AMENDMENT OF SOLICI	TATION/MODI	FICATION OF CONTRACT	1. CONTRACT	ID CODE	PAGE OF PAGES		
AMENDMENT OF SOLICI	TATION/MODI	FICATION OF CONTRACT	J		1 62		
2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.		5. PROJEC	TNO.(Ifapplicable)		
P00004	See block 16c	W31XNJ92618206					
6. ISSUED BY CODE	W91278	7. ADMINISTERED BY (Ifother than item 6)	COI	DE			
ENDIST MOBILE CONTRACTING DIVISION 109 ST JOSEPH ST MOBILE AL 36602		See Item 6					
8. NAME AND ADDRESS OF CONTRACTO GREAT LAKES DREDGE & DOCK COMPANY, LLC	OR (No., Street, County	r, State and Zip Code)	9A. AMENDM	ENT OF SO	OLICITATION NO.		
STEVEN R. AUERNHAMER  1 PARKVIEW PLAZA STE 800  OAKBROOK TERRACE IL 60181-4730			9B. DATED (S	EE ITEM 1	11)		
CALCACOT FERTIVACE IE SO IO 1-4750		X	10A. MOD. OF W9127819C00	CONTRA 29	CT/ORDER NO.		
CODE 1BSU5	EACH ITY CO	NDE X	10B. DATED ( 20-Sep-2019	(SEE ITEM	1 13)		
	FACILITY CO	APPLIES TO AMENDMENTS OF SOLICI	20 00p 2010				
The above numbered solicitation is amended as set			is extended,	is not ext	ended.		
(a) By completing Items 8 and 15, and returning or (c) By separate letter or telegram which includes RECEIVED AT THE PLACE DESIGNATED FOI REJECTION OF YOUR OFFER. If by virtue of the	copies of the amendr s a reference to the solicitation R THE RECEIPT OF OFFER is amendment you desire to co the solicitation and this ame	secified in the solicitation or as amended by one of the ment; (b) By acknowledging receipt of this amendment on and amendment numbers. FAILURE OF YOUR ACLS PRIOR TO THE HOUR AND DATE SPECIFIED Mange an offer already submitted, such change may be rendment, and is received prior to the opening hour and	on each copy ofthe of KNOWLEDGMENT IAY RESULT IN made by telegramor le	TO BE	;		
13. THIS	ITEM APPLIES ONLY	TO MODIFICATIONS OF CONTRACTS/0	ORDERS.				
		ACT/ORDER NO. AS DESCRIBED IN ITEM		AADE DIE			
CONTRACT ORDER NO. IN ITEM 10		authority) THE CHANGES SET FORTH IN	NIIEM 14 ARE N	MADE IN I	HE		
office, appropriation date, etc.) SET FC	ORTH IN ITEM 14, PU	D TO REFLECT THE ADMINISTRATIVE RSUANT TO THE AUTHORITY OF FAR		as changes	in paying		
X C. THIS SUPPLEMENT AL AGREEMENT FAR 52.243-4 Changes	I IS ENTERED INTO I	PURSUANT TO AUTHORITY OF:					
D. OTHER (Specify type of modification a	and authority)						
E. IMPORTANT: Contractor is not,	X is required to s	sign this document and return1 c	opies to the issuin	g office.			
14. DESCRIPTION OF AMENDMENT/MOD where feasible.) Modification Control Number: k5ct9djf The purpose of this modification is to:  1. Outline revisions to the Scope of Work p 2. Re-establish the completion date from 1 hurricanes and storms that passed throug 3. All other terms and conditions remain un 4.In consideration of this modification agree release the Government from any and all licircumstances giving rise to the proposal in	21289  er the attached specs 0 Novmeber 2020 to 4 h in the past 3 months changed. ed to herein as a comp iability under this modif	at no cost to the Government. December 2020 (24 additional days) due t	o the impact of nu	umerous ctor hereb	у		
Except as provided herein, all terms and conditions of the 15A. NAME AND TITLE OF SIGNER (Type		m9A or 10A, as hereto fore changed, remains unchanged			e or print)		
	r/	Sara C Lagadan			usace.army.mil		
Steven R. Auernhamer, Vice President  15B. CONTRACTOR/OFFEROR	15C. DATE SIGN				6C. DATE SIGNED		
Steven R. Auernhamer Date: 2020.11.24 13:14:14-06'00'	amer	DAY LOGSDON, SARA.G. (b) (6) Pigitally		)(6)	11/30/2020		
(Signature of person authorized to sign)  November 24, 2020  Signature of Contracting Officer)							

### SECTION SF 30 BLOCK 14 CONTINUATION PAGE

### **SUMMARY OF CHANGES**

### SECTION 00 10 00 - SOLICITATION

The following Delivery Schedule item for CLIN 0001 has been changed from:

	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	DODAAC / CAGE
	10-NOV-2020	61,767,026.85	IRVINGTON SITE OFFICE STEPHEN REID 7861 13TH STREET IRVINGTON, AL 36544-2899 251-957-6019 FOB: Destination	964151
To:				
	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	DODAAC / CAGE
	04-DEC-2020	61,767,026.85	IRVINGTON SITE OFFICE STEPHEN REID 7861 13TH STREET IRVINGTON, AL 36544-2899 251-957-6019 FOB: Destination	964151

(End of Summary of Changes)

#### PART I - REVISIONS MADE BY ADDED AND/OR REPLACEMENT PARAGRAPHS/PAGES/SECTIONS

The items listed below are to be replaced by the corresponding added and/or revised paragraphs/pages or sections. Added and/or revised paragraphs/pages or sections are indicated by a note in bottom right hand corner of each paragraph or page. Added sections are hereby made a part of the contract and are to be inserted in the specification in the proper numerical/alphabetical sequence.

Within the specifications, deletions from the specifications are indicated by strikethrough, e.g.: deletions are marked with strikethrough and additions to the specifications including revisions/substitutions are indicated in bold, italic and underlined, e.g.: additions are indicated thus.

SECTION	Corresponding Added or Revised Paragraph Page, and/or Section
VOLUME 2	
Appendix A	Pages added to Appendix A as indicated herein.
Appendix C	Page added to Appendix C as indicated herein.

PART II - NOTE: Revised and added drawings are listed below. These revised and added drawings are to be inserted into the folio in the proper numerical sequence. Drawings that have been revised by this amendment shall be deleted from the folio. All drawings listed below are revised unless indicated otherwise.

Sheet Reference	
Number	<u>Title</u>
	COVER SHEET
GI-001	INDEX OF DRAWINGS
CB123A	OCS PETIT BOIS PASS WEST 2 BORROW AREA (NEW)
CB124A	OCS PETIT BOIS PASS WEST 2 BORROW AREA OBSTRUCTION MAP (NEW)
CB125A	HORN ISLAND PASS BORROW AREA (NEW)
CB323A	CROSS SECTIONS PETIT BOIS PASS OSC WEST 2 BORROW AREA (NEW)
CB324A	CROSS SECTIONS PETIT BOIS PASS OSC WEST 2 BORROW AREA (NEW)
CB325A	CROSS SECTIONS PETIT BOIS PASS OSC WEST 2 BORROW AREA (NEW)
CB326A	CROSS SECTIONS OF HORN ISLAN PASS BORROW AREA (NEW)
CB327A	CROSS SECTIONS OF HORN ISLAN PASS BORROW (NEW)

#### Encl as stated:

Added pages of the specifications as indicated in Part I. 10 Revised and added drawings as indicated in Part II.



SHEET CB-123A: PETIT BOIS PASS OUTER CONTINENTAL SHELF WEST 2

BORROW AREA DRILLING LOGS

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# Boring Designation BI-PBS-095-12

			DIVISIO	N .		LIN	STALLATIO	N			IEET 1
DR	ILLING	LOC		th Atlantic		1	Mobile Dis			T	1 SHEETS
1. PRC	1. PROJECT							TYPE OF BIT	A		
l 1	AsCIP Barrie	er Isla	nd Restorati	ion				NATE SYSTEM/DATUM	HORIZON	TAL VE	RTICAL
	Petit Bois Pa						State	Plane, MSE (U.S. Ft.	) NAD83		NAVD88
2. BOF	RING DESIGN	OITA	N	LOCATION COORD	INATES	11.		CTURER'S DESIGNATI		☐ AUTO	HAMMER
E	BI-PBS-095-	-12	<u> </u>	E = 1,102,745	N = 240,967		Vibra	core		MANU	JAL HAMMER
	LLING AGEN			CONT	RACTOR FILE NO.	12	. TOTAL S	SAMPLES	DISTURBED	i	TURBED (UD)
	Corps of Eng		s - CESAM			ļ.				0	
			o Cuatama	Inc		13	. TOTAL N	IUMBER CORE BOXES			
	ECTION OF E		e Systems,		BEARING	14	. WATER	DEPTH	43.8 Ft.		
$\boxtimes$	VERTICAL INCLINED			DEG. FROM VERTICAL		15.	. DATE BO	DRING	STARTED 01-05-	i	<b>MPLETED</b> 01-05-13
6. THI	CKNESS OF	OVER	BURDEN	N/A	•	16	. ELEVAT	ION TOP OF BORING	-42.7 Ft.		
7. DEP	TH DRILLED	INTO	BOCK	N/A		17.	. TOTAL F	RECOVERY FOR BORIN	<b>G</b> 100%		
						18	. SIGNAT	URE AND TITLE OF INS	PECTOR		
8. TO1	AL DEPTH O	F BOI	RING 17	7.9 Ft.		L,	Mike	FitzHarris, Geologist			
ELEV.	DEPTH	LEGEND	CI	LASSIFICATION OF	MATERIALS		SAMPLE	LA	BORATORY RES	BULTS	
-42.7	0.0					ゴ					-0
-44.9	- - - -2.2		grained sa	oorly-graded, most and-sized quartz, li s, lt. gray (SP)	tly fine to medium ttle shell fragments	)- S,	Α	Classification: S D50: (		/ 6/2-light o Fines: 1.2	<b>‡</b> 1
-46.9	- - -4.2				grained sand-size ell fragments, gra		В	Classification: S D50: 0.7		or: 5Y 5/2-o Fines: 10.5	olive gray
-51.7				gariic-L, Mosty sii e shell fragments, ç	t, some sand, traci gray (ML)	е					-5 
-54.4	-		trace po	t, mostly clay, tra ckets of fine-gr gray (CH)	ce shell fragments ained sand, hig	s, h	NS				- 10 - 10 - 10 - 10
-60.6			soft becor siltier with	ming very stiff at d n depth to 15.9 ft.	ace shell fragments lepth, also become , becomes a CH a wn,and gray mottle	s at					
			accordand System. 2. NS =	ce with the Unified	ually classified in Soils Classification nitted for laborator	n					- 2
				afloor elevation 14 USACE survey.	determined from	n					- - -2:

