CHATHAM COUNTY PURCHASING & CONTRACTING DEPARTMENT

ADDENDUM NO. **2** TO **12-0125-4**

FOR: HUNT DRIVE BRIDGE REPLACEMENT AND FAYE DRIVE BRIDGE REPLACEMENT
PLEASE SEE THE FOLLOWING FOR ADDITIONS, CLARIFICATIONS AND/OR CHANGES:
1. SEE ATTACHED (3 sheets) FOR <u>RESPONSES TO QUESTIONS RECEIVED</u> .
2. SEE ATTACHED <u>BRIDGE FOUNDATION INVESTIGATION REPORT FOR HUNT</u> <u>DRIVE BRIDGE REPLACEMENT</u> (12 sheets)
3. SEE ATTACHED <u>BRIDGE FOUNDATION INVESTIGATION REPORT FOR FAYE</u> <u>DRIVE BRIDGE REPLACEMENT</u> (12 sheets)
4. SEE ATTACHED <u>USACE PERMIT</u> FOR HUNT DRIVE (8 sheets)
5. SEE ATTACHED <u>USACE PERMIT</u> FOR FAYE DRIVE (8 sheets)
6. SEE ATTACHED <u>CRD PERMIT</u> FOR HUNT DRIVE (13 sheets)
7. SEE ATTACHED <u>CRD PERMIT</u> FOR FAYE DRIVE (12 sheets)
THE BID OPENING REMAINS: 2PM, THURSDAY, JANUARY 29, 2013
THE PROPOSER IS RESPONSIBLE FOR MAKING THE NECESSARY CHANGES AND MUST ACKNOWLEDGE RECEIPT OF ADDENDUM.

DATE

ROBERT E. MARSHALL

SENIOR PROCUREMENT SPECIALIST CHATHAM COUNTY

RESPONSES TO QUESTIONS RECEIVED:

- 1. Section 12 of the Special conditions titled "Minority Paticipation Goal" states the contractor should submit a plan with the bid to show how M/WBE sub-contractors are encouraged to participate. What specific documentation of our good faith effort is required to satisfy this requirement?
- A: Contact M/WBE Coordinator, Arneja Riley, for any questions regarding M/WBE participation and good faith efforts, as stated in the Invitation to Bid document.
- 2. Special Provisions Section 511 requires testing of the reinforcing steel couplers. This provision indicates that the testing of these couplers should be paid for by the contractor, however Section 15 of the Special Conditions indicates all testing services shall be under separate contract with Chatham County. Please clarify.
- A: All testing will be completed by an independent testing agency under separate contract with Chatham County.
- 3. There are various conduits and utilities attached to the existing bridges and they are shown on DWG 24-002. There are no pay items that address the handling, demolition, or cutting and capping of these utilities. Is it correct to assume that all utility work will be performed and paid for by others?
- A: The utility work will be completed by each utility company, but coordination between Chatham County, the utility provider and the contractor will be required throughout construction. All utility companies will be invited to attend the pre-construction meeting. Costs associated with relocation will be incurred by Chatham County.
- 4. Will the contractor be required to keep any utilities active or supported during construction?
- A: The gas line will be relocated for both bridges as shown on the construction plans. AGL anticipates completing relocation prior to construction beginning on the bridges. Fro both bridges, the AT&T line will be required to remain active during construction. Contractor will be required to coordinate with AT&T. The water line on the Hunt Drive bridge will be taken out of services during construction. The water line on Faye Drive bridge will be required to remain active, and will have to be relocated during stage 2 of construction. Georgia Power lines and Comcast will be required to remain active during construction.
- 5. There are several wetland boundary areas identified on the plans in which construction will take place. What are the restrictions in these areas? Will they be required to be mitigated after construction? If so, there is no pay item for "Riparian, Stream Restoration, Wetland & Stream Mitigation".
- A: Restriction for work in EAS are included in the attached USACE permit and Georgia DNR permit No mitigation is required for these projects.

- 6. DWG 19-017 indicates that the traffic signal equipment shall be delivered to a location determined by Chatham County. Where is this location?
- A: Chatham County Public Works and Park Services, 7226 Varnedoe Drive, Savannah, Georgia.
- 7. There is very little available construction easement/ROW at the jobsite. Is it the intention that the work needs to be completed from a barge?
- A: Contractor will be required to work within existing easements and right of way and shall determine how best to construct both bridges. If additional right of way or easements are required, the contractor will be required to obtain them at their own expense.
- 8. The power lines are too close to work safely in accordance with the Georgia High Voltage Act without relocating the lines. Have arraignments been made with the power company and what agreements are in place with the power company as to who would bear the cost of the relocations?
- A: Chatham County is working with Georgia Power on possible options. The options being considered are raising the lines in place approximately 10 feet to provide additional clearance, relocating the lines temporarily during construction or possibly boring the lines below both channels permanently.
- 9. The specifications state that all sub-contractors must be pre-qualified by GDOT at the time of bid opening. Sections 2.21 and 2.22 of General Conditions also states that the County particulary urges contractors to give emphasis to local area M/WBE firms. Many of the locally certified M/WBE firms are not qualified with GDOT, and cannot quote this project. Is the GDOT prequalification a requirement that will be enforced for all subcontractors regardless of their status as certified through Chatham county and the City of Savannah?
- A: Yes, the GDOT prequalification requirement will be enforced for both of these projects.
- 10. There will be times during construction that traffic will have to be prohibited from crossing the bridge in order to safely work. What are the requirements and restrictions for temporarily stopping traffic?
- A: Temporary lane closures will be allowed, however, a minimum of 48 hours notice must be given to Chatham County prior to needing the lane closures so that residents can be notified. Lane closures will only be allowed to be temporary basis and must be limited to minimize the time of duration to allow traffic to pass across the bridge between required closures. Lane closures will only be allowed between the hours of 10: am and 2:00 pm to not impede the flow of buses during the school year.

- 11. Are there any soil borings available for the site?
- A: A copy of the Bridge Foundation Report is attached to this addendum.
- 12. Note 9 on DWG 19-016 (Hunt) says that the signal heads shall be aluminum, but the List of Materials on DWG 19-017 lists a Plastic signal head. Which signal head is desired?
- A: Signal heads shall be aluminum in accordance to Note 9 on sheet 19-016.

End of Responses

Bridge Foundation Investigation

Bridge Replacement on Hunt Drive Over Hunt Canal Chatham County, Georgia

November 28, 2010 Terracon Project No. ES105111

> Prepared for: Chatham County Savannah, Georgia 31410

Prepared by: Terracon Consultants, Inc. Savannah, Georgia

Offices Nationwide Employee-Owned Established in 1965 terracon.com



November 28, 2010



Chatham County Department of Engineering 124 Bull Street, Suite 430 Savannah, Georgia 31410

Attn:

Mr. Nathaniel Panther, P.E.

Re:

Bridge Foundation Investigation

Bridge Replacement on Hunt Drive Over Hunt Canal

Chatham County, Georgia Terracon Project No. ES105111

Dear Mr. Panther:

Terracon Consultants, Inc. is pleased to submit this Bridge Foundation Investigation Report for the proposed Bridge Replacement on Hunt Drive Over Hunt Canal in Chatham County, Georgia. The report has been completed in accordance with the QA/QC Manual by the Geotechnical Engineering Bureau of the Georgia Department of Transportation.

Terracon appreciates the opportunity to be of service to Chatham County on this project. Please feel free to contact us if you have any question or if we can be of further assistance.

Respectfully submitted,

Terracon Consultants, Inc.

Zengxuan (Frank) Li, P.E.

Senior Geotechnical Engineer

Guoming Lin, Ph.D., P.E.

Senior Principal/Senior Consultant



Bridge Replacement on Hunt Drive over Hunt Canal & Savannah, Chatham County, Georgia November 28, 2010 Terracon Project No. ES105111



BRIDGE FOUNDATION INVESTIGATION

PROJECT NUMBER N/A, Chatham County

P.I. NUMBER N/A

LOCATION (See Map) Bridge Replacement on Hunt Drive over Hunt Canal

GENERAL INFORMATION

GEOLOGIC FORMATION Wicomico Shoreline Complex Formation of the Georgia Coastal

Plain Region

SUBSURFACE FEATURES Medium dense sands and hard sandy clay below elevation -48 ft

overlain by very loose to loose clayey sand and soft to stiff clay

or silts layers.

Groundwater was encountered at Elevation 0.1 to 0.3 ft.

MAXIMUM PILE DESIGN LOADS

END BEARING = 15%

14" PSC = 50 Tons

FRICTION = 85%

16" PSC = 60 Tons

18" PSC = 70 Tons

20" PSC = 80 Tons

24" PSC = 105 Tons

FOUNDATION RECOMMENDATIONS

DRILLED SPREAD FTG SHAFT

PILE **FOOTING** PILE BENT

(BEARING)

(BEARING)

(PILE TYPE)

PILE TYPE)

PSC

ELEVATIONS

BENTS	BOTTOM OF FTG	MINIMUM TIP	ESTIMATED TIP
1 (STA 53+11.13)		-50	-53
2 (STA 53+45.13)		-50	-72
3 (STA 54+05.13)		-50	-68
4 (STA 54+35.13)		-50	-58

NOTES

All elevations are based on survey information provided by the design **Elevations** engineer and the Benchmark Information provided on the Preliminary Bridge Layout (July 2010).

PDO Driving resistance after Minimum Tip Elevations is achieved.

Bridge Foundation Investigation Report

Bridge Replacement on Hunt Drive over Hunt Canal Savannah, Chatham County, Georgia November 28, 2010 Terracon Project No. ES105111



Waiting Period None required.

Theoretical Scour Appears feasible for the material encountered.

Erosion We recommend the use of 24 inches of Type I riprap and filter fabric.

Spudding/Jetting Spudding and/or jetting will/may be required to achieve the Minimum Tip Elevations for PSC piles.

Tip Elevations for PSC piles

Pre-drilling The Contractor may choose pre-drilling as an option to assist in the installation of PSC piles at the proposed intermediate bents, as per Special Provision 520. No separate payment will be made if the Contractor chooses to use pre-drilling. Pre-drilling should be set up to 3 feet above Minimum Tip Elevation. The maximum diameter of the pre-drilled hole should be determined from the following table:

PSC Pile Size	Maximum Pre-drill Auger Size
14"	12"
16"	18"
18"	18"
20"	24"
24"	24"

Test Piles We recommend that PSC test piles be set up at Bents 1 and 3 to help

determine pile order lengths. They should be of sufficient length to reach

a depth of 5 feet below the Estimated Tip Elevation.

As Built The as built foundation information should be forwarded to the Information Geotechnical Engineering Bureau upon completion of the foundation system.

Prepared By Zengxuan (Frank) Li, P.E.

Reviewed By Guoming Lin, Ph.D., P.E.

Enclosed: Special Provision 520

Site Location Map Boring Location Plan

Standard Penetration Test Boring Logs

Laboratory Testing Summary

Revised: November 15, 2003

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

SPECIAL PROVISION

PROJECT NO., Chatham County P.I. NO.

SECTION 520—PILING

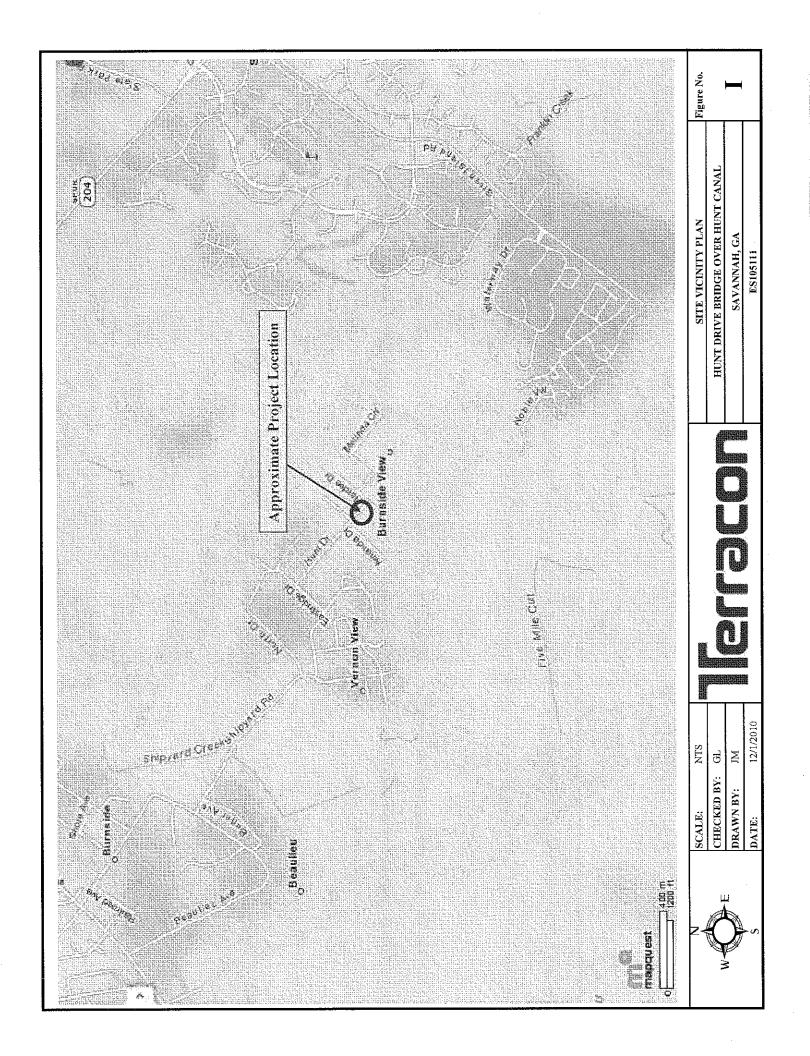
Add the following to Subsection 520.3.05.G:

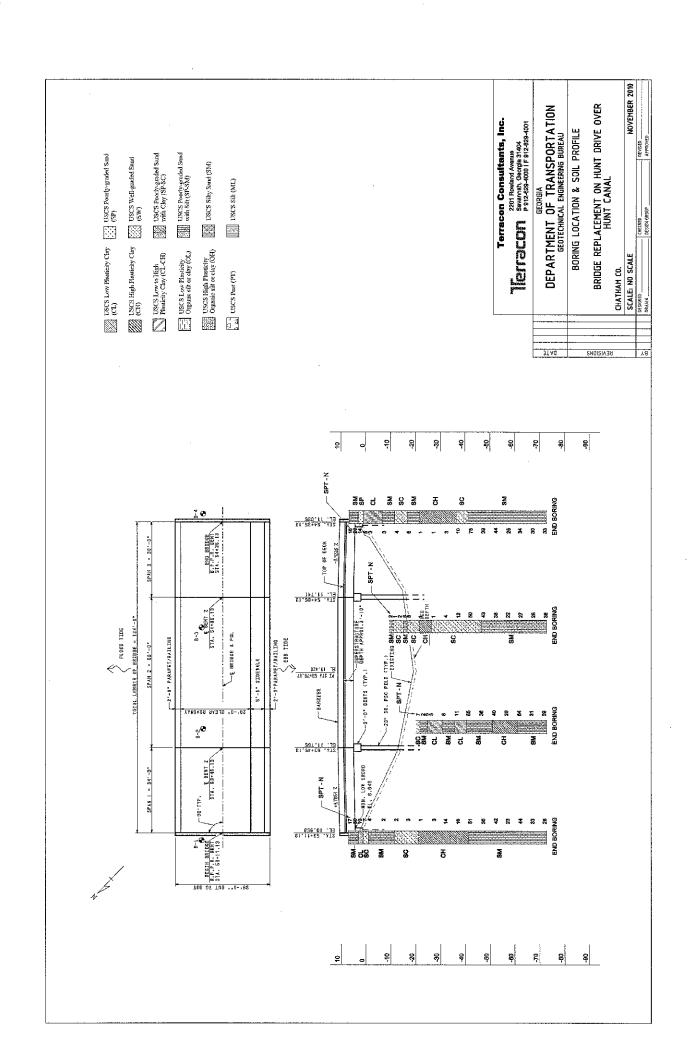
At the Contractor's option, predrilling may be used to loosen dense soil layers to assist in the installation of piling in lieu of spudding or jetting. To predrill, drill an auger into the ground to the required elevation at the pile location. It is not necessary to remove all material or to provide casing. Use one of the following maximum auger diameters corresponding to the pile size:

PSC Pile Size	Maximum Pre-drill Auger Size
14" (350 mm)	12" (300 mm)
16" (400 mm)	18" (450 mm)
18" (450 mm)	18" (450 mm)
20" (500 mm)	24" (600 mm)
24" (600 mm)	24" (600 mm)
30" (750 mm)	30" (750 mm)
36" (900 mm)	36" (900 mm)
Metal Pile Size	Maximum Pre-drill Auger Size
14" (350 mm)	12" (300 mm)
16" (400 mm)	12" (300 mm)
18" (450 mm)	12" (300 mm)

There will not be any separate payment made for predrilling.