SAM FORM 1836 - MsCIP MAY 2010 Lat = 30.16208° Long = -88.45838°

MSCIP COMPREHENSIVE BARRIER ISLAND RESTORATION PLAN SHIP ISLAND PHASES 3 AND 4, HARRISON COUNTY, MS

**Project** 

Mississippi Barrier Island Restoration Project AVS

AMERICAN VIBRACORE
S E R V I C E S

W9127819C0029

Core Identifier BI-PBS-95-12

Coordinate System
Latitude / Longitude

Date 01/05/2013

Water Depth 43.8'

**Start Time** 14:55:29

**End Time** 14:56:33

Total Time 00:01:04

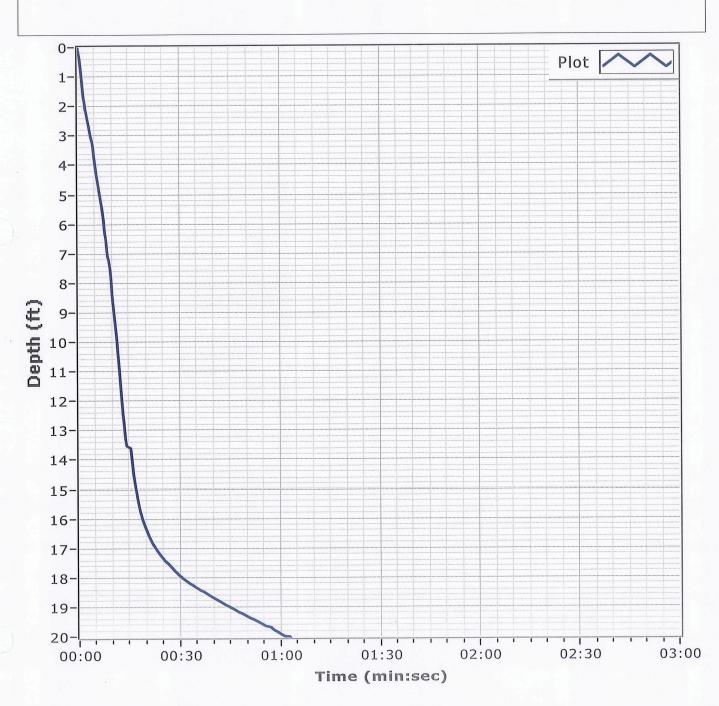
Penetration 20.2'

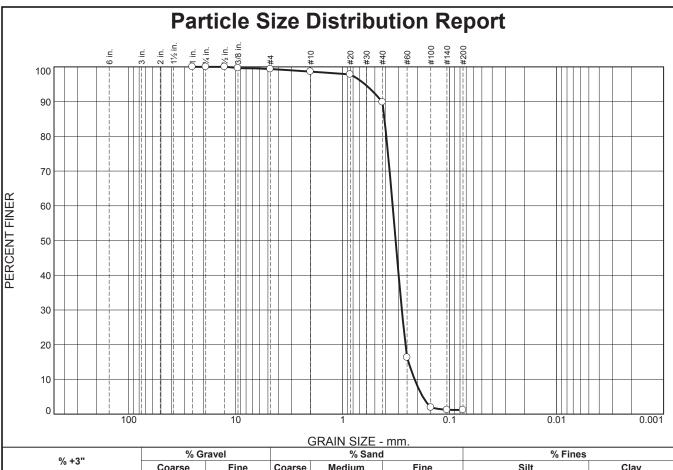
Recovery 17.8'

Latitude 30 09.725 N

**Longitude** 088 27.503 W

Comments





		GRAIN SIZE - mm.											
% +3"	% G	ravel		% Sand	ı	% Fines							
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay						
	0.0	0.0	0.6	0.8	8.8	88.6	1.2						

SIEVE	PERCENT	SPEC.*	PASS?
SIZE	FINER	PERCENT	(X=NO)
1	100.0		
.75	100.0		
.5	100.0		
.375	99.6		
#4	99.4		
#10	98.6		
#20	97.8		
#40	89.8		
#60	16.3		
#100	1.9		
#140	1.3		
#200	1.2		

Material Description Fine grained, SAND										
PL=	Atterberg Limits	PI=								
D <sub>90</sub> = 0.4292 D <sub>50</sub> = 0.3200 D <sub>10</sub> = 0.2124	$\begin{array}{c} \underline{\text{Coefficients}} \\ D_{85} = \ 0.4067 \\ D_{30} = \ 0.2801 \\ C_{\text{U}} = \ 1.61 \end{array}$	D <sub>60</sub> = 0.3409 D <sub>15</sub> = 0.2424 C <sub>C</sub> = 1.08								
USCS= SP	Classification AASHT	-O=								
	<u>Remarks</u>									

(no specification provided)

**Location:** BI-PBS-95-12 A **Sample Number:** 6503 (18)

**Depth:** 0.0'

**Date:** 1/08/13

**Thompson Engineering** 

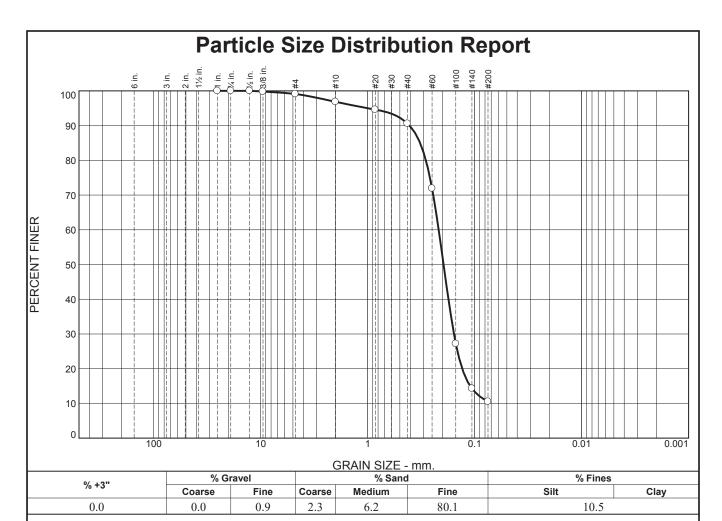
Client: CDM/Thompson Engineering JV

**Project:** MsCIP Barrier Island Restoration GT

Mobile, Alabama

**Project No:** 1221110095

**Figure** 



SIEVE	PERCENT	SPEC.*	PASS?
SIZE	FINER	PERCENT	(X=NO)
1	100.0		
.75	100.0		
.5	100.0		
.375	99.8		
#4	99.1		
#10	96.8		
#20	94.6		
#40	90.6		
#60	71.9		
#100	27.2		
#140	14.3		
#200	10.5		

Material Description Fine grained, SLIGHTLY SILTY SAND										
PL=	Atterberg Limits LL=	PI=								
D <sub>90</sub> = 0.4074 D <sub>50</sub> = 0.1954 D <sub>10</sub> =	Coefficients D85= 0.3235 D30= 0.1561 Cu=	D <sub>60</sub> = 0.2170 D <sub>15</sub> = 0.1100 C <sub>c</sub> =								
USCS= SP-SM	Classification AASHTO	)=								
	<u>Remarks</u>									

(no specification provided)

**Location:** BI-PBS-95-12 B **Sample Number:** 6503 (19)

Sample Number: 6503 (19) Depth: 2.2'