Office of Materials and Research





PROJECT No	. ES105111 Hunt Drive Bridge Savannah				LOG OF BORING NO. B-1
DATE:	11/4/2010	LOGGED BY: JM			NOTES: Soil classified in accordance with ASTM
DRILLING M	ETHOD: Mud Rotary	HAMMER TYPE: Safety			D2488. The SPT blow counts have not been
DRILLING RI	iG: ATV-550X	DRILLER: WPC			adjusted for overburden pressure.
WATER LEVI	EL @ TOB: 0.3	WATER LEVEL @ 24 hrs: NA			
DEPTH (feet) GRAPHIC LOG	MATERIAL DE	SCRIPTION	ELEVATION (feet)	SAMPLE NO/TYPE	STANDARD PENETRATION TEST DATA (blows/foot) 10 20 30 50 80
55	Very loose, light gray, silty SAN wet Very loose, light gray, silty SAN wet	(SM), with broken brick CLAY (CL), moist (SC), with trace mica specks, wet (SC), with trace mica specks, (D (SM), with trace mica specks, (SC), with broken shell fragment, (CH), moist (CH), moist fat CLAY (CH), wet andy fat CLAY (CH), wet	-5.0 = -10.0 = -15.0 = -25.0 = -35.0 = -40.0 = -55.0 = -60.0 = -70.0 =	SS1 SS2 SS3 SS4 SS5 SS6 SS7 SS10 SS11 SS12 SS14 SS15 SS16 SS17 SS16 SS17 SS18 SS17 SS18 SS19	10 20 30 50 80 17 50 10 7 4 2 2 2 3 3 14 16 51 35 42 23 44 44 33 3 3 28
					ater table the at end of the boring Page 1 of 1

PRO.	PROJECT No. ES105111 Hunt Drive Bridge Over Hunt Canal Savannah, Georgia LOG OF BORING NO. B-2				LOG OF BORING NO. B-2	
DAT	E:	11/2/2010	LOGGED BY: JM			NOTES: Soil classified in accordance with ASTM
DRII.	LING M	METHOD: Mud Rotary HAMMER TYPE: Safety			·	D2488. The SPT blow counts have not been
DRIL	LING R	NG RIG: ATV-550X DRILLER: WPC			adjusted for overburden pressure.	
WAT	ER LEVI	EL @ TOB: NA	WATER LEVEL @ 24 hrs: NA			
DEPTH (feet)	GRAPHIC LOG	MATERIAL DI	ESCRIPTION	ELEVATION (feet)	SAMPLE NO/TYPE	STANDARD PENETRATION TEST DATA (blows/foot) 0 10 20 30 50 80
5	55.	AIR. Drilling from the existing (1:45PM) below the bridge decl		-5.0		
25 - 30 - 30 - 30		Loose, gray, clayey SAND (SC Very loose, gray, silty SAND (S		-15.0	SS1 SS2	7 2
35		Loose, gray, silty SAND (SM), Soft, gray, sandy lean CLAY (C Loose, gray, silty SAND (SM),	with mica specks, wet	-30.0	\$\$3 \$\$4 \$\$5	6 3
45		broken shell fragment, wet Stiff, gray, sandy lean CLAY (Owet Very dense, gray, silty SAND (Sandard)		-35.0 -40.0	SS6 SS7	11 55
50		Dense,		-45.0 - -50.0	SS8	36
60 -		Hard, dark gray, sandy fat CLA moist Very stiff, dark gray, sandy fat (-55.0	SS9 SS10	20
70 — — — 75 —		Very dense, dark gray, silty SA	ND (SM), moist	-65.0	SS11 SS12	31
80 ~		Dense, END OF BORING @ 80.0 ft		-70.0	SS13	39
			<u> </u>	_		ater table sle at end of the boring Page 1 of 1

PROJECT No	PROJECT No. ES105111 Hunt Drive Bridge Over Hunt Canal Savannah, Georgia LOG OF BORING NO. B-3					DRING NO. B-3
DATE:	11/3/2010	LOGGED BY: JM			NOTES: Soil classified in accord	anaa ssrith ACTM
DRILLING M	METHOD: Mud Rotary HAMMER TYPE: Safety				D2488. The SPT blow	counts have not been
DRILLING RI	GRIG: ATV-550X DRILLER: WPC adjusted for overburden pressure.			pressure.		
WATER LEVI	EL @ TOB: NA	WATER LEVEL @ 24 hrs: NA				
DEPTH (feet) GRAPHIC LOG	MATERIAL DE	ESCRIPTION	ELEVATION (feet)	SAMPLE NO/TYPE	STANDARD PENETRA' (blows/fo	
5 -	AIR. Drilling from the existing to (11:00AM) below the bridge dec	bridge deck; Water level is 9.3 ft ck.	5.0			
10 -	WATER. Mudline is 16.5 ft belo		-5.0			
20 - 1111111 20 - 1111111	Very loose, dark brown, silty SA specks, wet Very loose, dark gray, clayey SA fragment, wet	AND (SC), with broken shell	10.0	SS1 SS2 SS3 SS4		2 1 2 6 6
25 - 7 - 7	Very loose, dark gray, clayey SA fragment, wet		20.0	SS5		0
30	Loose, gray, silty SAND (SM), Loose, gray, clayey SAND (SC) fragment, wet), with trace broken shell	25.0	SS6 (1
35	Very soft, gray, sandy fat CLAY Very loose, gray, clayey SAND		30.0	SS7 (1
40	Very loose, tan and light gray, cl	layey SAND (SC), wet	-35.0	SS8		4
45	Medium dense, light gray and ta mica specks, moist	an, clayey SAND (SC), with trace	_	SS9		12
50	Very dense, gray and brown, cla interbedded cemented sand layer		-45.0	SS10		50
55 = 1	Dense, gray, silty SAND (SM),	moist	-50.0	SS11		43
60 -	Dense,		-55.0	SS12		38
65	Medium dense, SS13 SS13		22			
70	Medium dense, 60.0		27			
75	Medium dense,		-70.0	SS15	'	28
80 - 111111	Dense, gray, silty SAND (SM), \layer, moist END OF BORING @ 80.0 ft	with interbedded cemented sand	/\frac{\frac{1}{10.0}}{2}	SS16		38
			_		ater table ple at end of the boring	Page 1 of 1

PROJECT No	Hunt Drive Bridge	e Over Hunt Canal 1, Georgia			LOG OF BORING NO. B-4
DATE:	11/4/2010	LOGGED BY: JM			NOTES:
DRILLING M		HAMMER TYPE: Safety			Soil classified in accordance with ASTM D2488. The SPT blow counts have not been
DRILLING R		DRILLER: WPC			adjusted for overburden pressure.
WATER LEV		WATER LEVEL @ 24 hrs: NA			
DEPTH (feet) GRAPHIC LOG	MATERIAL D	ESCRIPTION	ELEVATION (feet)	SAMPLE NO/TYPE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
10 - 15 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	with trace organics, moist Soft, light gray, sandy lean CLA Very loose, gray, silty SAND (some set of sandy clayer) Loose, gray and brown, silty SA sandy clay layer, wet Very soft, dark gray, sandy fat of the sandy clay layer, wet Very soft, gray, Soft, tan and light gray, Loose, tan and light gray, clayer Very dense, dark gray, silty SA Dense, Dense, Medium dense, Medium dense, Medium dense,	y SAND (SC), wet	-5.0 -5.0 -5.0 -10.0 -15.0 -15.0 -20.0 -35.0 -35.0 -40.0 -55.0 -60.0 -65.0 -70.0	SS14 SS15 SS16 SS17	16 20 14 5 3 3 4 5 10 75 39 44 25 34
	Dense, END OF BORING @ 80.0 f	t	_	SS19	33
			_		ater table sole at end of the boring Page 1 of 1

LABORATORY SOIL REPORT

Hunt Drive Bridge over Hunt Canal Project No.: P.J. No.:	er Hunt Canal P.I. No.:					Chatham County, GA Terracon Project No. ES105111	nty, GA ect No. ES1	05111
Boring Bent No.	Boring Bent No. OffSet Depth (ft) Sample No.	Date Received	Date Completed C	Date Moisture Organic Plastic Liquid in USCS Completed Contents (%) Limit (%	Plastic 6) Limit (%)	Plastic Liquid F	lo (%) au	USCS ssification
B-1	28.5 - 30 Split Spoon	11/17/10	11/22/10	90.6	26.5	77.5		끙
B-1	63,5 - 65 Split Spoon	11/17/10	11/22/10	49.1			29.3	SM
B-2	48.5 - 50 Split Spoon	11/17/10	11/22/10	32.8			28.8	SM
B-2	63.5 - 65 Split Spoon	11/17/10	11/22/10	71.3	20.9	96.4		CH
B-3	28.5 - 30 Split Spoon	11/17/10	11/22/10	73.6	16.7	67.9		CH
B-3	63.5 - 65 Split Spoon	11/17/10	11/22/10	0.99			48.6	SM
B-4	28.5 - 30 Split Spoon	11/17/10	11/22/10	81.7	15.9	85.0		S
B-4	63.5 - 60 Split Spoon	11/17/10	11/22/10	59.9			36.9	SM

Bridge Foundation Investigation

Bridge Replacement on Faye Drive Over Faye Canal Chatham County, Georgia

November 28, 2010 Terracon Project No. ES105110

Prepared for: Chatham County

Savannah, Georgia 31410

Prepared by:

Terracon Consultants, Inc. Savannah, Georgia

Offices Nationwide Employee-Owned Established in 1965 terracon.com



November 28, 2010



Chatham County Department of Engineering 124 Bull Street, Suite 430 Savannah, Georgia 31410

Attn:

Mr. Nathaniel Panther, P.E.

Re:

Bridge Foundation Investigation

Bridge Replacement on Faye Drive Over Faye Canal

Chatham County, Georgia Terracon Project No. ES105110

Dear Mr. Panther:

Terracon Consultants, Inc. is pleased to submit this Bridge Foundation Investigation Report for the proposed Bridge Replacement on Faye Drive Over Faye Canal in Chatham County, Georgia. The report has been completed in accordance with the QA/QC Manual by the Geotechnical Engineering Bureau of the Georgia Department of Transportation.

Terracon appreciates the opportunity to be of service to Chatham County on this project. Please feel free to contact us if you have any question or if we can be of further assistance.

Respectfully submitted,

Terracon Consultants, Inc.

Zengxuan (Frank) Li, P.E. Senior Geotechnical Engineer Guoming Lin, Ph.D., P.E.

Senior Principal/Senior Consultant



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BRIDGE FOUNDATION INVESTIGATION

PROJECT NUMBER N/A, Chatham County

P.I. NUMBER N/A

LOCATION (See Map) Bridge Replacement on Faye Drive over Faye Canal

GENERAL INFORMATION

GEOLOGIC FORMATION Wicomico Shoreline Complex Formation of the Georgia Coastal

Plain Region

SUBSURFACE FEATURES Medium dense sands and hard sandy clay below elevation -47 ft

overlain by very loose to loose clayey sand and soft to stiff clay

or silts layers.

Groundwater was encountered at Elevation 0.1 to 0.7 ft.

MAXIMUM PILE DESIGN LOADS

END BEARING = 15%

14" PSC = 45 Tons

FRICTION = 85%

16" PSC = 55 Tons

18" PSC = 65 Tons

20" PSC = 75 Tons

24" PSC = 95 Tons

FOUNDATION RECOMMENDATIONS

DRILLED SPREAD FTG

PILE **FOOTING** PILE BENT

SHAFT (BEARING)

(BEARING)

(PILE TYPE)

PILE TYPE)

PSC

ELEVATIONS

BENTS	BOTTOM OF FTG	MINIMUM TIP	ESTIMATED TIP
1 (STA 12+43.57)		-50	-52
2 (STA 12+73.57)		-50	-70
3 (STA 13+33.57)		-50	-70
4 (STA 13+71.57)		- 50	-56

NOTES

All elevations are based on survey information provided by the design **Elevations**

engineer and the Benchmark Information provided on the Preliminary

Bridge Layout (July 2010).

Driving resistance after Minimum Tip Elevations is achieved.

Bridge Foundation Investigation Report

Pre-drilling

Bridge Replacement on Faye Drive over Faye Canal ** Savannah, Chatham County, Georgia November 28, 2010 ** Terracon Project No. ES105110



Waiting Period None required.

Theoretical Scour Appears feasible for the material encountered.

Erosion We recommend the use of 24 inches of Type I riprap and filter fabric.

Spudding/Jetting Spudding and/or jetting will/may be required to achieve the Minimum Tip Elevations for PSC piles.

Tip Elevations for FSC pin

The Contractor may choose pre-drilling as an option to assist in the installation of PSC piles at the proposed intermediate bents, as per Special Provision 520. No separate payment will be made if the Contractor chooses to use pre-drilling. Pre-drilling should be set up to 3 feet above Minimum Tip Elevation. The maximum diameter of the pre-drilled hole should be determined from the following table:

PSC Pile Size	Maximum Pre-drill Auger Size
14"	12"
16"	18"
18"	18"
20"	24"
24"	24"

Test Piles We recommend that PSC test piles be set up at Bents 1 and 3 to help determine pile order lengths. They should be of sufficient length to reach a depth of 5 feet below the Estimated Tip Elevation.

As Built The as built foundation information should be forwarded to the Information Geotechnical Engineering Bureau upon completion of the foundation system.

Prepared By Zengxuan (Frank) Li, P.E.