Thompson Engineering Client: CDM/Thompson Engineering JV

Mobile, Alabama Project No: 1221110095 Figure

**Project:** MsCIP Barrier Island Restoration GT

**Date:** 1/08/13

## Boring Designation BI-PBS-171-13

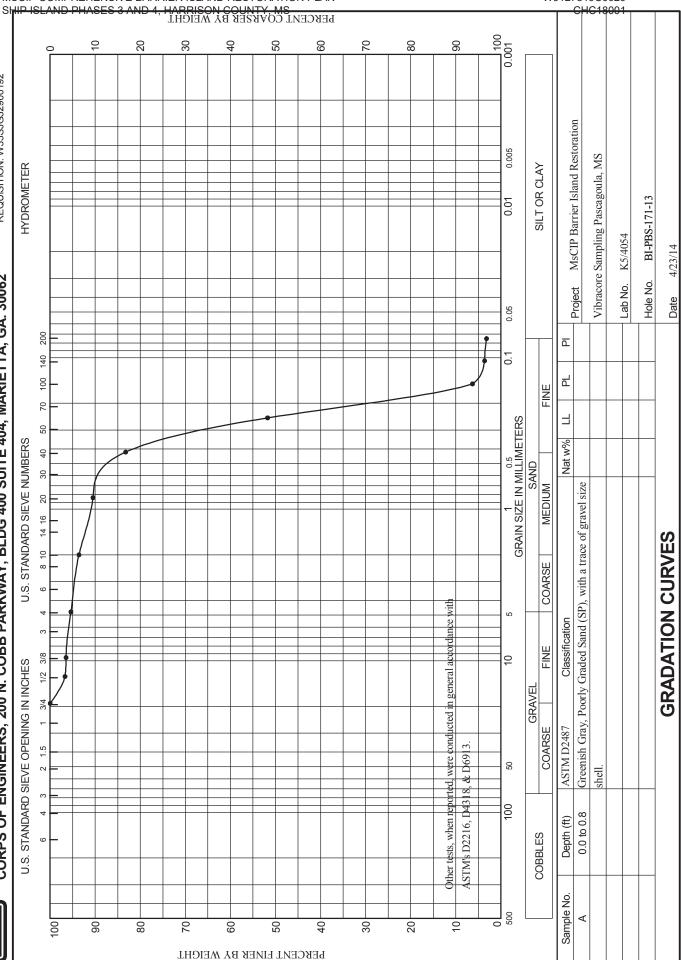
						I					
DRI	LLING	LOC	DIVISIO			IN:	STALLATIO			SHEET	
	South Atlantic  1. PROJECT					Mobile District  OF 1 SHEETS  9. SIZE AND TYPE OF BIT N/A					
		or lete	nd Doots	tion		$\overline{}$		TYPE OF BIT N/ NATE SYSTEM/DATUM	A HORIZON	TAL VERTIC	ΔΙ
	AsCIP Barrie			uori		'"			-	<u> </u>	
	Petit Bois Pa			LOCATION COORD	INATES	11		Plane, MSE (U.S. Ft.		AUTO HAN	/D88
	3I-PBS-171-		1	E = 1,103,271		١	Vibra		OR OF BRILL	MANUAL F	
	LING AGEN	_	l		RACTOR FILE NO.	$\vdash$			DISTURBED	UNDISTURI	
	Corps of Eng	gineer	s - CESAM			12	. TOTAL S	SAMPLES	2	0	
4. NAN	IE OF DRILL	ER				13	. TOTAL N	IUMBER CORE BOXES		•	
	Construction					14	. WATER	DEDTH	46.8 Ft.		
	ECTION OF E	BORIN	G	DEG. FROM VERTICAL	BEARING		. WAILK	JEF I II	STARTED	COMPL	ETED
_	INCLINED				-	15	. DATE BO	RING	12-27-	1	27-13
$\vdash$		0VED	DUDDEN		·	46	ELEVAT	ION TOP OF BORING	-45.2 Ft.	10 ; 12 2	., 10
6. I HI	CKNESS OF	OVER	BUKDEN	N/A		⊢					
7. DEP	TH DRILLED	INTO	ROCK	N/A		_		RECOVERY FOR BORING			
8. TOT	AL DEPTH O	F BOE	RING 0	.8 Ft.		18		URE AND TITLE OF INS	PECTOR		
U. 101	A	Ι.	<b></b> 5.			Ь,	Iom	Powers, Geologist			
		N N									
ELEV.	DEPTH	EGEND	CI	LASSIFICATION OF	MATERIALS		SAMPLE	LAI	BORATORY RE	SULTS	
		_				$\dashv$					
-45.2	0.0	ļ				$\dashv$		Classification:	SD Color:	: GLEY1 10Y 6/	0
-46.0	- 0.8		SAND, p	oorly-graded, most	tly fine to medium	1- <del> </del>	Α			Fines: 3.2	' <sup>-</sup>
-46.7	F 1.5	1111	∖ grained sa ∖∖lt. gray (S	and-sized quartz, li	ttle shell fragments	³, /Д	В	Classification: S	P-SM Cold	or: GLEY1 10Y	5/1-
	-		/	,		-/		\D50: 0.	.204 mm %	Fines: 9.8	——∕ <b>F</b>
	E		SAND, s	silty, mostly fine-	grained sand-size	d/					E
-48.8	3.6		quartz, re	w shell fragments,	medium gray (Sivi	ן, עי					F
	F			rganic-L, few shell	fragments, mediun	n/					F
	E		∖gray (ML	.)		اــ					<u>-</u> 5
	E		CLAY, I	ean, few shell	fragments, sandy	<sub>/,</sub>	NS				Ε°
-51.5	6.3		medium g	gray (CL)		ᅬ					E
	E		CLAY, fat	t, sandy, It. and me	edium gray and pal	e					E
	E		orange (0	CH)	0 , 1						E
	E										E
-54.5	9.3										F
-55.0	- 9.8	1111	N SAND s	silty, mostly fine	to medium-graine	<sub>ч</sub> ,					
	F			ed quartz, medium l		۲/۱					F"
	F			-		_					F
	E		NOTES:								E
	E			9 6:11							Ė
	E			ils are field vis- ce with the Unified							E
	<u> </u>		System.	ss mar are orinied		"					E
	Ė		2 NC -	Comple not auto	nitted for laborates	,					E - 15
	ŧ <sup>¯</sup>			<ul> <li>Sample not subnirom this interval.</li> </ul>	mileu ioi iaborator	У					F
	F		,								F
	E			eafloor elevation 14 USACE survey.	determined from	n					E
	Ē		10/20/20	14 OSACE survey.							E
	E										E
	E										E
	F										F _
	E										-20
	<u>F</u>										Ŀ
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	F										-25
	E.										E

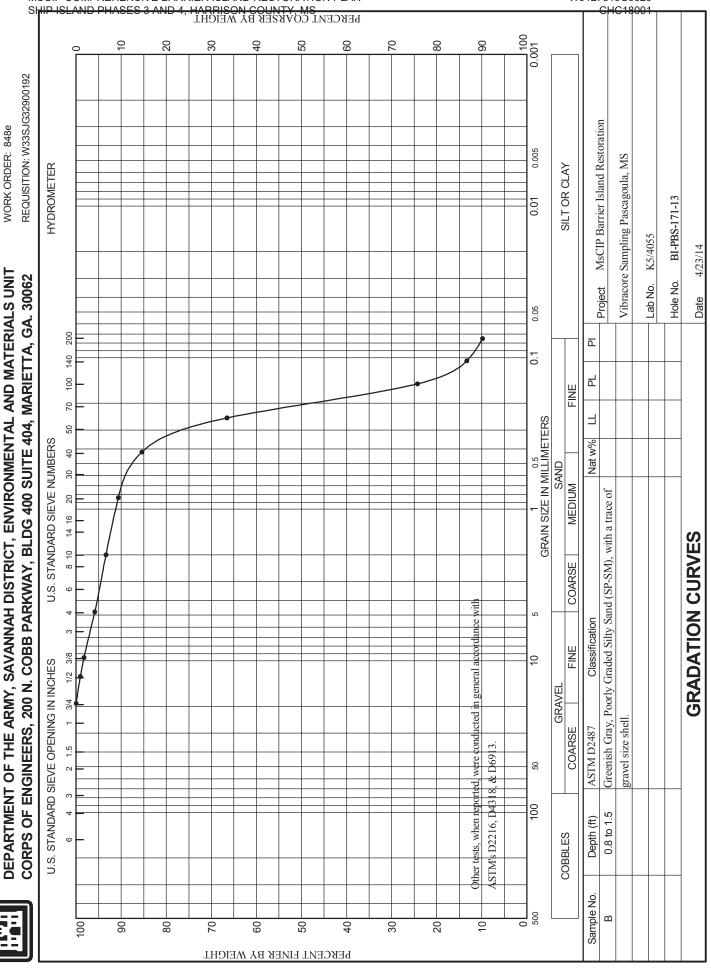
SAM FORM 1836 - MsCIP MAY 2010 Lat = 30.15775° Long = -88.45673°