Reviewed By Guoming Lin, Ph.D., P.E.

Enclosed: Special Provision 520

Site Location Map Boring Location Plan

Standard Penetration Test Boring Logs

Laboratory Testing Summary

Revised: November 15, 2003

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

SPECIAL PROVISION

PROJECT NO., Chatham County P.I. NO.

SECTION 520—PILING

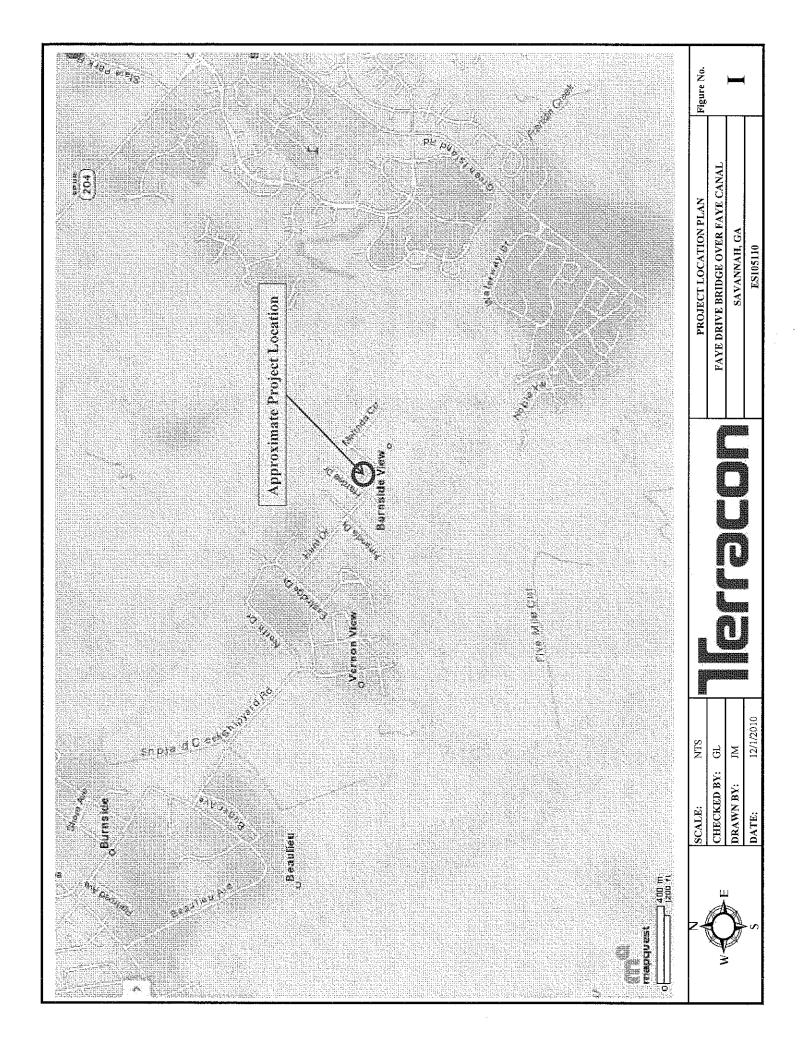
Add the following to Subsection 520.3.05.G:

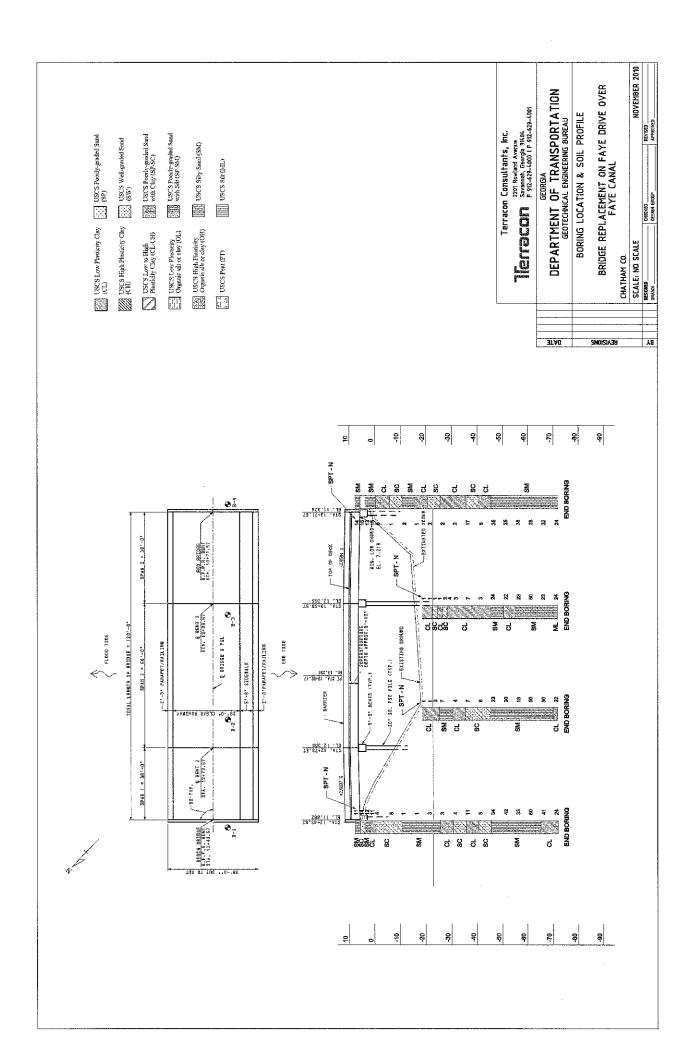
At the Contractor's option, predrilling may be used to loosen dense soil layers to assist in the installation of piling in lieu of spudding or jetting. To predrill, drill an auger into the ground to the required elevation at the pile location. It is not necessary to remove all material or to provide casing. Use one of the following maximum auger diameters corresponding to the pile size:

PSC Pile Size	Maximum Pre-drill Auger Size
14" (350 mm)	12" (300 mm)
16" (400 mm)	18" (450 mm)
18" (450 mm)	18" (450 mm)
20" (500 mm)	24" (600 mm)
24" (600 mm)	24" (600 mm)
30" (750 mm)	30" (750 mm)
36" (900 mm)	36" (900 mm)
•	
Metal Pile Size	Maximum Pre-drill Auger Size
14" (350 mm)	12" (300 mm)
16" (400 mm)	12" (300 mm)
18" (450 mm)	12" (300 mm)

There will not be any separate payment made for predrilling.

Office of Materials and Research





PROJECT N	o. ES105110 Faye Drive Bridge	LOG OF BORING NO. B-1						
	Savannah,							
DATE:	11/9/2010	LOGGED BY: JM			NOTES: Soil classified in accordance with ASTM			
DRILLING N	METHOD: Mud Rotary	HAMMER TYPE: Safety			D2488. The SPT blow counts have not been adjusted for overburden pressure.			
DRILLING R	IG: ATV-550X	DRILLER: WPC			adjusted for overbureen pressure.			
WATER LEV	EL @ TOB: 0.7	WATER LEVEL @ 24 hrs: NA		·				
DEPTH (feet) GRAPHIC LOG	MATERIAL DE	SCRIPTION	ELEVATION (feet)	SAMPLE NO/TYPE	STANDARD PENETRATION TEST DATA (blows/foot) 10 20 30 50 80			
-11,11,1	Medium dense, tan and light bro	wn, silty SAND (SM), with	 	SS1	20 30 30 00 11			
زیر عوجم 11111 - 5	\some gravels, moist \Medium dense, grav, black and o	orange, clayey SAND (SC), moist/	5.0	SS2 SS3	14 12			
# /////	\Medium dense, brown, silty SAl	ND (SM), moist	0.0	SS4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
10	Stiff, brown, gray and orange, sa organics, wet	ndy lean CLAY (CL), with some	-	SS5				
1.7.	Very loose, gray, clayey SAND Loose, light gray and tan, clayey		-5.0	SS6				
15 - 15 - 15	Loose, ngat gray and am, clayey	SAND (SC), wa		330				
20	Very loose, dark gray, silty SAN	D (SM), wet	10.0	SS7	1			
			15.0					
25	Very loose, dark gray, silty SAN clay layer, with broken shell frag	ID (SM), with interbedded sandy ment, wet		SS8				
30 = 1	Very loose, dark gray, silty SAN	ID (SM), with interbedded sandy	-20.0	SS9	3			
	clay layer, with broken shell frag	gment, wet	25.0					
35 -	Soft, dark gray, sandy lean CLA broken shell fragment, wet	Y (CL), with some gravels and	72.5.0	SS10	3			
	Very loose, dark gray, clayey SA	ND (SC) with broken shell	30.0	SS11				
40	fragment, wet	and (be), with broken shell	-	3311				
45 -	Stiff, tan, sandy lean CLAY (CL), wet	-35.0 <u>-</u>	SS12	11			
-/////			40.0					
50 - 7.	Loose, tan and dark brown, claye	ey SAND (SC), wet		SS13	5			
55 - 111-11	Dense, dark gray, silty SAND (S	M), moist	45.0	SS14	34			
	- , ,	,	50.0					
60	Dense,		-	SS15	42			
	Dense,		-55.0	SS16				
65	Dense,		-	2210	33			
70 = [[[]]	Very dense,		-60.0	SS17	60			
			-65.0					
75	Hard, dark gray, sandy lean CLA	AY (CL), moist	-	SS18	41			
., ¥////	Very stiff,		70.0	S\$19				
80 7////	END OF BORING @ 80.0 ft		1 -					
₹ 24-hrs water table								
	i larrari		Wa Wa	iter tab	le at end of the boring			
	R 11 Thomas II V Tomas (Page 1 of 1			

PROJECT No	o. ES105110 Faye Drive Bridge Savannah				LOG OF	BORING NO	. В-2
DATE: 11/8/2010 LOGGED BY: JM				NOTES: Soil classified in acc	ordonoo with A	STM	
DRILLING METHOD: Mud Rotary HAMMER TYPE: Safety					D2488. The SPT blo	ow counts have	
DRILLING RIG: ATV-550X DRILLER: WPC					adjusted for overbure	den pressure.	
WATER LEVEL @ TOB: NA WATER LEVEL @ 24 hrs: NA							
DEPTH (feet) GRAPHIC LOG	MATERIAL DI	ESCRIPTION	ELEVATION (feet)	SAMPLE NO/TYPE	`	/s/foot)	N VALUE
5 10 15 20 25 30 35 40 45	Very soft, dark gray, sandy lean fragment, wet Very soft, dark gray, sandy lean fragment, wet Soft, light gray, sandy lean CLA fragment, wet Loose, light gray sandy lean CLA fragment, wet Loose, light gray and tan, clayey Loose, light brown,	CLAY (CL), with broken shell CLAY (CL), with broken shell Y (CL), with broken shell M), wet Y (CL), with broken shell	-5.0 = -10.0 = -15.0 = -25.0 = -35.0 = -35.0 = -40.0 =	SS1			1 1 3 7
55 - 11 - 1	Medium dense, dark gray, silty	SAND (SM), moist	45.0	SS8			23
60	Medium dense, dark gray, silty specks, moist Medium dense, dark gray, silty specks, moist	•	-55.0	SS9 SS10			30
70	Very dense, dark gray, silty SAN Medium dense, dark gray, silty s specks, moist		-60.0 -	SS11			50
80	Very stiff, dark gray, sandy lean END OF BORING @ 80.0 ft		70.0	SS13		4	22
	Terrac				ter table le at end of the boring	Page	1 of 1

PROJECT No. ES105110 Faye Drive Bridge Over Faye Canal			LOG OF BO	ORING NO. B-3				
	Savannah				NOTES:			
DATE:	11/8/2010 LOGGED BY: JM Soil classified in accordance with ASTM							
DRILLING	METHOD: Mud Rotary	HAMMER TYPE: Safety			D2488. The SPT blow adjusted for overburder			
DRILLING	FRIG: ATV-550X	DRILLER: WPC			adjusted for overbander	i pressure.		
WATER L	EVEL @ TOB: NA	WATER LEVEL @ 24 hrs; NA						
DEPTH (feef) GRAPHIC	MATERIAL DI	SCRIPTION	ELEVATION (feet)	SAMPLE NO/TYPE	STANDARD PENETRA (blows/f)	I - I		
	AIR. Drilling from the existing	oridge deck; Water level is 12.3 ft	-					
-	(3:00PM) below the bridge decl	r Na	5.0					
			=					
10 =			0.0					
	WATER. Mudline is 26.5 ft bel	ow the bridge deck	-5.0					
15 🚽		on the ortage door						
			-10.0					
20 = 1] =					
25 🗐			-15.0					
- 1/1/	Very soft, dark gray, sandy lean	CLAY (CL), with broken shell	-20.0	SSI				
30 = 1111	fragment, wet Very soft,	. "		SS2 (1		
		(SC), with broken shell fragment, /	25.0	SS3 (
35	wet Very soft, gray, sandy lean CLA	V (CL) wat] -	SS5		3		
		(SC), with broken shell fragment,	-30.0	SS6 SS7	>	4 3		
40 -	wet Soft, gray, sandy lean CLAY (C	I) with broken shall from out	-	357				
45	wet		35.0	SS8		7		
	Soft, gray, sandy lean CLAY (C wet	· ·	40.0					
50	Medium stiff, light gray, sandy light quartz gravels, moist	ean CLAY (CL), with some fine	-	SS9		3		
	Soft, light gray, sandy lean CLA		45.0					
55 — • [• [Dense, dark gray, silty SAND (S	SM), moist	-	\$\$10		34		
3 H.H.	Very stiff, dark gray, sandy lean	CLAY (CL), moist	50.0	SS11				
60 - 4///	g	· · · · · · · · · · · · · · · · · · ·						
65	Medium dense, dark gray, silty	SAND (SM), moist	-55.0	SS12		23		
			-60.0	1				
70 =	Very dense,		-	SS13		50		
	Modium dong-		-65.0	001				
75	Medium dense,			SS14		23		
80	Very stiff, dark gray, sandy SIL	Γ (ML), moist	70.0	SS15		24		
00	END OF BORING @ 80.0 ft							
24-hrs water table								
					ole at end of the boring			
L						Page 1 of 1		

PRO.	ECT No	ES105110 Faye Drive Bridge Savannah				LOG OF B	ORING NO). B-4	
DAT	 В:	11/10/2010	LOGGED BY: JM			NOTES:	T 2.1		
DRILLING METHOD: Mud Rotary HAMMER TYPE: Safety					Soil classified in accord D2488. The SPT blow	counts have			
DRIL	LING RI	G: ATV-550X	DRILLER: WPC			adjusted for overburder	n pressure.		
WAT	ER LEVI	EL @ TOB: 0.1	WATER LEVEL @ 24 hrs: NA						
DEPTH (feet)	GRAPHIC LOG	MATERIAL DE	SCRIPTION	ELEVATION (feet)	SAMPLE NO/TYPE	STANDARD PENETRA (blows/f	oot)	DATA 50 80	N VALUE
		Medium dense, brown, silty SA	ND (SM), moist	<u> </u>	SS1	10		ÎĦĬĬ	14
_ =	111111	Red brick debris	CANTO (CNOi-t	5.0	SS2				18
5 <u>-</u>		Medium dense, dark brown, silty SAND (SM), moist Medium dense, brown, silty SAND (SM), with trace organics,			SS3 SS4		7		13 15
10 -		\text{wet} \text{ wet} \text{ Medium stiff, gray and brown, sandy lean CLAY (CL), with} \text{ sss}			SS5				6
=		some organics, wet	· · · · · · · · · · · · · · · · · · ·	-5.0					
15		Very loose, light gray, clayey SA	AND (SC), wet	_	SS6 (]
		Very loose, gray, silty SAND (S	M) with broken shell fragment	10.0	SS7				2
20 –	1:1:11	wet	ivi), with broken stien tragment,		337				
25 -		Very soft, gray, sandy lean CLA	Y (CL), with some mica specks,	15.0 -	\$\$8 (1
=======================================		moist		20.0					
30 -	///	Very loose, gray, clayey SAND wet	(SC), with broken shell fragment,		SS9				2
=		Very soft, gray, sandy lean CLA	V (CI) was	25.0	0010				
35 -		very sort, gray, sandy lean CLA	r (CL), wei		SS10				2
40 -		Very soft, gray, sandy lean CLA	Y (CL), with broken shell	30.0	SS11				2
		fragment, wet		-35.0					
45 -	///	Medium dense, tan and light gra	y, clayey SAND (SC), wet		SS 12		>		17
=		3.6.1° ('00.1° 1 () 1.1	CT ATT (CT)	40.0					
50 -		specks, wet	ean CLAY (CL), with trace mica	-	SS13				5
55		Dense, light gray, silty SAND (S	5M), with trace mica specks, wet	45.0	SS14				35
]				500		:			
60 =	<u>;[:[::];</u>	Medium dense, dark gray, silty S	SAND (SM), moist	-50.0	ŠS15		-		25
		D 1.1 (1. CANT) (6	9.5	-55.0					
65 –		Dense, dark gray, silty SAND (S	SM), moist		SS16				38
70		Medium dense, dark gray, silty S	SAND (SM), moist	-60.0	SS17	:]		28
/ =		,, 3,,	(,,	-]
75		Dense, dark gray, silty SAND (S	M), moist	-65.0 <u>~</u>	SS18		\longrightarrow		32
=	<u> </u>			70.0					
80 –	*[+]-]-	Medium dense, dark gray, silty S END OF BORING @ 80.0 ft	SAND (SM), moist	-	SS19		- -		24
			<u>. </u>						
	(maral)	en e		,					
	and a			=		ter table			
	Water table at end of the boring Page 1 of 1								

LABORATORY SOIL REPORT

Faye Drive Bridge over Faye Canal Project No.:	ver Faye Canal P.I. No.:					Chatham County, GA Terracon Project No. FS105110	1A 5 ES405110
Boring Bent No.	rt Depth (1	t) Sample Type	Date Received	Date Completed	Date Moisture Organic mpleted Contents (%)	Date Moisture Organic Plastic Liquid Fine (%) Classification Completed Contents (%) Limit (%) Limit (%) Classification	0 Classification
B-1	8-9.5	8 - 9.5 Split Spoon	11/17/10	11/22/10	25.0	21.2	SC
B-1	63.5 - 65	Split Spoon	11/17/10	11/22/10	47.2	23.2	SM
B-2	63.5 - 65	Split Spoon	11/17/10	11/22/10	50.9	21.9	SM
B-2	78.5 - 80	Split Spoon	11/17/10	11/22/10	92.6	84.9	ರ
B-3	30.5 - 32	Split Spoon	11/17/10	11/22/10	32.0	23.1	SS
B-3	58.5 - 60	Split Spoon	11/17/10	11/22/10	77.8	63.1	C
B-4	28.5 - 30	Split Spoon	11/17/10	11/22/10	33.6	17.7	SC
B-4	58.5 - 60	Split Spoon	11/17/10	11/22/10	51,9	27.3	SM



DEPARTMENT OF THE ARMY SAVANNAH DISTRICT, CORPS OF ENGINEERS 100 W. OGLETHORPE AVENUE SAVANNAH, GEORGIA 31401-3640

OCTOBER 1 7 2012

Regulatory Division SAS-2010-00128

Mr. Leon Davenport Chatham County Engineering Department Post Office Box 8161 Savannah, Georgia 31412-8161

Dear Mr. Davenport:

I refer to the Pre-Construction Notification submitted on July 14, 2012, requesting verification for use of Nationwide Permit (NWP) No. 3 (Maintenance) for impacts to 0.028 acre of wetland associated with the rehabilitation of an existing bridge. The project is located on Hunt Drive as it extends over an unnamed tributary of the Moon River on Burnside Island, Savannah, Chatham County, Georgia (Latitude 31.9289, Longitude -81.0863). The request was submitted on your behalf by Mr. Jeffrey Williams of Sligh Environmental Consultants. This project has been assigned number SAS-2010-00128 and it is important that you refer to this number in all communication concerning this matter.

An expanded preliminary Jurisdictional Determination (JD) was completed for the site on February 19, 2010, pursuant to our March 4, 2009, Public Notice entitled, "Characterization of Jurisdictional Determinations: Purpose, Application and Documentation Requirements as Defined by the Savannah District, US Army Corps of Engineers (USACE)."

The wetlands/other waters on the subject property may be waters of the United States within the jurisdiction of Section 404 of the Clean Water Act (33 United States Code (U.S.C.) 1344) and/or Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403). The placement of dredged or fill material into any waterways and/or their adjacent wetlands or mechanized land clearing of those wetlands could require prior Department of the Army authorization pursuant to Section 404.

We have completed coordination with other federal and state agencies as described in Part C (31)(d) of our NWP Program, published in the February 12, 2012, Federal Register, Vol. 77, No. 34, Pages 10184-10290 (77 FR). The NWPs and Savannah District's Regional Conditions for NWPs can be found on our website at http://www.sas.usace.army.mil/regulatory/Nationwide Permits.html. During our coordination procedure, no adverse comments regarding the proposed work were received.

As a result of our evaluation of your project, we have determined that the proposed activity is authorized under NWP 3, as described in Part B of the NWP Program. Your use of this NWP is valid only if:

- a. The activity is conducted in accordance with the information submitted and meets the conditions applicable to the NWP, as described at Part C of the NWP Program and the Savannah District's Regional Conditions for NWPs.
- b. You shall obtain and comply with all appropriate federal, state, and local authorizations required for this type of activity. A stream buffer variance may be required. Variances are issued by the Director of the Georgia Environmental Protection Division (EPD), as defined in the Georgia Erosion and Sedimentation Control Act of 1975, as amended. It is our understanding that you may obtain information concerning variances at the Georgia EPD's web site at www.gaepd.org or by contacting the Watershed Protection Branch at (404) 675-6240.
- c. All work conducted under this permit shall be located, outlined, designed, constructed and operated in accordance with the minimal requirements as contained in the Georgia Erosion and Sedimentation Control Act of 1975, as amended. Utilization of plans and specifications as contained in the "Manual for Erosion and Sediment Control, First Edition, 2002," published by the Georgia Soil and Water Conservation Commission or their equivalent, will aid in achieving compliance with the aforementioned minimal requirements.
- d. The permittee agrees that all personnel associated with the project will be advised that there are civil and criminal penalties for harming, harassing or killing manatees, which are protected under the Endangered Species Act of 1973 and the Marine Mammal Protection Act of 1972. The permittee and contractor will be held responsible for any manatee harmed, harassed or killed as a result of construction activities.
- e. Siltation barriers will be made of material in which manatees cannot become entangled, are properly secured, and are regularly monitored to avoid manatee entrapment. Barriers must not block manatee entry to or exit from essential habitat.
- f. All vessels associated with the project will operate at "no wake/idle" speeds at all times while in the construction area. All vessels will follow routes of deep water whenever possible.
- g. All on-site project personnel are responsible for observing water-related activities for the presence of manatees. All construction and activities in open water will cease upon sighting of manatees within 50 feet of the project area. Construction activities will not resume until the manatees have left the project area for at least 30 minutes.

- h. Extreme care will be taken in lowering equipment or materials, including, but not limited to piles, sheet piles, casings for drilled shaft construction, spuds, pile templates, anchors, etc., below the water surface and into the stream bed; taking any precaution not to harm any manatee(s) that may have entered the construction area undetected. All such equipment or materials will be lowered at the lowest possible speed.
- i. The permittee agrees that any collision with a manatee shall be reported immediately to the US Army Corps of Engineers (912-652-5347), the US Fish and Wildlife Service, Ecological Services Field Office, (912-832-8739), and Georgia Department of Natural Resources (Georgia DNR) (Weekdays 8:00 a.m.-4:30 p.m.: 912-264-7218 or 1-800-272-8363; (nights and weekends: 1-800-241-4113). Any dead manatee(s) found in the project area must be secured to a stable object to prevent the carcass from being moved by the current before the authorities arrive. In the event of injury or mortality of a manatee, all aquatic activity in the project area must cease pending Section 7 consultation under the Endangered Species Act with the US Fish and Wildlife Service and the lead Federal agency.
- j. The permittee agrees that the contractor shall keep a log detailing sightings, collisions, or injury to manatees, which have occurred during the contract period.
- k. The permittee agrees that following project completion, a report summarizing the above incidents and sightings will be submitted to the US Fish and Wildlife Service, Ecological Services Field Office, Coastal Georgia Sub-Office, 4980 Wildlife Drive Northeast, Townsend, Georgia 31331.
- I. All temporary construction materials will be removed upon completion of the work, and disturbed upland areas will be stabilized. No construction debris or trash will be discarded in the water.
- m. The permittee shall regularly maintain all hoses, faucets, and/or freshwater discharges to prevent freshwater leakage into manatee habitat. This minimizes attraction of manatees to the marina where boats are concentrated and a potential for increased boat/manatee collisions exists. Oil and sewage spill contingency plans should be in place for the marina to protect manatees.
- n. The permittee shall identify a person who will be the contact for reporting manatee sightings, boat strikes or other manatee concerns with the US Fish and Wildlife Service and Georgia DNR.
- o. You fill out and sign the enclosed certification and return it to our office within 30 days of completion of the activity authorized by this permit.

This proposal was reviewed and coordinated with the US Fish and Wildlife Service in accordance with Section 7 of the Endangered Species Act. The US Fish and Wildlife Service provided a statement on October 9, 2012, requesting the inclusion of standard manatee conditions within the NWP authorization. With the inclusion of these conditions, USFWS concurs with the USACE determination that the project may effect, but is not likely to adversely effect the West Indian manatee. Authorization of an activity by a NWP does not authorize the "take" of threatened or endangered species. In the absence of separate authorization, both lethal and non-lethal "takes" of protected species are in violation of the Endangered Species Act. See Part (C) of 77 FR for more information.

This verification is valid for a period of two years from the date of this letter, or until the NWP is modified, reissued or revoked. All of the existing NWPs are scheduled to expire on March 18, 2017. It is incumbent upon you to remain informed of changes to the NWPs. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant nationwide permit is modified or revoked, you will have twelve (12) months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this NWP.

This authorization should not be construed to mean that any future projects requiring Department of the Army authorization would necessarily be authorized. Any new proposal, whether associated with this project or not, would be evaluated on a case-by-case basis. Any prior approvals would not be a determining factor in making a decision on any future request.

Revisions to your proposal may invalidate this authorization. In the event changes to this project are contemplated, I recommend that you coordinate with us prior to proceeding with the work.

This communication does not relieve you of any obligation or responsibility for complying with the provisions of any other laws or regulations of other federal, state or local authorities. It does not affect your liability for any damages or claims that may arise as a result of the work. It does not convey any property rights, either in real estate or material, or any exclusive privileges. It also does not affect your liability for any interference with existing or proposed federal projects. If the information you have submitted and on which the USACE bases its determination/decision of authorization under the NWP is later found to be in error, this determination may be subject to modification, suspension, or revocation.

A copy of this letter is being provided to the following party: Mr. Jeffrey Williams, Sligh Environmental Consulting, 31 Park of Commerce Way, Suite 2008, Savannah, Georgia 31405.

Thank you in advance for completing our Customer Survey Form. This can be accomplished by visiting our website at http://per2.nwp.usace.army.mil/survey.html and completing the survey

on-line. We value your comments and appreciate your taking the time to complete a survey each time you have interaction with our office.

If you have any questions, please feel free to contact me at 912-652-5349.