REQUISITION: W33SJG32900192

WORK ORDER: 848e





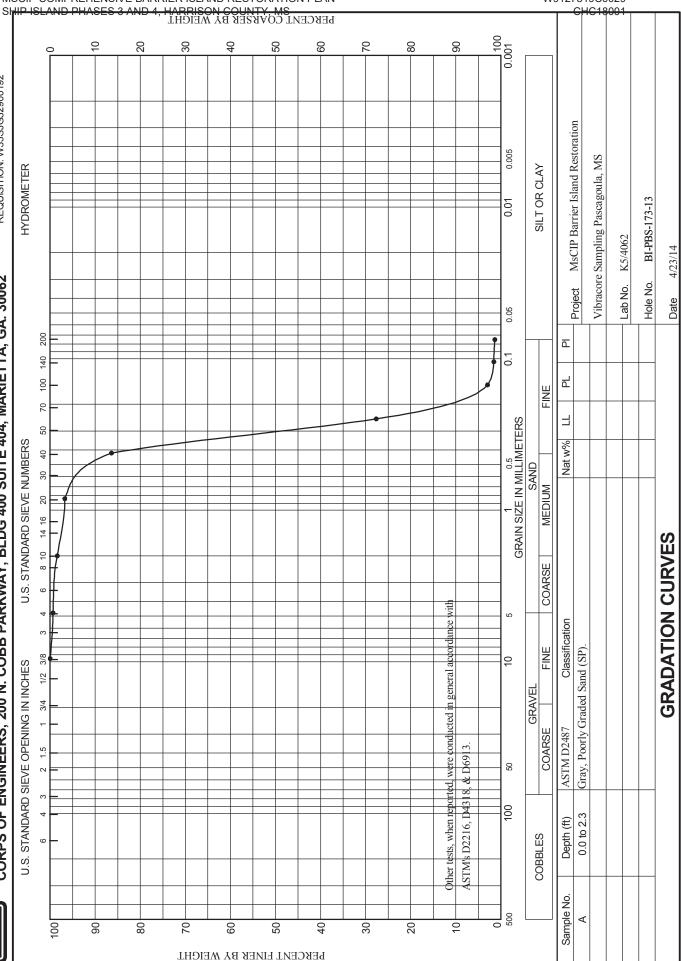
## Boring Designation BI-PBS-173-13

			DIVISIO	ON		l IN	STALLATIO	N C		SH	EET 1
DR	ILLING	LOG		ith Atlantic		'''	Mobile Dis			1	1 SHEETS
1. PRO	JECT		, 550			9. SIZE AND TYPE OF BIT N/A					
l ,	MsCIP Barrie	er Isla	nd Restorat	tion				NATE SYSTEM/DATUM	HORIZONT	AL VER	RTICAL
	Petit Bois Pa	ss-O0	CS West				State	Plane, MSE (U.S. Ft.)	)   NAD83	1	NAVD88
2. BOI	RING DESIGN	IATIOI	N	LOCATION COORD	INATES	11	. MANUFA	CTURER'S DESIGNATI	ON OF DRILL	AUTO	HAMMER
	BI-PBS-173-	_	į	E = 1,103,469		L	Vibra	core			AL HAMMER
	LLING AGEN		050414	CONT	RACTOR FILE NO.	12	. TOTAL S	AMPLES	DISTURBED	i	TURBED (UD)
	Corps of Eng		S - CESAIVI	i		<del> </del>			2	0	
	Construction		tions Interna	ational Inc		13	. TOTAL N	IUMBER CORE BOXES			
	ECTION OF E			DEG. FROM VERTICAL	BEARING	14	. WATER	DEPTH	45 Ft.		
	VERTICAL INCLINED			VERTICAL	 	15	. DATE BO	DRING	<b>STARTED</b> 12-29-	i	MPLETED 12-29-13
6. ТНІ	CKNESS OF	OVER	BURDEN	N/A		16	. ELEVAT	ION TOP OF BORING	-42.7 Ft.		
7. DEF	TH DRILLED	INTO	ROCK	N/A		17	. TOTAL F	RECOVERY FOR BORING	<b>3</b> 100%		
<u> </u>						18		URE AND TITLE OF INS	PECTOR		
8. TO	AL DEPTH O	F BOF	RING 15	5.3 Ft.		Щ	Tom	Powers, Geologist			
ELEV.	DEPTH	LEGEND	C	LASSIFICATION OF	MATERIALS		SAMPLE	LAE	BORATORY RES	SULTS	
-42.7	0.0										-0
-45.0	- - - -2.3		SAND, p grained s It. gray (\$	oorly-graded, most and-sized quartz, f SP)	ly fine to medium ew shell fragments	)- S,	Α	Classificatior D50: 0.		: 2.5Y 6/1- Fines: 1.3	<b>F</b> 1
	- - -4.2			silty, mostly fine- ittle shell fragme			В	Classification: S D50: 0.2	P-SM Colo 201 mm % F	r: GLEY1 1 Fines: 10.8	0Y 7/1-
-50.3	7.6		SAND, c quartz, litt	layey, mostly fine- tle shell fragments,	grained sand-size medium gray (SC	d ;)					- -5 - - - - - - -
-51.9	- - 9.2		CLAY, lea	an, sandy, medium	to dark gray (CL)						-
-58.0	15.3		CLAY, fa green, an	at, sandy, pale ora id pale brown (CH)	ange, It. gray, pal	е	NS				1 10 10 10 10 10 10 10 10 10 10 10 10 10
35.0	E										<u> </u>
			accordand System.  2. NS = analysis f  3. Se	ils are field vis ce with the Unified Sample not subn from this interval. eafloor elevation 14 USACE survey.	Soils Classification	n y					-20

SAM FORM 1836 - MsCIP MAY 2010 Lat = 30.16127° Long = -88.45609°



WORK ORDER: 848e REQUISITION: W33SJG32900192



3

4

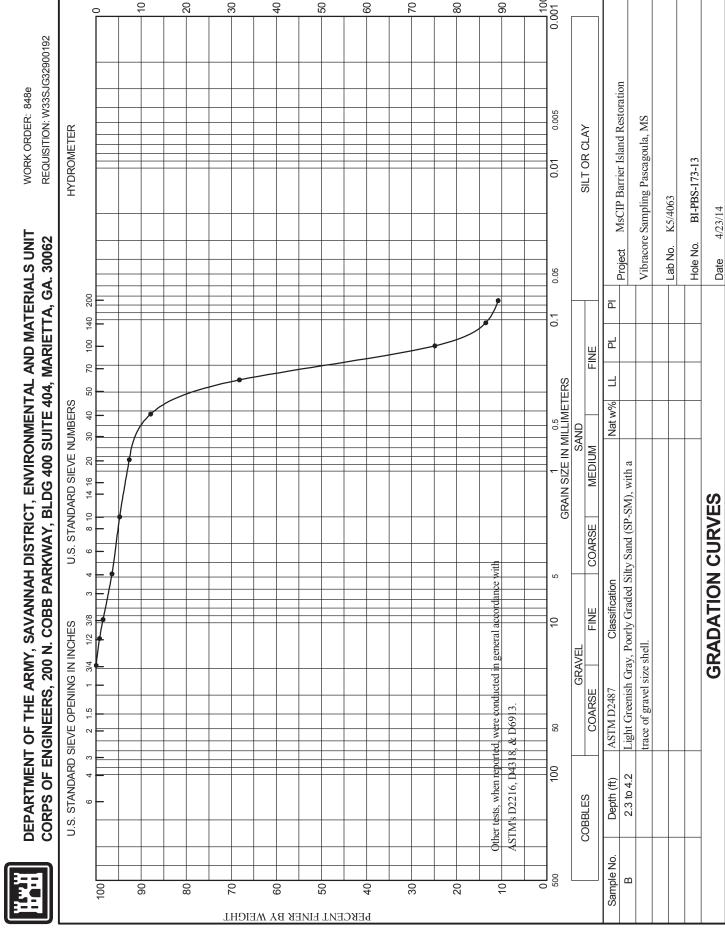
20

8

2

2

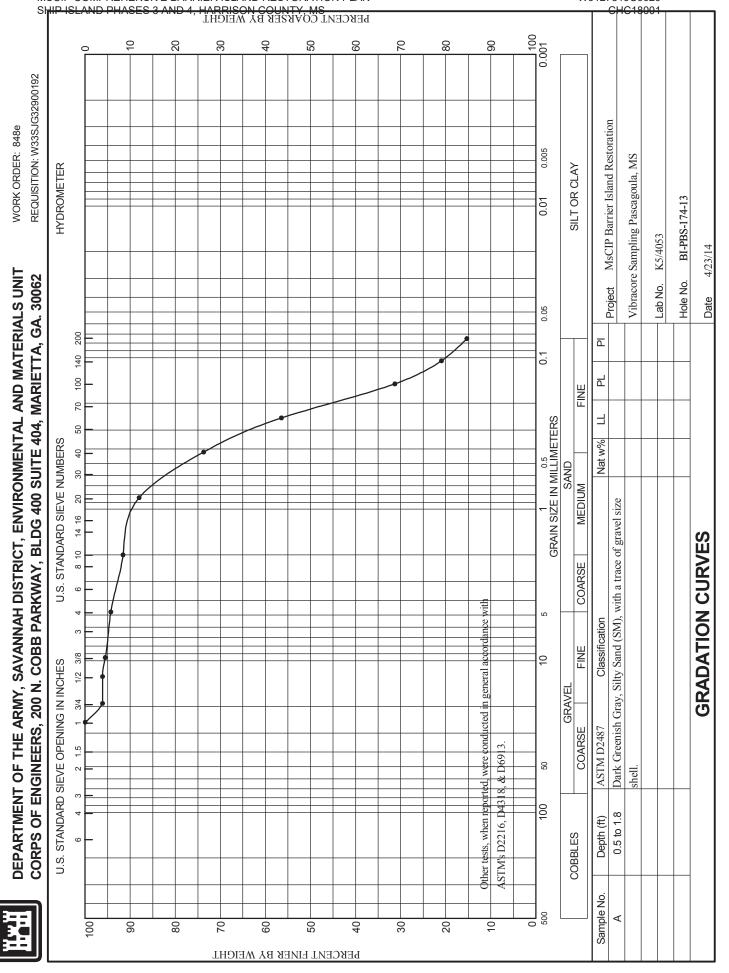
8



#### Boring Designation BI-PBS-174-13

DRI	LLING	l OG	DIVISIO				IN	STALLATI				SHEET	
1. PRO			Sout	th Atlantic			-	Mobile Di				<b>OF</b> 1	SHEETS
							<u>_</u>		NATE SYSTEM/DA	N/A TUM HORIZON	TAI :-	/ERTIC	A1
	IsCIP Barrie			ion			10			!	- 1		
	etit Bois Pa			LOCATION C	OOPDI	NATES	11		e Plane, MSE (U.S	S. Ft.)   NAD83		NAV	
	I-PBS-174-		· .			N = 238,36	- 1		acore	NATION OF DRILL		TO HAN	IMER IAMMER
	LING AGEN		<u> </u>			RACTOR FILE	NO.			DISTURBED			BED (UD)
C	orps of Eng	gineers	- CESAM		! !		12	. TOTAL	SAMPLES	1	0		
4. NAM	E OF DRILL	ER					13	. TOTAL	NUMBER CORE BO	XES			
	construction						1	. WATER	DEPTH	49 Ft.			
$\boxtimes$	ECTION OF E	BORING	ì	DEG. FROM VERTICAL	M	BEARING	-	. DATE B		STARTED	1	COMPLI	
	KNESS OF	OVERB	URDEN	! N/A			16	6. ELEVAT	ION TOP OF BORI	12-27- NG -50.4 Ft.	13	12-2	7-13
7 DED	TH DRILLED	INTO	BUCK	N/A			17	. TOTAL	RECOVERY FOR BO	DRING 100%			
7. DEF	III DRILLED		NOCK	IN/A			18	. SIGNAT	URE AND TITLE O	FINSPECTOR			
8. ТОТ	AL DEPTH O	F BORI	I <b>NG</b> 14	.7 Ft.				Tom	Powers, Geologi	st			
ELEV.	DEPTH	LEGEND	CI	ASSIFICATIO	ON OF I	MATERIALS		SAMPLE		LABORATORY RE	SULTS		
-50.4	0.0												
	- 0.5		CLAY lea	n, sandy, me	edium (	aray (CL)	_		_				F
-51.4	- 1.0					, ,		Α		cation: SM Cold 0: 0.219 mm %	or: 2.5Y 6 Fines: 15	/1-gray	/ F
-52.2	- 1.8 		SAND, s	ilty, mostly	fine-g	rained sand- its, medium	-sized		Do	0. 0.21911111 %	rines. 10	1.3	<u></u> <u>-</u> <u>-</u> -
	-		(SM)	ttie Sileii II	ayınıcı	its, inculuin	gray						Ė
-53.8	3.4		\ <u>``</u>										E
			SAND, Cl	ayey, mostiy le shell fragr	y fine-( nents i	grained sand- medium gray	-sized   (SC)						E
-55.0	4.6		/				(00) 1						ŧ.
	_		CLAY, lea	n, sandy, m	edium (	gray (CL)							E-5
	_		SAND, cl	ayey, mostly	y fine-g	grained sand-	-sized						E
				edium gray (									E
			CLAY, fat	. It. and med	dium ar	ay and pale o	range						E
	-		(CH)	,		,		NS					Ŀ
								140					Ē
													Ė
	-												F-1
													E
													E
-62.8	12.4												F
	-					grained sand-							F
	<u> </u>		quartz, tr	ace wood	fragme	nts at 14.0,	, little						E
-65.1	14.7			ieii tragmen ind lt. gray (\$		m 14.1 ft.	uown,						F
	_			37 (	/								F <sub>1</sub>
	_		NOTES:										E
	Ē												E
	-					ally classifie Soils Classifie							F
	-		System.	o with the C	Jillileu -	oons Olassill	cauon						F
	<u> </u>		,										E
	Ė			Sample not rom this inte		itted for labo	ratory						F
	-		ananyoio II		. vai.								-2
	<u> </u>					mined from	2013						E
	Ē		USGS ge	ophysical sui	rvey.								E
	E												F
	_												E
	Ē												E
	_												E
	<u>-</u>												E-2
	_												F
									1				