Sincerely,

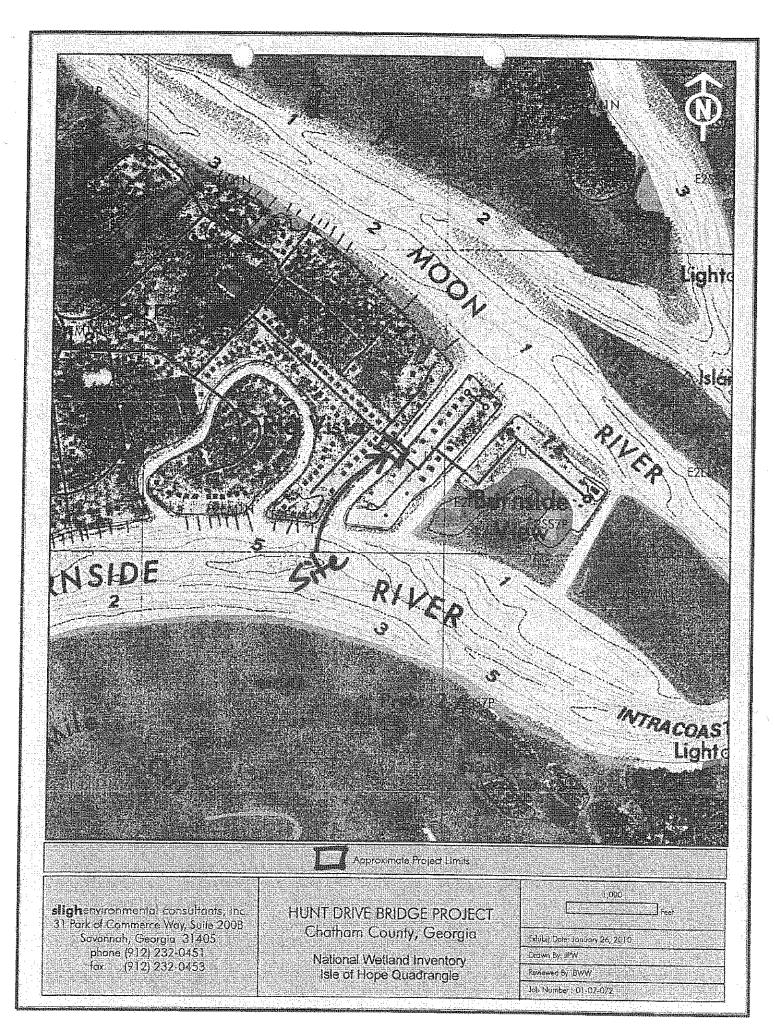
C. Brian Moore

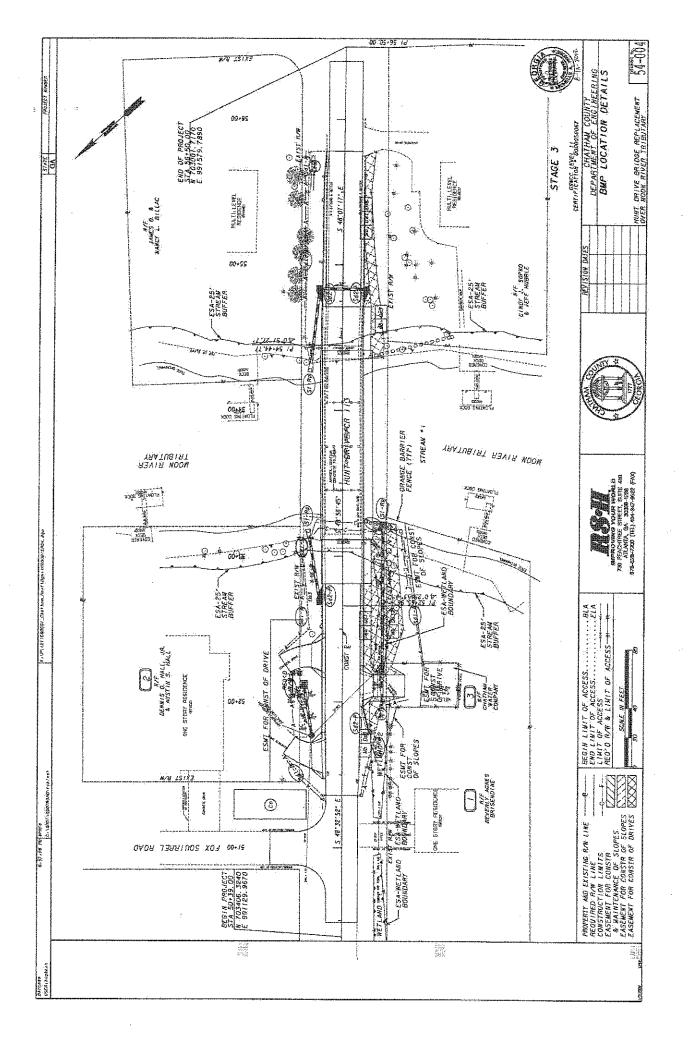
Regulatory Specialist, Coastal Branch

Enclosures

CERTIFICATION OF COMPLIANCE WITH DEPARTMENT OF THE ARMY NWP 3

PERMIT FILE NUMBER:	SAS-2010-00128	
PERMITTEE ADDRESS:	Mr. Leon Davenport Chatham County Engineering Department Post Office Box 8161 Savannah, Georgia 31412-8161	
	ne project is located on Hunt Drive as it extends on Burnside Island, Savannah, Chatham Coun.).	
an existing bridge, widening	To construct improvements to Hunt Drive income of existing travel lanes and the addition of a p to 0.028 acre of wetland associated with the respective to the existing travel lanes and the addition of a p to 0.028 acre of wetland associated with the respective travels.	edestrian sidewalk.
ACRES AND/OR LINEAR I	FEET OF WATERS OF THE US IMPACTED	D: 0.028 acre
DATE WORK IN WATERS	OF US COMPLETED:	
COMPENSATORY MITIGA	ATION REQUIRED: n/a	,
DATE MITIGATION COMI	PLETED OR PURCHASED (include name of	fbank): n/a
Inspection. If I fail to comply Program, published in the Fel	ed activity is subject to a US Army Corps of E y with the permit conditions at Part C of the N bruary 12, 2012, <u>Federal Register</u> , Vol. 77, No e subject to suspension, modification or revoc	Vationwide Permit 0.34,
	authorized by the above referenced permit as been completed in accordance with the terms	
Signature of Permittee	· ·	Date







DEPARTMENT OF THE ARMY SAVANNAH DISTRICT, CORPS OF ENGINEERS 100 W. OGLETHORPE AVENUE SAVANNAH, GEORGIA 31401-3540

OCTOBER 17 2012

Regulatory Division SAS-2010-00127

FECEIVED
COUNTY ENGNEERING

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Mr. Leon Davenport Chatham County Engineering Department Post Office Box 8161 Savannah, Georgia 31412-8161

Dear Mr. Davenport:

I refer to the Pre-Construction Notification submitted on July 14, 2012, requesting verification for use of Nationwide Permit (NWP) No. 3 (Maintenance) for impacts to 0.01 acre of wetland associated with the rehabilitation of an existing bridge. The project is located on Faye Drive as it extends over an unnamed tributary of the Moon River on Burnside Island, Savannah, Chatham County, Georgia (Latitude 31.9283, Longitude -81.0840). The request was submitted on your behalf by Mr. Jeffrey Williams of Sligh Environmental Consultants. This project has been assigned number SAS-2010-00127 and it is important that you refer to this number in all communication concerning this matter.

An expanded preliminary Jurisdictional Determination (JD) was completed for the site on February 19, 2010, pursuant to our March 4, 2009, Public Notice entitled, "Characterization of Jurisdictional Determinations: Purpose, Application and Documentation Requirements as Defined by the Savannah District, US Army Corps of Engineers (USACE)."

The wetlands/other waters on the subject property may be waters of the United States within the jurisdiction of Section 404 of the Clean Water Act (33 United States Code (U.S.C.) 1344) and/or Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403). The placement of dredged or fill material into any waterways and/or their adjacent wetlands or mechanized land clearing of those wetlands could require prior Department of the Army authorization pursuant to Section 404.

We have completed coordination with other federal and state agencies as described in Part C (31)(d) of our NWP Program, published in the February 12, 2012, Federal Register, Vol. 77, No. 34, Pages 10184-10290 (77 FR). The NWPs and Savannah District's Regional Conditions for NWPs can be found on our website at http://www.sas.usace.army.mil/regulatory/Nationwide_Permits.html. During our coordination procedure, no adverse comments regarding the proposed work were received.

As a result of our evaluation of your project, we have determined that the proposed activity is authorized under NWP 3, as described in Part B of the NWP Program. Your use of this NWP is valid only if:

- a. The activity is conducted in accordance with the information submitted and meets the conditions applicable to the NWP, as described at Part C of the NWP Program and the Savannah District's Regional Conditions for NWPs.
- b. You shall obtain and comply with all appropriate federal, state, and local authorizations required for this type of activity. A stream buffer variance may be required. Variances are issued by the Director of the Georgia Environmental Protection Division (EPD), as defined in the Georgia Erosion and Sedimentation Control Act of 1975, as amended. It is our understanding that you may obtain information concerning variances at the Georgia EPD's web site at www.gaepd.org or by contacting the Watershed Protection Branch at (404) 675-6240.
- c. All work conducted under this permit shall be located, outlined, designed, constructed and operated in accordance with the minimal requirements as contained in the Georgia Erosion and Sedimentation Control Act of 1975, as amended. Utilization of plans and specifications as contained in the "Manual for Erosion and Sediment Control, First Edition, 2002," published by the Georgia Soil and Water Conservation Commission or their equivalent, will aid in achieving compliance with the aforementioned minimal requirements.
- d. The permittee agrees that all personnel associated with the project will be advised that there are civil and criminal penalties for harming, harassing or killing manatees, which are protected under the Endangered Species Act of 1973 and the Marine Mammal Protection Act of 1972. The permittee and contractor will be held responsible for any manatee harmed, harassed or killed as a result of construction activities.
- e. Siltation barriers will be made of material in which manatees cannot become entangled, are properly secured, and are regularly monitored to avoid manatee entrapment. Barriers must not block manatee entry to or exit from essential habitat.
- f. All vessels associated with the project will operate at "no wake/idle" speeds at all times while in the construction area. All vessels will follow routes of deep water whenever possible.
- g. All on-site project personnel are responsible for observing water-related activities for the presence of manatees. All construction and activities in open water will cease upon sighting of manatees within 50 feet of the project area. Construction activities will not resume until the manatees have left the project area for at least 30 minutes.

- h. Extreme care will be taken in lowering equipment or materials, including, but not limited to piles, sheet piles, casings for drilled shaft construction, spuds, pile templates, anchors, etc., below the water surface and into the stream bed; taking any precaution not to harm any manatee(s) that may have entered the construction area undetected. All such equipment or materials will be lowered at the lowest possible speed.
- i. The permittee agrees that any collision with a manatee shall be reported immediately to the US Army Corps of Engineers (912-652-5347), the US Fish and Wildlife Service, Ecological Services Field Office, (912-832-8739), and Georgia Department of Natural Resources (Georgia DNR) (Weekdays 8:00 a.m.-4:30 p.m.: 912-264-7218 or 1-800-272-8363; (nights and weekends: 1-800-241-4113). Any dead manatee(s) found in the project area must be secured to a stable object to prevent the carcass from being moved by the current before the authorities arrive. In the event of injury or mortality of a manatee, all aquatic activity in the project area must cease pending Section 7 consultation under the Endangered Species Act with the US Fish and Wildlife Service and the lead Federal agency.
- j. The permittee agrees that the contractor shall keep a log detailing sightings, collisions, or injury to manatees, which have occurred during the contract period.
- k. The permittee agrees that following project completion, a report summarizing the above incidents and sightings will be submitted to the US Fish and Wildlife Service, Ecological Services Field Office, Coastal Georgia Sub-Office, 4980 Wildlife Drive Northeast, Townsend, Georgia 31331.
- 1. All temporary construction materials will be removed upon completion of the work, and disturbed upland areas will be stabilized. No construction debris or trash will be discarded in the water.
- m. The permittee shall regularly maintain all hoses, faucets, and/or freshwater discharges to prevent freshwater leakage into manatee habitat. This minimizes attraction of manatees to the marina where boats are concentrated and a potential for increased boat/manatee collisions exists. Oil and sewage spill contingency plans should be in place for the marina to protect manatees.
- n. The permittee shall identify a person who will be the contact for reporting manatee sightings, boat strikes or other manatee concerns with the US Fish and Wildlife Service and Georgia DNR.
- o. You fill out and sign the enclosed certification and return it to our office within 30 days of completion of the activity authorized by this permit.

This proposal was reviewed and coordinated with the US Fish and Wildlife Service in accordance with Section 7 of the Endangered Species Act. The US Fish and Wildlife Service provided a statement on October 9, 2012, requesting the inclusion of standard manatee conditions within the NWP authorization. With the inclusion of these conditions USFWS concurs with the USACE determination that the project may effect, but is not likely to adversely effect the West Indian manatee. Authorization of an activity by a NWP does not authorize the "take" of threatened or endangered species. In the absence of separate authorization, both lethal and non-lethal "takes" of protected species are in violation of the Endangered Species Act. See Part (C) of 77 FR for more information.

This verification is valid for a period of two years from the date of this letter, or until the NWP is modified, reissued or revoked. All of the existing NWPs are scheduled to expire on March 18, 2017. It is incumbent upon you to remain informed of changes to the NWPs. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant nationwide permit is modified or revoked, you will have twelve (12) months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this NWP.

This authorization should not be construed to mean that any future projects requiring Department of the Army authorization would necessarily be authorized. Any new proposal, whether associated with this project or not, would be evaluated on a case-by-case basis. Any prior approvals would not be a determining factor in making a decision on any future request.

Revisions to your proposal may invalidate this authorization. In the event changes to this project are contemplated, I recommend that you coordinate with us prior to proceeding with the work.

This communication does not relieve you of any obligation or responsibility for complying with the provisions of any other laws or regulations of other federal, state or local authorities. It does not affect your liability for any damages or claims that may arise as a result of the work. It does not convey any property rights, either in real estate or material, or any exclusive privileges. It also does not affect your liability for any interference with existing or proposed federal projects. If the information you have submitted and on which the USACE bases its determination/decision of authorization under the NWP is later found to be in error, this determination may be subject to modification, suspension, or revocation.

A copy of this letter is being provided to the following party: Mr. Jeffrey Williams, Sligh Environmental Consulting, 31 Park of Commerce Way, Suite 2008, Savannah, Georgia 31405.

Thank you in advance for completing our Customer Survey Form. This can be accomplished by visiting our website at http://per2.nwp.usace.army.mil/survey.html and completing the survey

on-line. We value your comments and appreciate your taking the time to complete a survey each time you have interaction with our office.

If you have any questions, please feel free to contact me at 912-652-5349.