SAM FORM 1836 - MsCIP MAY 2010 Lat = 30.15491° Long = -88.45454°



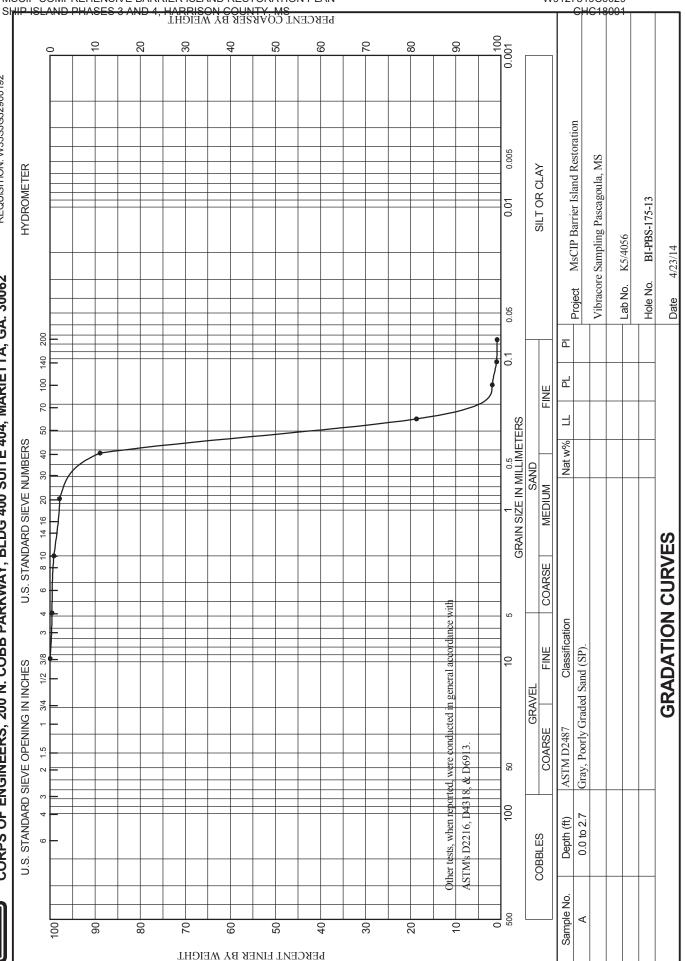
## Boring Designation BI-PBS-175-13

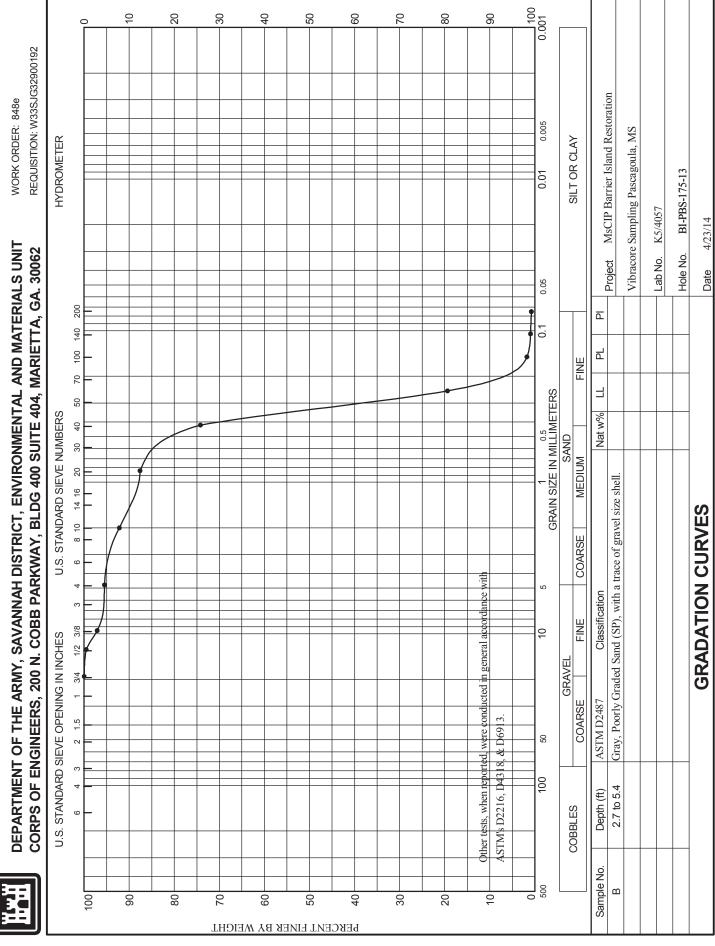
DRILLING LOG South Atlantic  1. PROJECT	INSTALLATION SHEET 1  Mobile District OF 1 SHEETS						
South Atlantic	I IVIODIIE DISTRICT OF 1 SHEETS						
MoCID Parrier Joland Pastersties	9. SIZE AND TYPE OF BIT N/A  10. COORDINATE SYSTEM/DATUM HORIZONTAL VERTICAL						
MsCIP Barrier Island Restoration	l ;						
Petit Bois Pass-OCS West  2. BORING DESIGNATION LOCATION COORDINATES	State Plane, MSE (U.S. Ft.) NAD83 NAVD88  11. MANUFACTURER'S DESIGNATION OF DRILL ALITO HAMMER						
BI-PBS-175-13	11. MANUFACTURER'S DESIGNATION OF DRILL AUTO HAMMER Vibracore MANUAL HAMMER						
3. DRILLING AGENCY CONTRACTOR FILE NO.	DISTURBED UNDISTURBED (UD)						
Corps of Engineers - CESAM	12. TOTAL SAMPLES 3						
4. NAME OF DRILLER	13. TOTAL NUMBER CORE BOXES						
Construction Solutions International, Inc.							
5. DIRECTION OF BORING DEG. FROM BEARING	<b>14. WATER DEPTH</b> 44.8 Ft.						
∨ VERTICAL     VERTICA	15. DATE BORING						
INCLINED	12-27-13 12-27-13						
6. THICKNESS OF OVERBURDEN N/A	16. ELEVATION TOP OF BORING -42.9 Ft.						
7. DEPTH DRILLED INTO ROCK N/A	17. TOTAL RECOVERY FOR BORING 100%						
	18. SIGNATURE AND TITLE OF INSPECTOR						
8. TOTAL DEPTH OF BORING 16.6 Ft.	Tom Powers, Geologist						
ELEV. DEPTH Q CLASSIFICATION OF MATERIALS	SAMPLE LABORATORY RESULTS						
-42.9 0.0	1						
SAND, poorly-graded, mostly fine to medium grained sand-sized quartz, few shell fragment lt. gray (SP)	Classification: SP Color: GLEY1 10Y 7/1- D50: 0.315 mm % Fines: 0.8						
At El46.4 Ft., little shell fragments	B Classification: SP Color: GLEY1 10Y 7/1- D50: 0.334 mm % Fines: 0.8						
SAND, silty, mostly fine-grained sand-size quartz, little shell fragments, medium gra (SM)							
CLAY, lean, trace shell fragments, sand medium gray (CL)	NS NS						
CLAY, fat, sandy, lt. to medium gray (CH)							
NOTES:  1. Soils are field visually classified accordance with the Unified Soils Classification System.  2. NS = Sample not submitted for laborator analysis from this interval.  3. Seafloor elevation determined fro 10/28/2014 USACE survey.	y g						

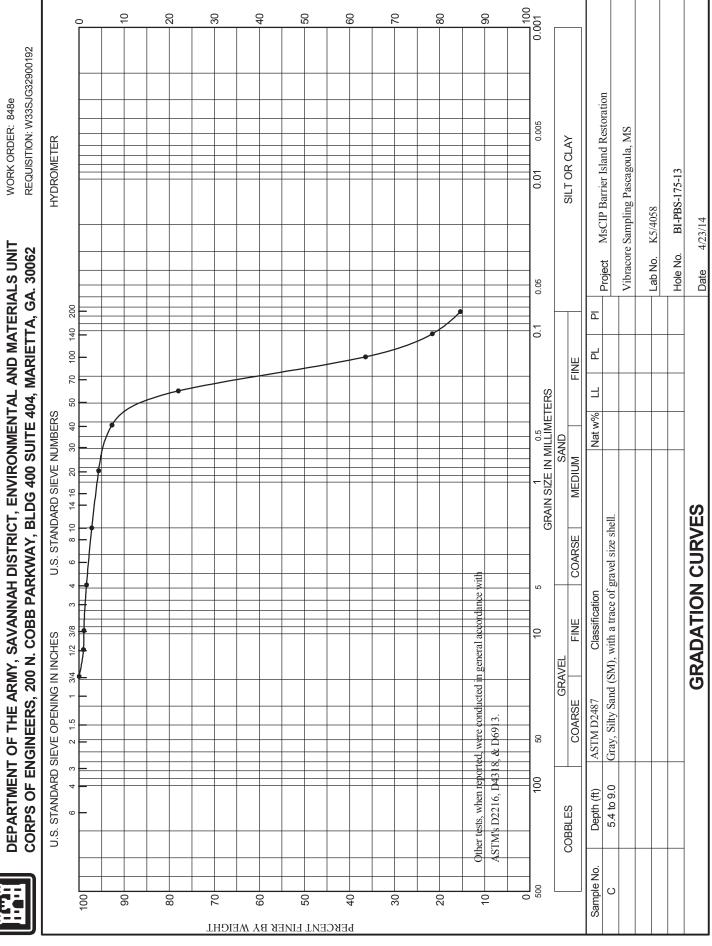
SAM FORM 1836 - MsCIP MAY 2010 Lat = 30.15808° Long = -88.45164°