Sincerely,

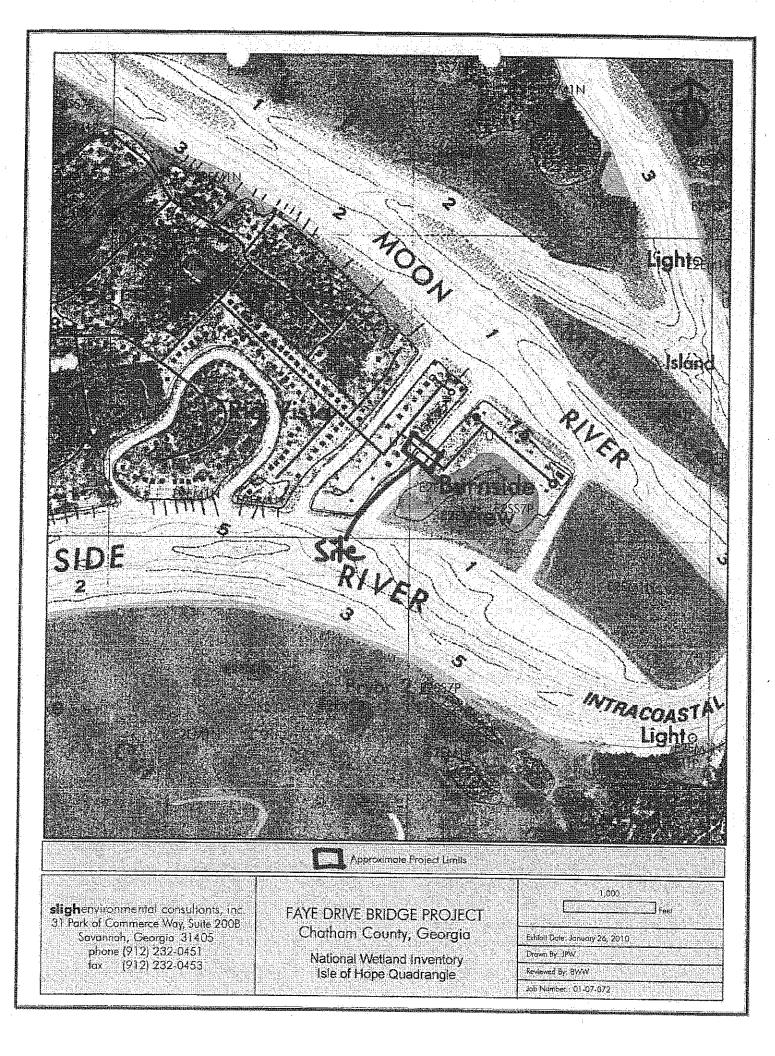
. Brian Moore

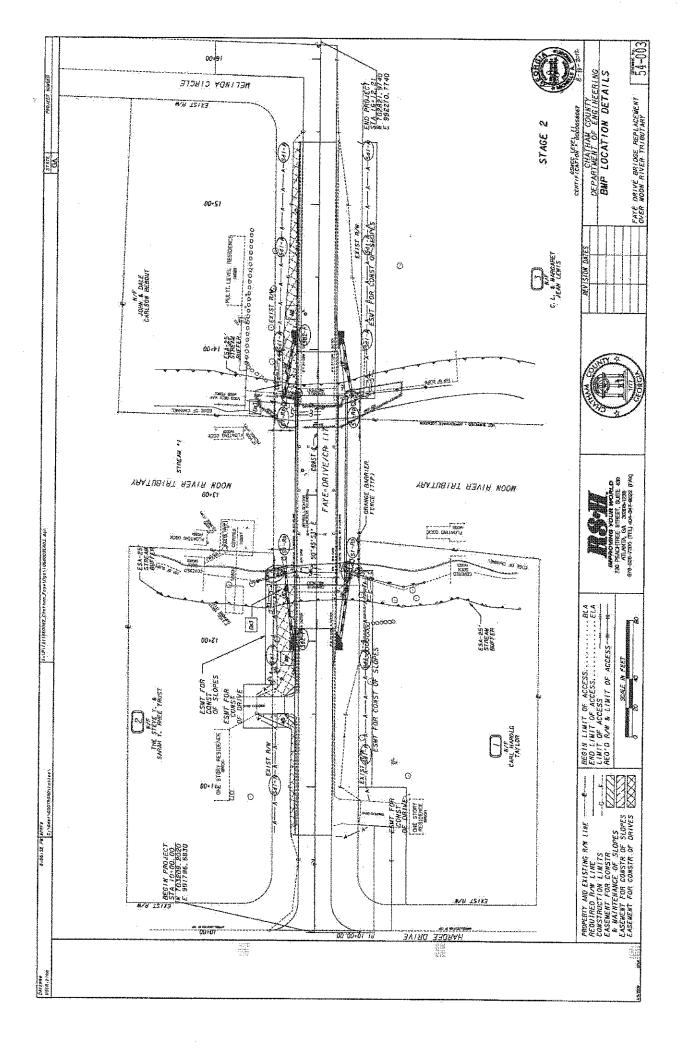
Regulatory Specialist, Coastal Branch

Enclosures

CERTIFICATION OF COMPLIANCE WITH DEPARTMENT OF THE ARMY NWP 3

PERMIT FILE NUMBER:	SAS-2010-00127	
PERMITTEE ADDRESS:	Mr. Leon Davenport Chatham County Engineering Department Post Office Box 8161 Savannah, Georgia 31412-8161	
	ne project is located on Faye Drive as it extend on Burnside Island, Savannah, Chatham Count)).	
an existing bridge, widening	To construct improvements to Faye Drive inc of existing travel lanes and the addition of a p to 0.01 acre of wetland associated with the re	edestrian sidewalk.
ACRES AND/OR LINEAR	FEET OF WATERS OF THE US IMPACTED); 0.01 acre
DATE WORK IN WATERS	OF US COMPLETED:	·
COMPENSATORY MITIGA	ATION REQUIRED: n/a	
DATE MITIGATION COM	PLETED OR PURCHASED (include name of	bank): n/a
Inspection. If I fail to comple Program, published in the Fe	ed activity is subject to a US Army Corps of Early with the permit conditions at Part C of the Normary 12, 2012, Federal Register, Vol. 77, Note subject to suspension, modification or revoce	ationwide Permit
	authorized by the above referenced permit as been completed in accordance with the terms	
Signature of Permittee	· ·	Date







'A.G. 'SPUD' WOODWARD DIRECTOR

JUN - 4 2012

Mr. Jeff Williams Sligh Environmental Consultants 31 Park of Commerce Way, Suite 200B Savannah, GA 31405

RE: Coastal Marshlands Protection Act Permit # 662, Chatham County Government, Hunt Drive Bridge Replacement Burnside Island, Moon River, Chatham County.

Dear Mr. Williams:

The Coastal Marshlands Protection Committee considered and approved permit #662 referenced above under the Coastal Marshlands Protection Act O.C.G.A. 12-5-280 et seq. The permit and permit conditions are attached to this letter. All decision documents, as well as all other plans, documents and materials submitted during the application process become terms of this permit and are now enforceable conditions.

Staff of the Coastal Management Program has reviewed the above referenced application pursuant to Section 404 of the Clean Water Act and/or Section 10 of the River and Harbors Act or 1899 for consistency with the Georgia Coastal Management Program (GCMP). The Program concurs with the applicant's consistency certification to the extent that the project adheres to all conditions and restrictions of Coastal Marshlands Protection Act Permit #662. Issuance of a federal permit that does not contain the same conditions and/or restriction, as any issued state permit, does not alleviate the permittee from adhering to all components of state permits.

This letter and attachments are to be held by you for your files and for inspection by any authorized persons. The expiration date for the permit is five (5) years from the date of issuance. However, no construction may commence within the area of jurisdiction of the Act until the expiration of thirty (30) days following the date of issuance, provided there is no legal appeal of this permit, you have all other necessary federal, state and local authorizations and you have met all of the standard and special conditions as required by this permit.

Permitted Project Description:

Replace the existing Hunt Bridge over a tributary of the Moon River on Burnside Island, Chatham County, Georgia. Total new impact to jurisdictional coastal marshlands is 2,656 sq. ft. (0.06 acre). Standard and Special conditions apply to this permit.

Chatham County Government-Hunt Drive Bridge Replacement CMPA Permit #662

Page 2 of 2

JUN - 4 2012

Marsh Component:

The bridge will be approximately 39' wide by 120.4' long (4,725 sq. ft.), approximately 348 sq. ft. (0.008 acre) of rip rap will be installed to stabilize the slopes of the three stormwater outfalls located adjacent to the bridge and approximately 15' of tidally influenced ditch, 653 sq. ft. (0.015 acre), will be piped with 18" re-enforced concrete pipe (RCP).

Permit Placard:

Enclosed is the permit placard to be posted at the work site (within 24 hours) for the duration of the construction activity.

Post Construction Requirements: Compliance Certification and File Maintenance Also enclosed is a Certification of Compliance that must be submitted to us within 30 days following completion of the permitted activity. Please include this compliance form with the post-construction survey, if required under the special conditions. Department staff will assess compliance and provide you with a written verification of project completion and compliance.

Conveyance of Ownership Interest:

If you as the permit holder sell, lease, rent, or otherwise convey the land or any portion of the land for which the permit was issued, you must notify the Department within 30 days of this transfer or conveyance. The permit shall continue in force in favor of the new owner, lessee. tenant, or other assignee so long as there is no change in the use of the land as set forth in the original application. The Department will transfer the permit to the new owner with all of the original terms and conditions.

We ask that you carefully read through this document and attachments and comply with the terms and conditions of this permit. Feel free to contact me if you need clarification of any of these conditions or for assistance with this project.

Sincerely,

Brad Gane

Chief

Ecological Services Section

B. Gane

Enclosures:

CMPC Permit #662 and Permit Conditions, Compliance Certificate, Permit

Placard, Drawings

cc:

Mr. Brian Moore, SAS2010-00128 Savannah District Corps of Engineers PO Box 889 Savannah, GA 3140

File # (022510.1243pm CMPA#662)



A.G. 'SPUD' WOODWARD DIRECTOR

Coastal Marshlands Protection Committee Permit #662 Final Conditions May 30, 2012

Chatham County Government
Hunt Drive Bridge Replacement
Burnside Island, Moon River, Chatham County, Georgia

Project Description: Replace the existing Hunt Drive Bridge over a tributary of the Moon River on Burnside Island, Chatham County, Georgia. Total new impact to jurisdictional coastal marshlands is 2,656 sq. ft. (0.06 acre). Standard and Special conditions apply to this permit.

Marsh Component:

The bridge will be approximately 39' wide by 120.4' long (4,725 sq. ft.), approximately 348 sq. ft. (0.008 acre) of rip rap will be installed to stabilize the slopes of the three stormwater outfalls located adjacent to the bridge and approximately 15' of tidally influenced ditch, 653 sq. ft. (0.015 acre), will be piped with 18" re-enforced concrete pipe (RCP).

COASTAL MARSHLANDS PROTECTION ACT STANDARD CONDITIONS

- 1. The project must comply, as applicable, for areas permitted herein, with all other federal, state, and local statutes, ordinances, and regulations and the applicant must obtain all licenses and permits prior to commencement of construction.
- 2. This permit does not resolve actual or potential disputes regarding ownership of, rights in or over the property upon which the subject project is proposed, and shall not be construed as recognizing or denying any such rights or interests.
- 3. All plans, documents and materials contained in this permit application, required by Coastal Marshlands Protection Act of 1970, as amended O.C.G.A. § 12-5-280 et seq. are a part of this permit and conformance to such plans, documents, and materials are a condition of this permit. No change or deviation from these plans, documents, and materials shall be permitted without prior notification and approval by the Department or CMPC.
- 4. No further encroachment or construction shall take place within state jurisdiction, except as permitted by the CMPC. Any modification of the plans or structure in the jurisdictional area must be reviewed and approved by the Department or the CMPC, as necessary, prior to construction.
- 5. No construction or alteration of a project may commence until the expiration of 30 days following the date on which the application is approved; provided however that if a timely appeal is filed, no construction or alteration may commence until all administrative and judicial proceedings are terminated.

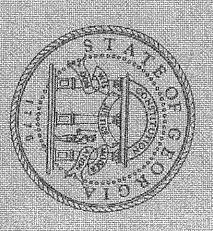
- 6. The permit must be posted onsite within twenty-four (24) hours of beginning construction.
- 7. A copy of these and all permit conditions must be supplied to the person in charge of construction. All contractors and subcontractors are responsible for strict adherence to all permit conditions.
- 8. All Best Management Practices (BMPs) should be used to prevent any erosion and sedimentation at the site. No equipment, materials, or debris may be placed in, disposed of, or stored in jurisdictional areas. Any visible alterations in the marsh topography will be restored immediately using low-impact hand tools. Any damage to the marsh vegetation that has not recovered naturally during the next growing season will be repaired by a method acceptable to the Department.
- 9. If the permitted improvements are damaged, fall into disrepair, become dilapidated, or are not meeting their expected usefulness and are not maintained at a serviceable level, it is the responsibility of the owner to remove the improvements. A new permit will be required to retain and repair the structure, improvement, or asset if it loses its structural integrity and is no longer serviceable.
- 10. The CMPC is not bound in the future to protect any improvement or asset authorized by the permit.

SPECIAL CONDITIONS

- 1. Should unreasonable damage to the marsh surface occur, preexisting surface elevations shall be restored using hand tools. Such restoration must be coordinated with the Department prior to restoration work being conducted.
- 2. There shall be no disposal of excavated sediments in coastal marshlands.
- 3. Siltation screens shall be placed where disposal of material will occur to hold placed material and to prevent fill of coastal marshlands.
- 4. Construction activities shall be performed using best management practices (BMPs) to comply with the Georgia Erosion & Sedimentation Act, O.C.G.A. §12-7-1 et. seq.
- 5. Permittee may be required to provide a post-construction survey to the Georgia Department of Natural Resources, Coastal Resources Division upon completion of the permitted activity. Such survey shall comply with the Georgia Plat Act O.C.G.A. 15-6-67 et seq.

Issued Pursuant to O C.C.A. 12-5-280

County, Georgia Total new impaciro luniscictional coasial marshandsis 2,556 sq. it (o 06 acre)



May 30, 2012

Expiration Date: May 30, 2017

Permit Number S S S S S

Authonized By:

For further information, please contact the DNR Goastal Resources Division at (912) 264-7218

STATE OF GEORGIA REVOCABLE LICENSE REQUEST In Association with a DNR Permitted Project

APPLICANTS NAME	(S): Chatham County D	epartment of Engineering -	Mr. A.G. Bungard, P.E	. / County Engineer
MAILING ADDRESS:	P.O. Box 8161 (Street)	Savannah (City)	Georgia (State)	31412 (Zip)
PROJECT ADDRESS/I	OCATION: Hunt Driv	e, Burnside Island, Chatham		(-2)
COUNTY: Chatham		7: Tributary of the Moon R		DATE: January 24, 2012
LOT, BLOCK & SUBD	IVISION NAME FROM	I DEED:		
A. G. "Spud" Woodward,	DIRECTOR			
Georgia Department of No Coastal Resources Division			GADI	R/HMP
One Conservation Way Brunswick, Georgia 3152			#EB	3 7817
Dear Mr. Woodward:				
issuance of such a permit of constitute an encroachmen license from the State of G the subject of such a licens misrepresentation or falsiff I understand that interest. I acknowledge that the property upon which the acknowledge that such a license.	will not relieve me of the of t on the beds of tidewaters eorgia. Attached hereto at e. I certify that all informa- ication is punishable by la if permission from the Sta at this revocable license do the subject project is pro- cense would relate only to	obligation to obtain authorizes which are State-owned property and made a part of this requestation submitted is true and coaw. ate is granted, it will be a recess not resolve any actual or posed, and shall not be constituted in the property interests of the	ation from the State of Coerty. Accordingly, I he t is a copy of the plans an orrect to the best of my known to the license and will potential disputes regard trued as recognizing of State and would not ob-	, Savannah District. I understand that the deorgia since the proposed project would reby request that I be granted a revocable and description of the project which will be mowledge and understand that the willful not constitute a license coupled with an ling the ownership of, or rights in, or over denying any such rights or interests. I viate the necessity of obtaining any other aboards, nor allow them to occur, at this
structure. I recognize that project until the Commissi	I waive my right of expect	ation of privacy and I do not	have the permission of	the State of Georgia to proceed with such
		Sincerely, By:	Ze.	1/25/2012
		5		A.G. Bungard, P.E., County Engineer
Attachment	****	By:	****	(Applicant), title if applicable
future be utilized by boats the premises, licensee shall covenant by licensee may b project proposed for this li condition. Otherwise, acti STATE OF GEORGIA Office of the Governor By: For: Mark Willia	employing power drawn not discriminate against a se enforced by termination dense must be completed	nets under the provisions for any person on the basis of ract of this license, by injunction within 5 years of the date coke the license and all struct	commercial or sport bai e, gender, color, nationa n, and by any other remed if issuance of the license	our request. This area may now or in the t shrimping. In its occupancy and use of al origin, religion, age, or disability. This ly available at law to the Department. The e and must be maintained in serviceable mmediately at the licensee's expense.
DATE:	\$ 62 * 1			Revised 12/1/2009