WORK ORDER: 848e REQUISITION: W33SJG32900192



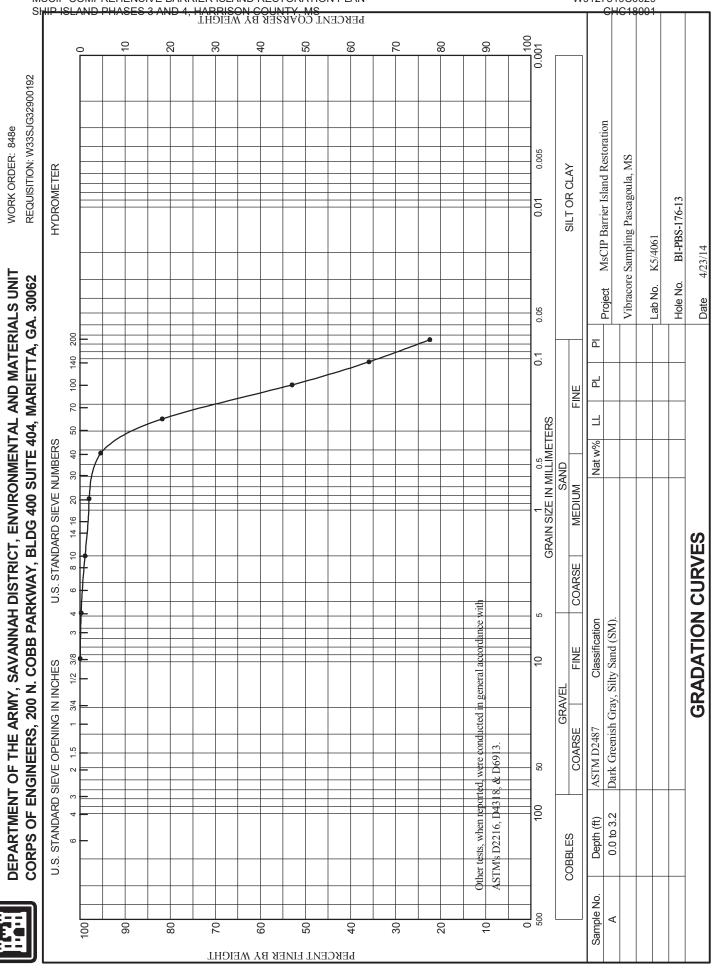




# Boring Designation BI-PBS-176-13

						_		orning Designation			
DRI	LLING	LOG	DIVISIO				Mahila Dia			SHEET	
1. PRO	JECT		Sout	th Atlantic			Mobile Dis		Λ	OF 1	SHEETS
		or lele	nd Restorati	ion				NATE SYSTEM/DATUM	HORIZONT	TAL VERTICA	<u> </u>
	Petit Bois Pa			ION		'''			-	1	
	ING DESIGN			LOCATION COORD	INATES	11.		Plane, MSE (U.S. Ft.		NAVI	
	3I-PBS-176-		•	E = 1,105,840		١	Vibra		ON OF BRILE	MANUAL H	
	LING AGEN	_	<u> </u>		RACTOR FILE NO.	. DISTURBED UNDISTURBED					
	Corps of Eng	gineers	s - CESAM			12. TOTAL SAMPLES					
4. NAN	IE OF DRILL	ER				13.	TOTAL	NUMBER CORE BOXES		•	
			ions Interna			14	WATER	DEDTH	50.1 Ft.		
	ECTION OF E	BORING	G	DEG. FROM VERTICAL	BEARING		WAILK	DEFIN	STARTED	COMPLE	TED
_	INCLINED				!	15.	DATE BO	DRING	12-29-	i	
				:	:	-				13 12-2	9-13
6. THI	CKNESS OF	OVERE	BURDEN	N/A		⊢		ION TOP OF BORING	-48.6 Ft.		
7. DEP	TH DRILLED	INTO	ROCK	N/A				RECOVERY FOR BORING			
° TOT	AL DEPTH O	E BOB	ING 10	9.8 Ft.		18.		URE AND TITLE OF INS	PECTOR		
0. 101	AL DEPTH O	T	18	7.0 Г (.		Щ	Iom	Powers, Geologist			
ELEV.	DEPTH	LEGEND	CL	LASSIFICATION OF	MATERIALS		SAMPLE	LAI	BORATORY RES	BULTS	
-48.6	0.0					$\dashv$					
10.0	E	11111	CAND -	silty mostly fine:	arainad aar d siere						
	<u>F</u>	HHH			grained sand-sized nts, medium gray			0115	CM C !	OLEV4 40451	, <b>E</b>
	F		(SM)	and onen magnife	e,ea.a g.a,	'	Α	Classification:		GLEY1 10Y 5/1 ines: 22.4	<sup> -</sup>
	E	-						D30. 0.	701	11163. 22.4	E
-51.8	-3.2	<u> </u>									
	E		SAND d	avev mostly fine-	grained sand-sized	4					E
-53.3	F 4.7		quartz, litt	le shell fragments,	medium gray (SC)	ĭ					E
	-					$\neg$					-5
	F	V/A	(CL)	an, rew snell fragm	nents, medium gray	<sup>y</sup>					F
	F	V//	(02)								F
	-	1///									F
	E	1///									Ė
	F										F
	F	1///									F
	E										<u>E</u> 1
-59.1	F 10.5					_					F'
	F		CLAY, fa	at, sandy, It. gray	, pale green, pale	e					F
	E		orange, ar	nd pale brown (CF	í)		NS				E
	F										F
	-										F
	<b>F</b>										ļ.
	F										F
	<u> </u>										<u>-</u> 1
	<b>F</b>										ŧ
	F										F
	Ė.										F
	Ė										F
	E										E
	<u>F</u>										Ŀ
-68.4	19.8					4					F ,
	E										-2
	F		NOTES:								F
	Ė		1 901	le are field view	ially classified in	,					Ė
	F				ually classified ir Soils Classificatior						F
	<u> </u>		System.								F
	ŧ			0 1 :							E
	E			Sample not subm rom this interval.	nitted for laboratory	У					F
	Ė.		ariarysis II	ioni uno inicival.							-2
	Ę.			afloor elevation	determined from	n					<u> </u>

SAM FORM 1836 - MsCIP MAY 2010 Lat = 30.16060° Long = -88.44859°



### Boring Designation BI-PBS-177-13

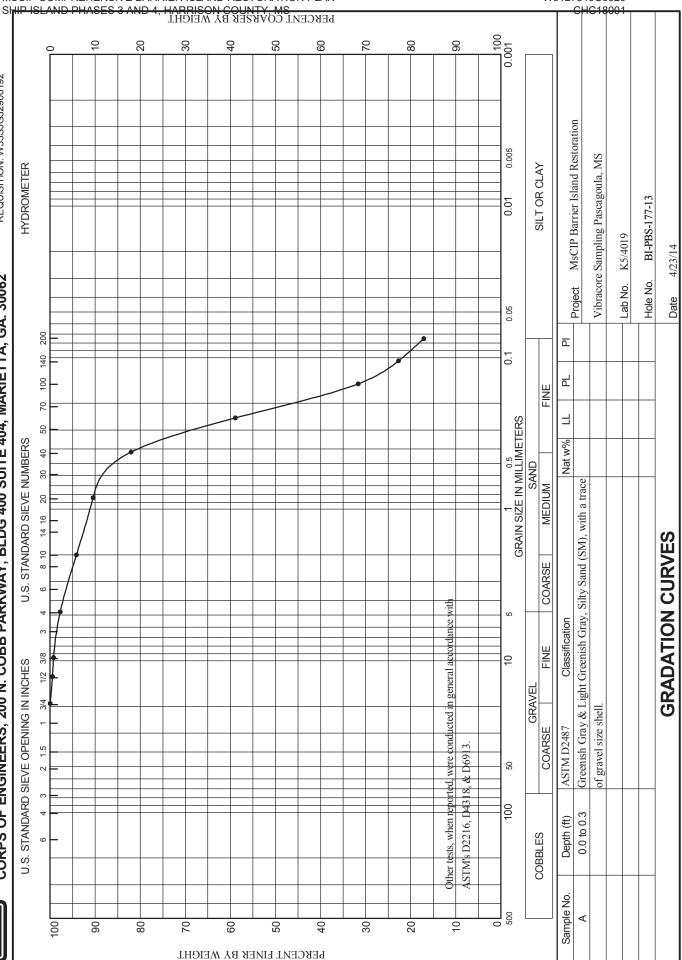
			DIVISIO	N		INS	TALLATIO	nn Designatio		SHEET	1
D	RILLING	LOG	<b>1</b>	h Atlantic		ı	Mobile Dis				SHEETS
1. P	ROJECT		Cour			_			/A	10.	
	McCIP Barri	er Isla	nd Restoration	on		_	_	NATE SYSTEM/DATUM		TAL VERTICA	AL
	Petit Bois Pa			011				Plane, MSE (U.S. Ft		<u> </u>	
2. E	ORING DESIG			LOCATION COORE	INATES	11.		ACTURER'S DESIGNAT		AUTO HAM	
	BI-PBS-177				N = 239,362		Vibra			MANUAL H	
3. D	RILLING AGEN	_	<u> </u>		TRACTOR FILE NO.				DISTURBED	UNDISTURB	ED (UD)
	Corps of En	gineer	s - CESAM			12.	TOTAL S	SAMPLES	1	0	
4. N	IAME OF DRILL	.ER				13.	TOTAL N	NUMBER CORE BOXES	•		
			tions Internat			14	WATER	DEDTU	50.4 Ft.		
	IRECTION OF	BORIN	G	DEG. FROM VERTICAL	BEARING		WAILK	JEF III	STARTED	COMPLE	TED
	VERTICAL INCLINED					15.	DATE BO	DRING	12-16-	i	
					<u>:</u>	10				15   12-10	0-10
6. Т	HICKNESS OF	OVER	BURDEN	N/A		⊢		ION TOP OF BORING	-49.2 Ft.		
7. D	EPTH DRILLE	OTNI C	ROCK	N/A		17. 18.		RECOVERY FOR BORIN			
8. Т	OTAL DEPTH	OF BOF	RING 11.	.5 Ft.		] ''		Powers, Geologist	SPECION		
ELE	V. DEPTH	LEGEND	CL	ASSIFICATION OF	MATERIALS		SAMPLE		BORATORY RE	SULTS	
-49	.2 0.0					寸					
-49	.5 - 0.3	1777	SAND ei	ilty moetly fine	grained sand-size	<u>ч /</u> г	Α	\ Classification:		GLEY1 10Y 5/1	1- /= 0
	F		Quartz. It. t	to medium gray (	SM)	۲/۱		D50: 0.	211 mm %	Fines: 17.1	/ <u>F</u>
	E		·		,	_					Ē
	F		CLAY, lea	n, It. to medium g	ray and pale orang	e					F
	F		(OL)								F
	ļ.										ļ.
	F										E
	E-		<u> </u>		-						<u>-</u> 5
	ļ:		At El54.0	0 Ft., trace woody	fines		NS				ŧ
	E						NO				E
	E-										F
	ļ.										ŧ
	F										F
	F										F
	E										E <sub>-1</sub>
60	2 F 11 0										F'
-60 -60		<del>IIII</del>				$\dashv$					F
	<u> </u>		I	0 1 0 6	grained sand-size	/ 1					<u>_</u>
	Ė		∖quartz, lit  ∖(SM)	tie sneil fragme	ents, medium gra	<sup>y</sup> /					į.
	F		1(0141)			-					F
	Ē		NOTES:								E
	Ė		INOTES:								E
	F				ually classified i						F-1:
	E			e with the Unified	Soils Classificatio	n					E
	E		System.								Ė
	E		2. NS =	Sample not subr	mitted for laborator	y					F
	E			om this interval.							E
	E		3. Sea	afloor elevation	determined fror	<sub>n</sub>					E
	E			4 USACE survey.		"					E
	Ė			,							-2
	E										E
	E										F
	Ė										F
	E										E
	E										F
	Ė.										E
	E										E
	E										F-2
	<u>F</u>										E