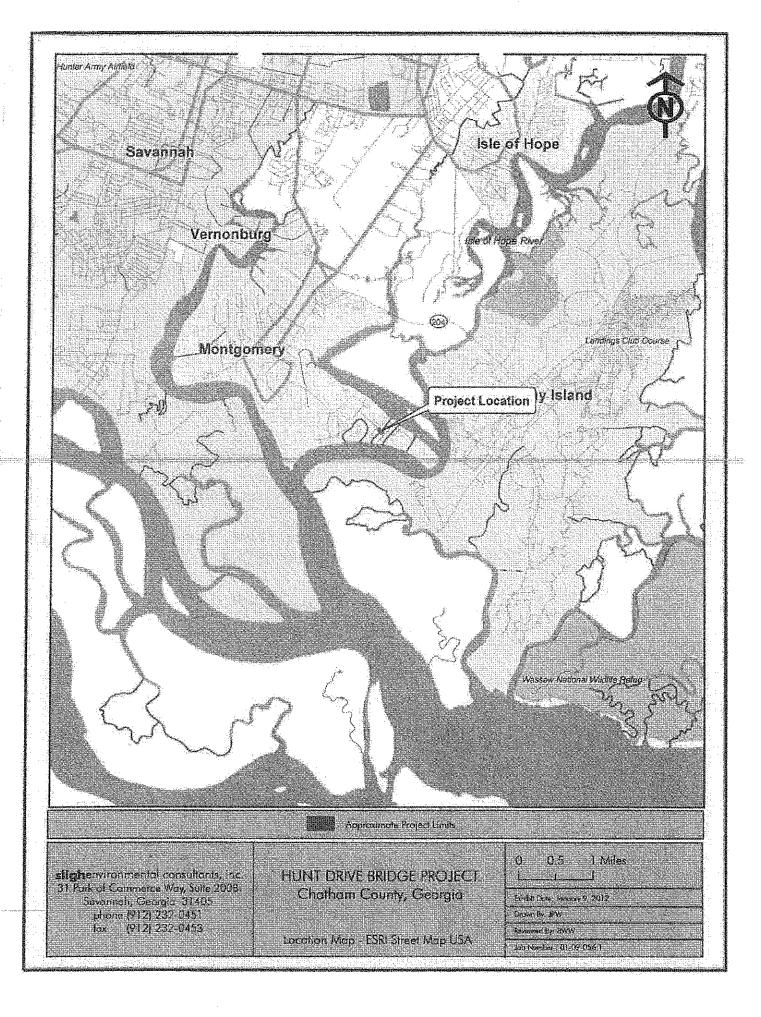


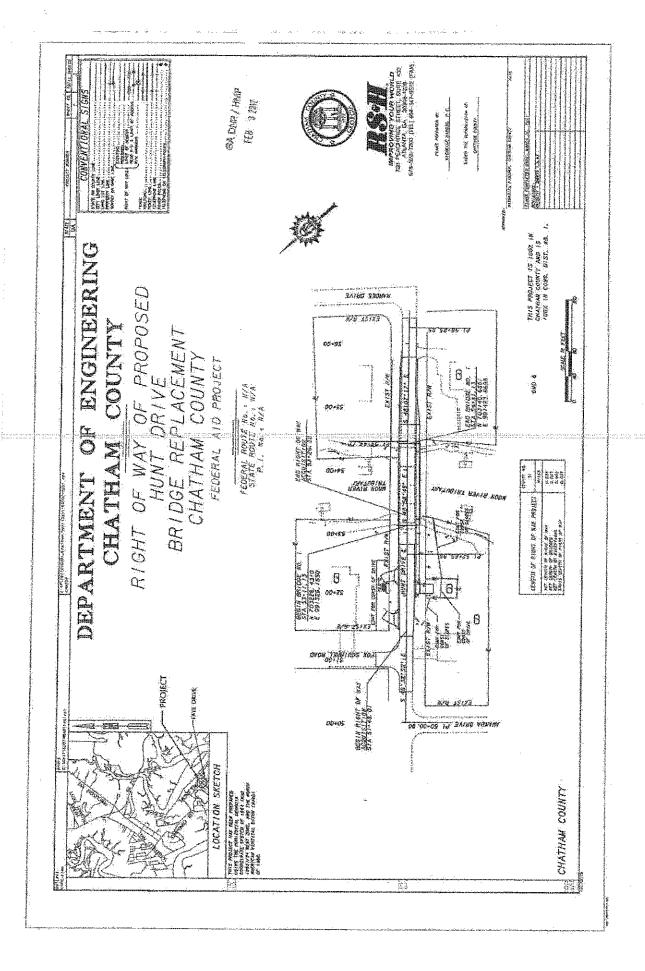
PERMITTEE:

A.G. 'SPUD' WOODWARD DIRECTOR

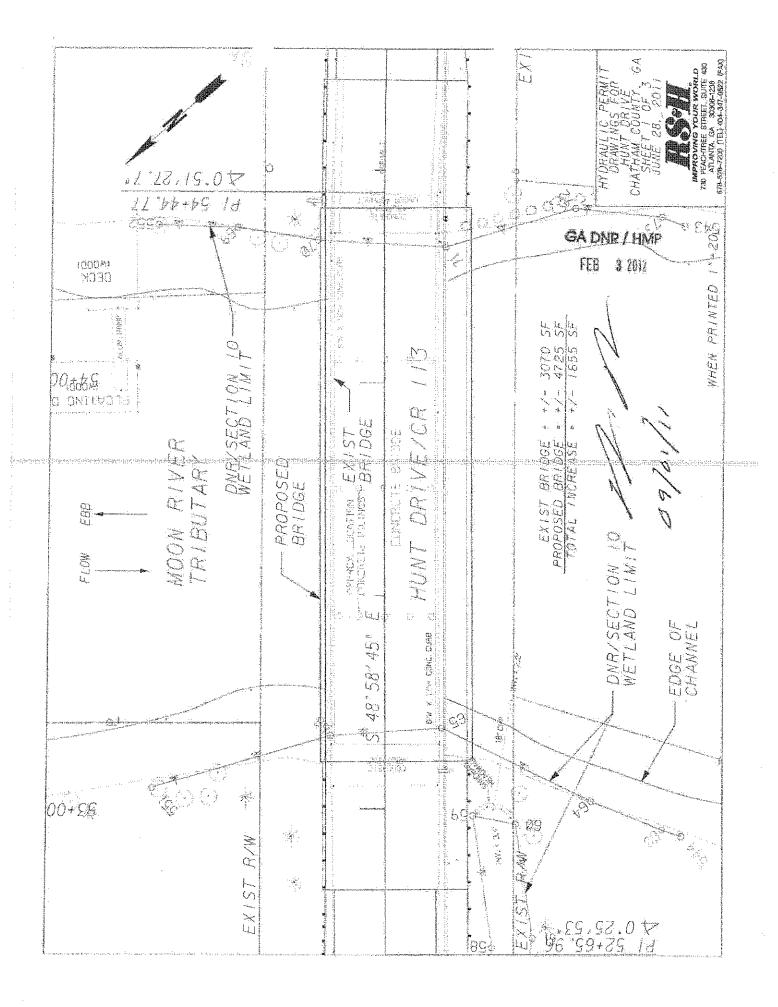
CERTIFICATION OF COMPLIANCE FOR THE CONSTRUCTION AND MAINTENANCE OF PROJECTS PERMITTED UNDER THE COASTAL MARSHLAND PROTECTION ACT

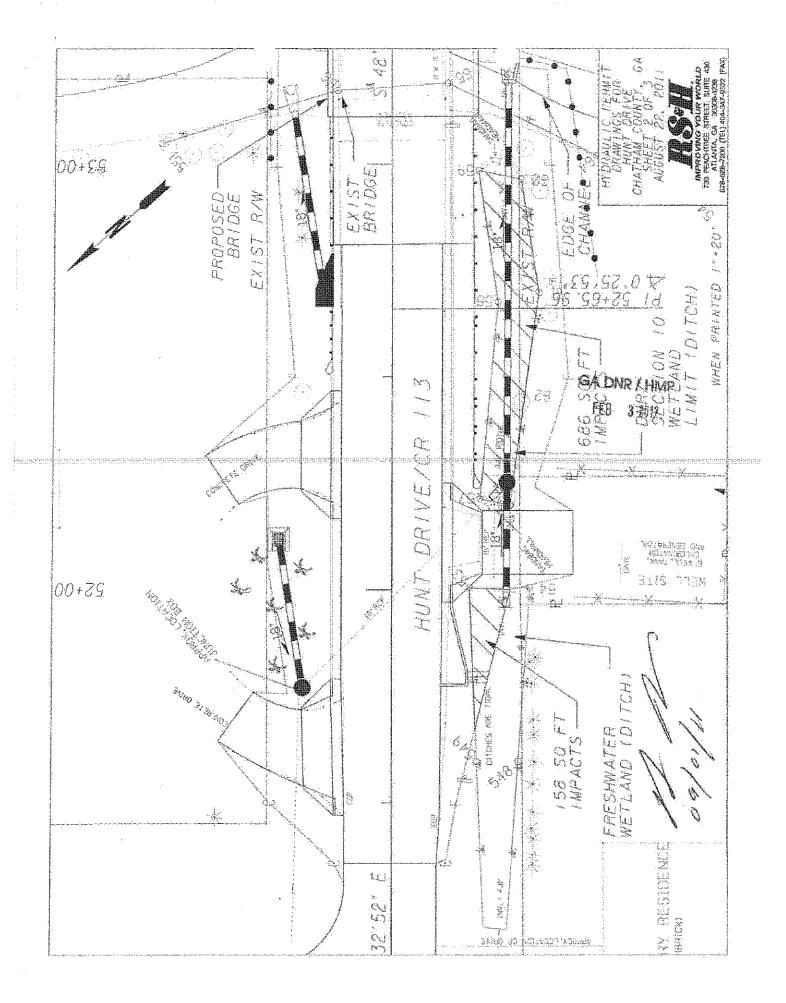
Name: Chatham County Government
City or Town: Hunt Drive, Burnside Island
Island or Waterway: Tributary to Moon River
County: Chatham County
Permit Number: 662
Within 30 days of completion of the activity authorized by this permit, sign this certification and return to the Habitat Management Program of the Ecological Services Section at the address listed below.
Please note that your permitted activity is subject to compliance inspections by DNR representatives before and after completion of the project. If you fail to comply with the permit terms and conditions it may be subject to suspension, modification, or revocation.
Permittee Statement "I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit."
Signature of Permittee:
Date:





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GA DNR / HMP FEB 3 7012 ELEVATION -HANDRAIL



A.G. 'SPUD' WOODWARD. DIRECTOR

JUN - 4 2012

Mr. Jeff Williams Sligh Environmental Consultants 31 Park of Commerce Way, Suite 200B Savannah, GA 31405

RE: Coastal Marshlands Protection Act Permit #663, Chatham County Government, Faye Drive Bridge Replacement Burnside Island, Moon River, Chatham County.

Dear Mr. Williams:

The Coastal Marshlands Protection Committee considered and approved permit #663 referenced above under the Coastal Marshlands Protection Act O.C.G.A. 12-5-280 et seq. The permit and permit conditions are attached to this letter. All decision documents, as well as all other plans, documents and materials submitted during the application process become terms of this permit and are now enforceable conditions.

Staff of the Coastal Management Program has reviewed the above referenced application pursuant to Section 404 of the Clean Water Act and/or Section 10 of the River and Harbors Act or 1899 for consistency with the Georgia Coastal Management Program (GCMP). The Program concurs with the applicant's consistency certification to the extent that the project adheres to all conditions and restrictions of Coastal Marshlands Protection Act Permit #663. Issuance of a federal permit that does not contain the same conditions and/or restriction, as any issued state permit, does not alleviate the permittee from adhering to all components of state permits.

This letter and attachments are to be held by you for your files and for inspection by any authorized persons. The expiration date for the permit is five (5) years from the date of issuance. However, no construction may commence within the area of jurisdiction of the Act until the expiration of thirty (30) days following the date of issuance, provided there is no legal appeal of this permit, you have all other necessary federal, state and local authorizations and you have met all of the standard and special conditions as required by this permit.

Permitted Project Description:

Replace the existing Faye Drive Bridge over a tributary of the Moon River on Burnside Island, Chatham County, Georgia. Total new impact to jurisdictional coastal marshlands is 1,840 sq. ft. (0.04 acre). Standard and Special conditions apply to this permit.

Chatham County Government-Faye Drive Bridge Replacement CMPA Permit #663 Page 2 of 2

JUN - 4 2012

Marsh Component:

The bridge will be approximately 39' wide by 121' long (4,725 sq. ft.). Approximately 435 sq. ft. (0.01 acre) of rip rap will be installed to stabilize the slopes at the four stormwater outfalls.

Permit Placard:

Enclosed is the permit placard to be posted at the work site (within 24 hours) for the duration of the construction activity.

Post Construction Requirements: Compliance Certification and File Maintenance

Also enclosed is a *Certification of Compliance* that must be submitted to us within 30 days following completion of the permitted activity. Please include this compliance form with the post-construction survey, if required under the special conditions. Department staff will assess compliance and provide you with a written verification of project completion and compliance.

Conveyance of Ownership Interest:

If you as the permit holder sell, lease, rent, or otherwise convey the land or any portion of the land for which the permit was issued, you must notify the Department within 30 days of this transfer or conveyance. The permit shall continue in force in favor of the new owner, lessee, tenant, or other assignee so long as there is no change in the use of the land as set forth in the original application. The Department will transfer the permit to the new owner with all of the original terms and conditions.

We ask that you carefully read through this document and attachments and comply with the terms and conditions of this permit. Feel free to contact me if you need clarification of any of these conditions or for assistance with this project.

Sincerely,

Brad Gane

Chief

Ecological Services Section

B. Gave

Enclosures: CN

CMPC Permit #663 and Permit Conditions, Compliance Certificate, Permit

Placard, Drawings

cc:

Mr. Brian Moore, SAS2010-00127

Savannah District Corps of Engineers

PO Box 889

Savannah, GA 3140

File # (021805.1201pm CMPA#663)



A.G. 'SPUD' WOODWARD DIRECTOR

Coastal Marshlands Protection Committee Permit # 663 Final Conditions May 30, 2012

Chatham County Government
Faye Drive Bridge Replacement
Burnside Island, Moon River, Chatham County, Georgia

Project Description: Replace the existing Faye Drive Bridge over a tributary of the Moon River on Burnside Island, Chatham County, Georgia. Total new impact to jurisdictional coastal marshlands is 1,840 sq. ft. (0.04 acre). Standard and Special conditions apply to this permit.

Marsh Component:

The bridge will be approximately 39' wide by 121' long (4,725 sq. ft.). Approximately 435 sq. ft. (0.01 acre) of rip rap will be installed to stabilize the slopes at the four stormwater outfalls.

COASTAL MARSHLANDS PROTECTION ACT STANDARD CONDITIONS

- 1. The project must comply, as applicable, for areas permitted herein, with all other federal, state, and local statutes, ordinances, and regulations and the applicant must obtain all licenses and permits prior to commencement of construction.
- 2. This permit does not resolve actual or potential disputes regarding ownership of, rights in or over the property upon which the subject project is proposed, and shall not be construed as recognizing or denying any such rights or interests.
- 3. All plans, documents and materials contained in this permit application, required by Coastal Marshlands Protection Act of 1970, as amended O.C.G.A. § 12-5-280 et seq. are a part of this permit and conformance to such plans, documents, and materials are a condition of this permit. No change or deviation from these plans, documents, and materials shall be permitted without prior notification and approval by the Department or CMPC.
- 4. No further encroachment or construction shall take place within state jurisdiction, except as permitted by the CMPC. Any modification of the plans or structure in the jurisdictional area must be reviewed and approved by the Department or the CMPC, as necessary, prior to construction.
- 5. No construction or alteration of a project may commence until the expiration of 30 days following the date on which the application is approved; provided however that if a timely appeal is filed, no construction or alteration may commence until all administrative and judicial proceedings are terminated.
- 6. The permit must be posted onsite within twenty-four (24) hours of beginning construction.

- 7. A copy of these and all permit conditions must be supplied to the person in charge of construction. All contractors and subcontractors are responsible for strict adherence to all permit conditions.
- 8. All Best Management Practices (BMPs) should be used to prevent any erosion and sedimentation at the site. No equipment, materials, or debris may be placed in, disposed of, or stored in jurisdictional areas. Any visible alterations in the marsh topography will be restored immediately using low-impact hand tools. Any damage to the marsh vegetation that has not recovered naturally during the next growing season will be repaired by a method acceptable to the Department.
- 9. If the permitted improvements are damaged, fall into disrepair, become dilapidated, or are not meeting their expected usefulness and are not maintained at a serviceable level, it is the responsibility of the owner to remove the improvements. A new permit will be required to retain and repair the structure, improvement, or asset if it loses its structural integrity and is no longer serviceable.
- 10. The CMPC is not bound in the future to protect any improvement or asset authorized by the permit.

SPECIAL CONDITIONS

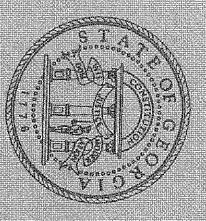
- 1. Should unreasonable damage to the marsh surface occur, preexisting surface elevations shall be restored using hand tools. Such restoration must be coordinated with the Department prior to restoration work being conducted.
- 2. There shall be no disposal of excavated sediments in coastal marshlands.
- 3. Siltation screens shall be placed where disposal of material will occur to hold placed material and to prevent fill of coastal marshlands.
- 4. Construction activities shall be performed using best management practices (BMPs) to comply with the Georgia Erosion & Sedimentation Act, O.C.G.A. §12-7-1 et. seq.
- 5. Permittee may be required to provide a post-construction survey to the Georgia Department of Natural Resources, Coastal Resources Division upon completion of the permitted activity. Such survey shall comply with the Georgia Plat Act O.C.G.A. 15-6-67 et seq.

Georgia Coastal Marshlands Protection Committee

Issued Pursuant to O.C.G.A. 12-5-280

To: Chatham County Government

Candand Special conditions 21111/10 The period County, Georgia, Tural new impact to junisdictional coastal marshlands is 1,846 sq. ft. (0,02 acre) I die Replace lie existing Faye Dinve Bridge over a tribilianvol The Woon Wiver on Burnsläc Island, Chaman



May 20, 2012

Expiration Date: May 30, 2017

Permit Number: 6

Authorized By:

For further information, please contact the DNR Coastal Resources DMEIon at (612) 264-7218

STATE OF GEORGIA REVOCABLE LICENSE REQ. 3T In Association with a DNR Permitted Project

APPLICANTS NAME	(S): Chatham County Dep	artment of Engineering	Mr. A.G. Bungard, P.E. / C	County Engineer
MAILING ADDRESS:	P.O. Box 8161 (Street)	Savannah (City)	Georgia (State)	31412 (Zip)
PROJECT ADDRESS/I	OCATION: Faye Drive,	Burnside Island, Chatha	m County, Georgia	19-14-01-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0
COUNTY: Chatham	WATERWAY:	Tributary of the Moon	River & Burnside River	DATE: January 24, 2012
LOT, BLOCK & SUBD	IVISION NAME FROM I	DEED:		
A. G. "Spud" Woodward, Georgia Department of N Coastal Resources Divisio One Conservation Way Brunswick, Georgia 3152	atural Resources on			
Dear Mr. Woodward:				
issuance of such a permit constitute an encroachmer license from the State of G the subject of such a license misrepresentation or falsiful I understand that interest. I acknowledge the property upon which acknowledge that such a li State license, permit or au structure. I recognize that	will not relieve me of the oblat on the beds of tidewaters we eorgia. Attached hereto and se. I certify that all informatification is punishable by law if permission from the State at this revocable license does the subject project is proposeense would relate only to the thorization required by State	ligation to obtain authorichich are State-owned promade a part of this reque on submitted is true and obtain a submitted, it will be a not resolve any actual of sed, and shall not be contemporary interests of the law. I further recognizion of privacy and I do not of pri	zation from the State of Georoperty. Accordingly, I hereby st is a copy of the plans and decorrect to the best of my known evocable license and will not potential disputes regarding astrued as recognizing or detected as the state and would not obviate that I will have no liveabout have the permission of the state and would not obtain the s	vannah District. I understand that the rgia since the proposed project would y request that I be granted a revocable description of the project which will be wiedge and understand that the willful to constitute a license coupled with an the ownership of, or rights in, or overnying any such rights or interests. I e the necessity of obtaining any other ards, nor allow them to occur, at this State of Georgia to proceed with such I 25/2012. G. Bungard, P.E., County Engineer
		By:	1,	o. Dungard, F.D., County Engineer
Attachment	沙沙沙沙	******	***	(Applicant), title if applicable
future be utilized by boats the premises, licensee shal covenant by licensee may project proposed for this l	employing power drawn net I not discriminate against any be enforced by termination of icense must be completed w	s under the provisions for y person on the basis of ra f this license, by injunction thin 5 years of the date	r commercial or sport bait shace, gender, color, national or on, and by any other remedy a of issuance of the license an	request. This area may now or in the rimping. In its occupancy and use of rigin, religion, age, or disability. This vailable at law to the Department. The id must be maintained in serviceable rediately at the licensee's expense.
STATE OF GEORGIA			GAI	MR/HMP
Office of the Governor By:	Cane		FEB	3 2012
For: Mark Willia	nms, Commissioner-DNR	V 9 B anim		
DATE:	ma ma	Y 3 0 2012	····	Revised 12/1/2009

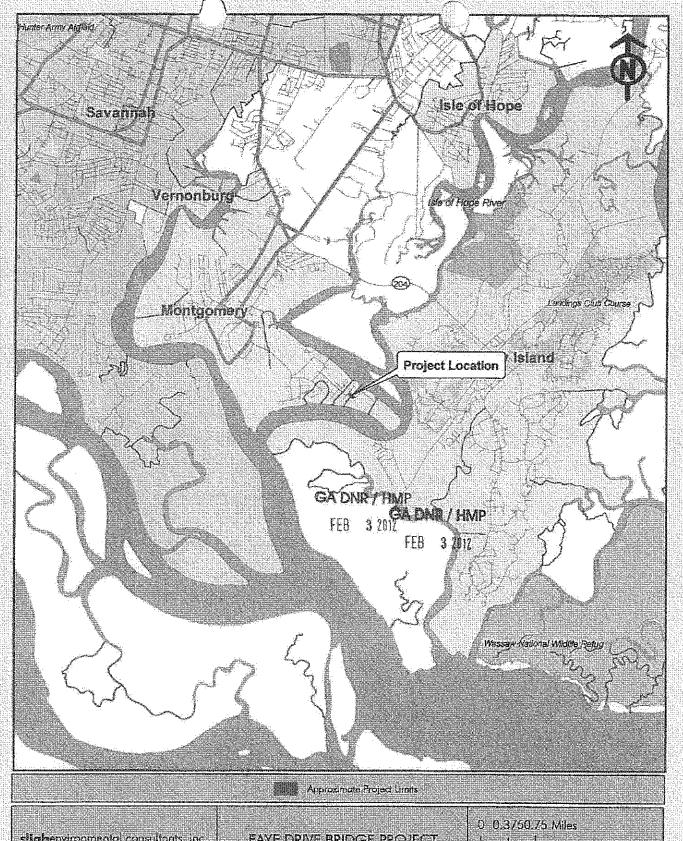


PERMITTEE:

A.G. 'SPUD' WOODWARD DIRECTOR

CERTIFICATION OF COMPLIANCE FOR THE CONSTRUCTION AND MAINTENANCE OF PROJECTS PERMITTED UNDER THE COASTAL MARSHLAND PROTECTION ACT

Name: Chatham County Government
City or Town: Faye Drive, Burnside Island
Island or Waterway: Tributary to Moon River
County: Chatham County
Permit Number: 663
Within 30 days of completion of the activity authorized by this permit, sign this certification and return to the Habitat Management Program of the Ecological Services Section at the address listed below.
Please note that your permitted activity is subject to compliance inspections by DNR representatives before and after completion of the project. If you fail to comply with the permit terms and conditions it may be subject to suspension, modification, or revocation.
Permittee Statement "I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit."
Signature of Permittee:
Date:



slighenvironmental consultants, inc. 31 Park of Commerce Way, Suile 200b Savarnah, Georgia 31495 phone (912) 232-0451 fax (912) 232-0453

FAYE DRIVE BRIDGE PROJECT Chatham County, Georgia

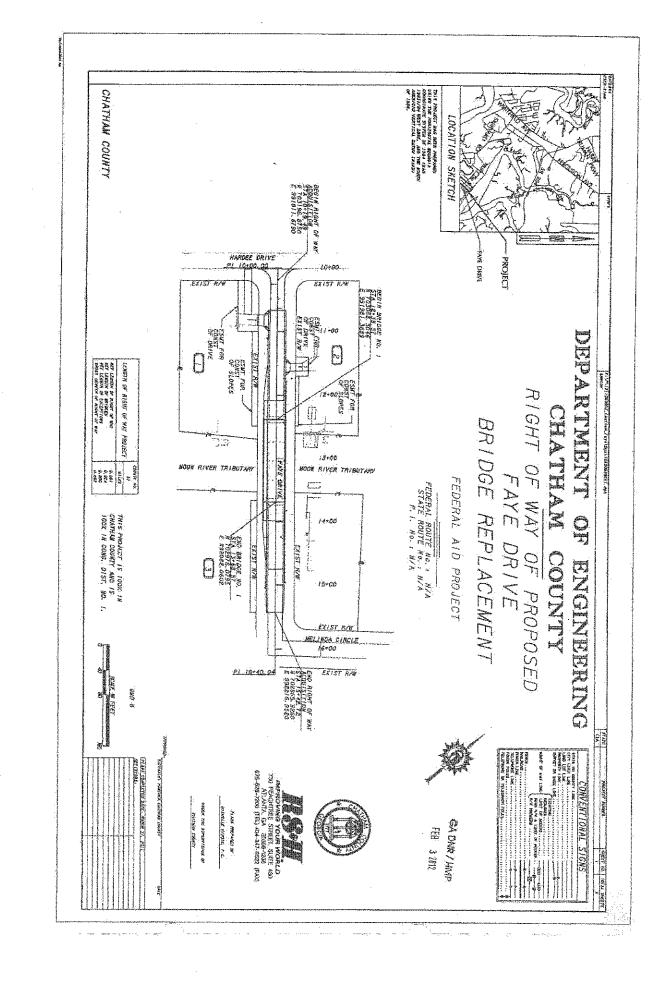
Location Map - ESRI Street Map USA

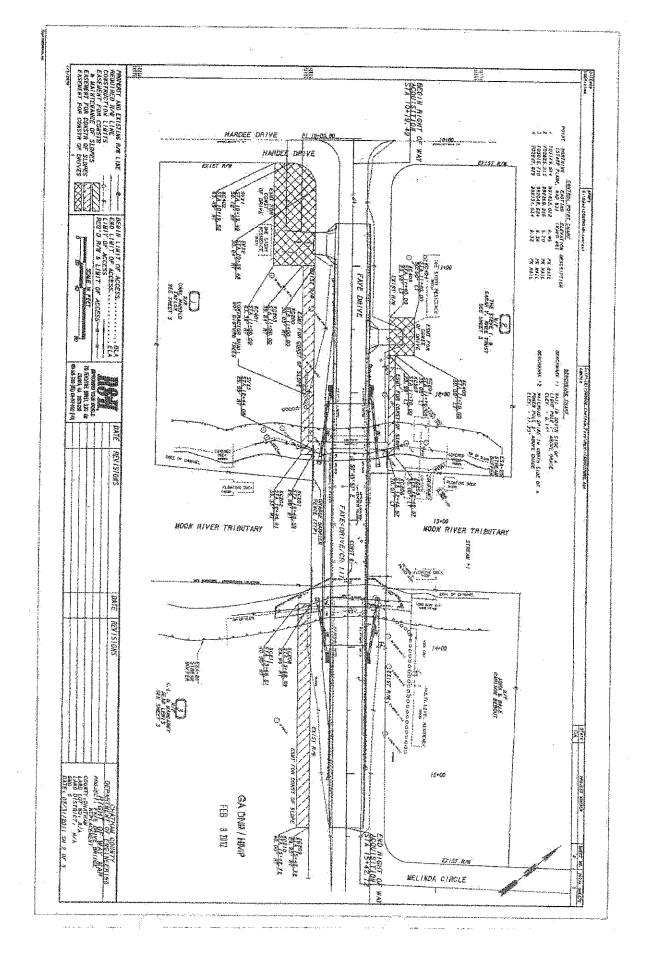
Exhibit Date: January 9, 2012

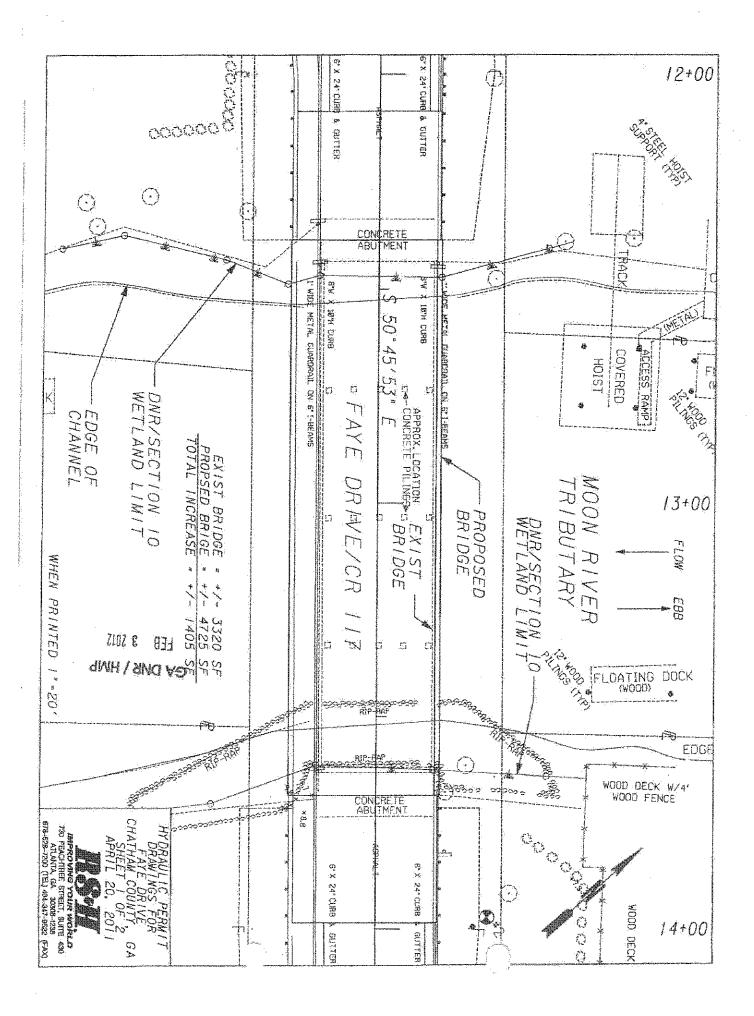
Drawn By JPW

Reviewed By BWW

Job Number: 01:09:056.2









GA DNR / HMP