SAM FORM 1836 - MsCIP MAY 2010

Lat = 30.15762° Long = -88.44303°



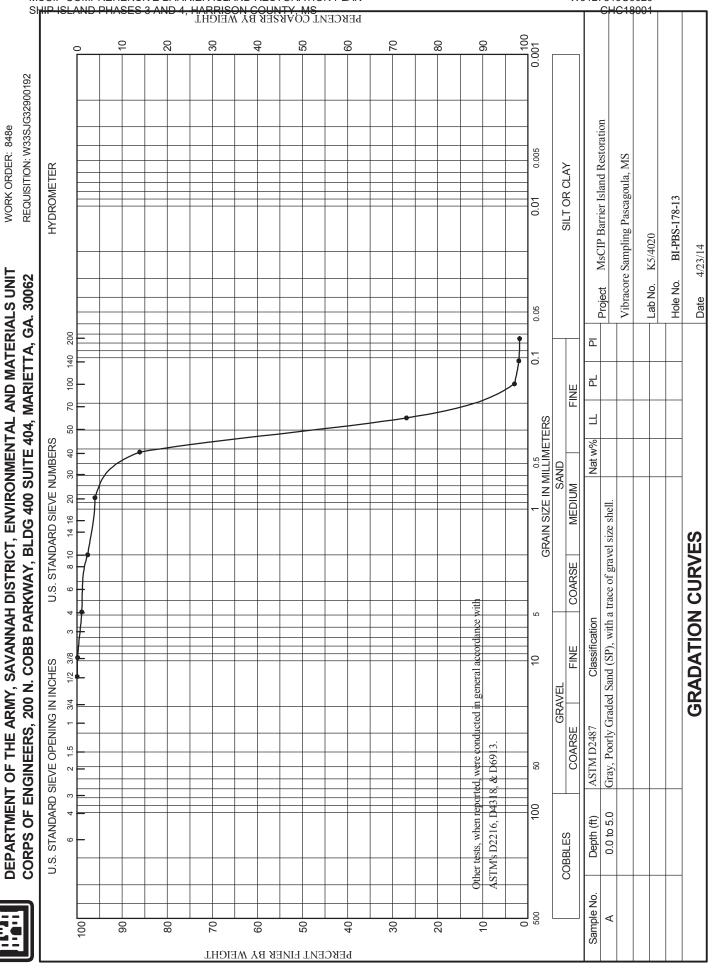
MATERIALS UNIT WORK ORDER: 848e ETTA, GA, 30062 REQUISITION: W33SJG32900192



# Boring Designation BI-PBS-178-13

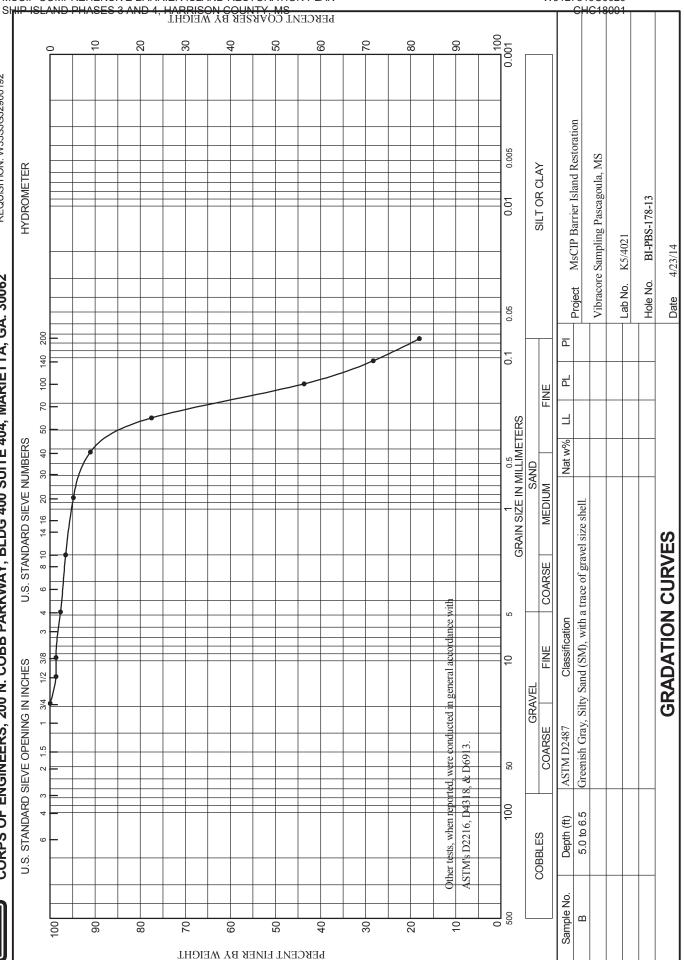
			DIVISION	ON	1	INS	STALLATIO	Nu Designation			ET 1
DRI	LLING	LOG		uth Atlantic			Mobile Dis				1 SHEETS
1. PRO	JECT		000	ati i i tidi itio				TYPE OF BIT N//	Δ		
l n	/IsCIP Barrie	er Islai	nd Restorat	tion	ľ			NATE SYSTEM/DATUM	HORIZON	TAL VERT	TICAL
	etit Bois Pa						State	Plane, MSE (U.S. Ft.)	NAD83	l N	AVD88
	ING DESIGN			LOCATION COORD	INATES	11.		ACTURER'S DESIGNATION			IAMMER
Е	3I-PBS-178-	-13		E = 1,107,742	N = 237,886		Vibra	core			L HAMMER
3. DRII	LING AGEN	CY		CONT	RACTOR FILE NO.	12 TOTAL SAMPLES					JRBED (UD)
	Corps of Eng		s - CESAM	<u> </u>		12. TOTAL SAMPLES 2 0					
	IE OF DRILL					13.	. TOTAL N	NUMBER CORE BOXES			
	Construction					14.	WATER	DEPTH	44.8 Ft.		
	ECTION OF E	BORING	G	DEG. FROM VERTICAL	BEARING				STARTED	COM	PLETED
_	INCLINED			i	į	15.	. DATE BO	DRING	12-16-	i	2-16-13
6. THI	CKNESS OF	OVERE	RURDEN	N/A	'	16.	. ELEVAT	ION TOP OF BORING	-43.4 Ft.	· · · · · ·	
						-		RECOVERY FOR BORING			
7. DEP	TH DRILLED	INTO	ROCK	N/A		18.		URE AND TITLE OF INS			
8. тот	AL DEPTH O	F BOR	ING 19	9.3 Ft.				Powers, Geologist	LOTOR		
ELEV.	DEPTH	LEGEND	С	LASSIFICATION OF	MATERIALS		SAMPLE		ORATORY RES	BULTS	
-43.4	0.0	-				$\dashv$					
70.7	_ <del>0.0</del>	<del>   </del>	71440		L. C	$\dashv$					0
	E		SAND, p	poorly-graded, most sand-sized quartz, f	ly fine to medium- aw shell fragments	-					E.
	Ē	ŀ∷⊹l	It. gray (		ew shell fragilients	,					E
	Ē	···:	0 , (	,			Α	Classification:		GLEY1 10Y	6/1-
	_						А	D50: 0.	306 mm %	Fines: 1.8	E
	E	<b> .∵∴</b>									E
	Ē	-:									E
-48.4	5.0					4					<sub>5</sub>
	Ē		SAND, s	silty, mostly fine-	grained sand-sized	ı l	В	Classification		r: 2.5Y 6/1-g	
-49.9	6.5		quartz, tra	ace shell fragments	, It. gray (SM)	$\dashv$		D50: 0.1	164 mm % F	Fines: 18.1	F
	-		CLAY, lea	an, sandy, medium	gray (CL)						F
	Ē	1//	~	•							Ė
	F		At El50	0.9 Ft., medium gray	/						F
	F		\								F
	Ē.		At El52	2.4 Ft., sandy and si	Ity, medium gray						E <sub>-10</sub>
	Ė										E "
	Ē										E
	E	1///									E
	Ē	V//}	\				NO				E
	E	V/A	At El55	5.9 Ft., trace woody	fines		NS				E
	<u> </u>	<i>V//</i>									E
-58.4	- 15.0	<b>V</b> ///									<b>F</b>
	=		CLAV fo	it, It. gray and pale o	orange (CU)	$\exists$					F-15
	F		CLAT, la	ıı, ıı. yıay anu pale (	nange (CD)						F
	E										F
	F										F
	<u>F</u>										F
00 7	F										į.
-62.7	<u>– 19.3</u>					+					<del></del> F
	F		NOTES								-20
	Ē		NOTES:								E
	F		1. So	ils are field visu	ually classified in	۱ ۱					F
	F		accordan	ice with the Unified	Soils Classification	۱					Į.
	Ė		System.								Ė
	F		2 NS =	= Sample not subn	nitted for laborators	,					F
	F			from this interval.		'					F
	Ė		•								<b> </b>
	F			floor elevation dete	rmined from 2014	1					F-25
	<u>F</u>		USACE s	survey.							F

SAM FORM 1836 - MsCIP MAY 2010





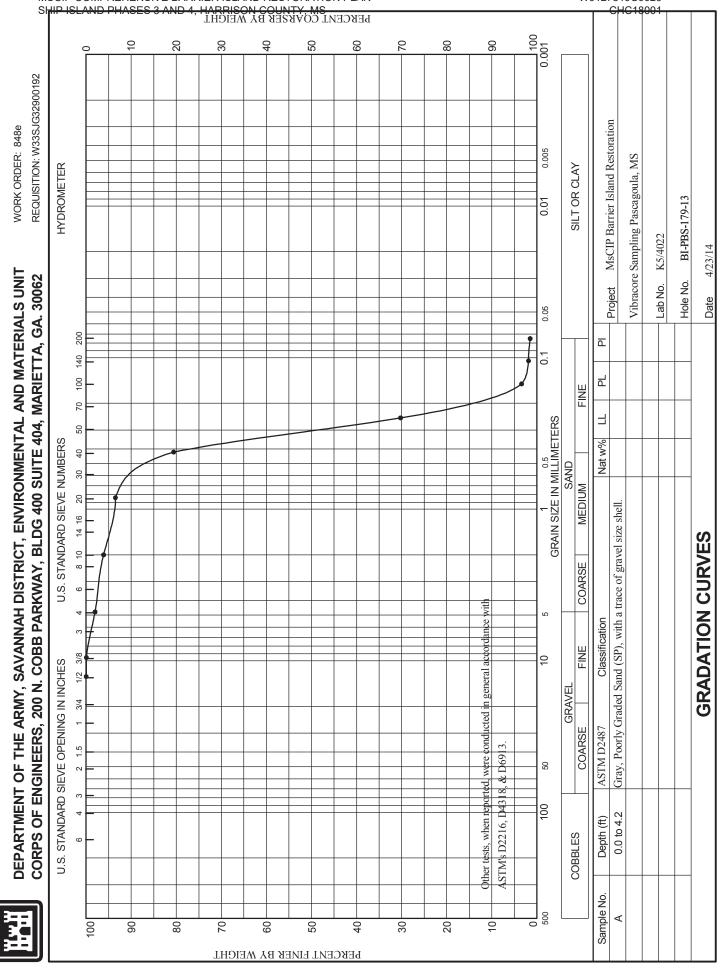
WORK ORDER: 848e REQUISITION: W33SJG32900192



#### Boring Designation BI-PBS-179-13

			Lange	2121		I			220		
DRI	LLING	LOC	DIVIS	outh Atlantic		INSTALLATION  Mobile District  SHEET 1  OF 1 SHEETS					
1. PRO	JECT		30	Outil Atlantic				TYPE OF BIT	/^	JOP 1 3	MEETS
	/IsCIP Barri	or Isla	and Doctor	ration				NATE SYSTEM/DATUM		TAL VERTICA	
	Petit Bois Pa			ration				Plane, MSE (U.S. Ft		-	
	ING DESIGN			LOCATION COORD	INATES	11.		ACTURER'S DESIGNAT		AUTO HAMI	
Е	8I-PBS-179	-13		1	N = 236,671		Vibra			MANUAL HA	
3. DRII	LING AGEN	ICY		CON	TRACTOR FILE NO.	1.0			DISTURBED	UNDISTURBE	ED (UD)
	Corps of Eng		s - CESAI	M		12.	. TOTAL S	SAMPLES	1	0	
	IE OF DRILL					13.	. TOTAL N	NUMBER CORE BOXES			
				national, Inc.		14	. WATER	DEPTH	47.4 Ft.		
-	ECTION OF I	BORIN	G	DEG. FROM VERTICAL	BEARING	H			STARTED	COMPLET	ΓED
_	INCLINED					15.	. DATE BO	DRING	12-16-	1	
6 THI	CKNESS OF	OVER	RIIPNEN	N/A	-	16	FLEVAT	ION TOP OF BORING	-46.3 Ft.		
				IN/A		⇤		RECOVERY FOR BORIN			
7. DEP	TH DRILLED	INTO	ROCK	N/A				URE AND TITLE OF IN			
8. тот	AL DEPTH C	F BOI	RING	13.6 Ft.				Powers, Geologist	or Lotok		
						_	10111	r owers, ocologist			
ELEV.	DEPTH	EGEND		CLASSIFICATION OF	MATERIALS		SAMPLE		BORATORY RES	elli Te	
LLEV.	DEFIN	EG		CLASSIFICATION OF	MATERIALS		JAMPLE	LA	BORATORT RES	JULIS	
-46.3	0.0	+-				$\dashv$					——
-40.3	- 0.0	l	_			$\dashv$					-0
	E	ļ · .		poorly-graded, most							E
	Ė	· · · ·		l sand-sized qua nts, lt. gray (SP)	artz, trace she	<sup>31</sup>		01 15 "	CD - C -	0 FV 0/4	E
	F	·	l liagilio	into, it. gray (or )			Α	Classificatio	n: SP Colo 1.306 mm %	r: 2.5Y 6/1-gray	F
	E							D30. 0		1 11163. 1.3	E
-50.1	3.8										Ė
-50.5	-4.2		J SVND	silty, mostly fine-	grained sand-size	$^{\prime\prime}$					<del></del>
	E_			medium gray (SM)	grained sand-size	۲/۱					E <sub>-5</sub>
	Ē		· · · · · ·		E ft. It to modium	_					E
	E		gray (C	lean, sandy down to	5 ft., it. to mediun	n					E
	Ė.		9.4) (	<i>y=</i> /							F
	E										E
	E										E
-55.5	9.2		Λ Δt El _F	54.9 Ft., oyster shell			NS				F
	F			, <b>,</b>		~					E <sub>-1</sub>
-56.7	10.4			clayey, mostly fine		$^{d}$					F'
	F		`	medium gray and pa		-/					F
	E_		CLAY, I	lean, sandy, It. to me	dium gray (CL)						Ē
	E										Ė
-59.6 -59.9	E-13:3 E-13:6					_					F
	E		\ SAND,	silty, mostly fine-	grained sand-size	a /t					E
	E		\quartz,	medium gray (SM)		] [					E.
	F	1									F <sup>1</sup>
	F	1	NOTES	S:							F
	Ė		1. S	Soils are field vis	ually classified in	,					E
	ļ:	1	accorda	ance with the Unified	Soils Classification	n					F
	F		System	1.							F
	E		2 NS	= Sample not subr	nitted for laborator	νĺ					E
	E	1	analysis	s from this interval.		'					E
	E		, ,	ofloor classation of t	arminad force 001	ا ۱					F <sup>-2</sup>
	<u> </u>	1		afloor elevation dete Esurvey.	errnined from 2014	4					E
	E			_ oui voy.							E
	E	1									F
	E										E
	E	1									E
	E										F
	<b>L</b>	1									E <sub>-2</sub>
	E										E -
	⊢	1				- 1					⊢

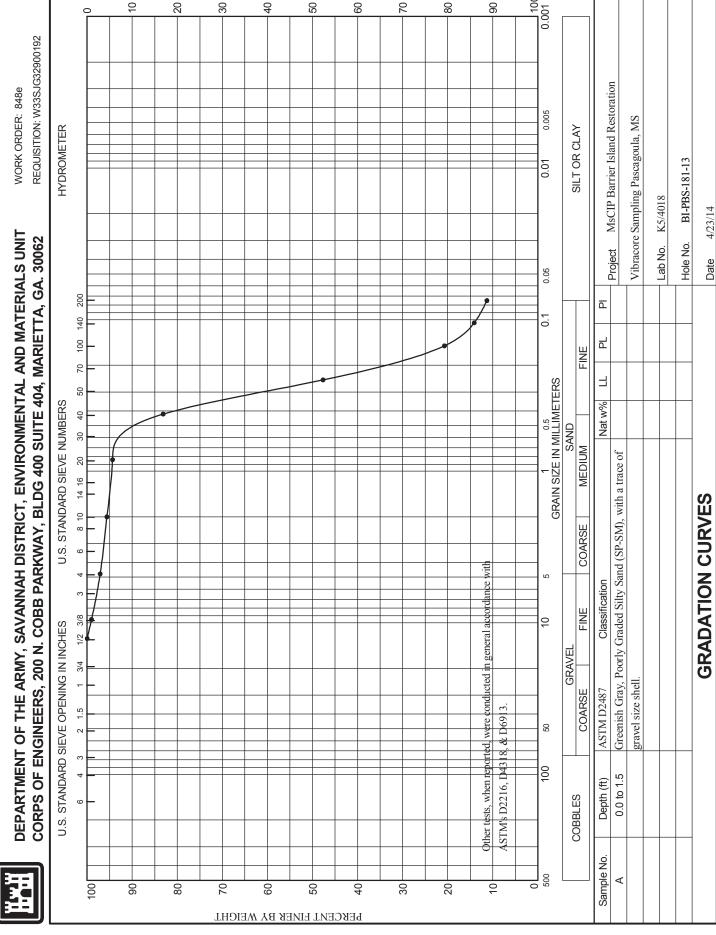
SAM FORM 1836 - MsCIP MAY 2010 Lat = 30.15021° Long = -88.43943°



#### Boring Designation BI-PBS-181-13

DRI	LLING	LOG	DIVISIO				IN	ISTALLATIO				SHEET	
1. PRO			Sou	th Atlantic			-	Mobile Di				<b>OF</b> 1	SHEETS
		on lel - :	d Doots	ion			_		NATE SYSTEM/DAT	N/A UM HORIZO	NTAL	VERTIC	
	AsCIP Barrie			ion			"			:		1	
	Petit Bois Pa			LOCATION C	OORD	INATES	11		e Plane, MSE (U.S. ACTURER'S DESIGN			NA AUTO HA	√D88
	3I-PBS-181-		į			N = 237,925	-   ' '		acore	ATTON OF BRIDE	<u></u>		HAMMER
3. DRIL	LING AGEN	CY		,		RACTOR FILE N			CAMPI FO	DISTURBED	U	NDISTUR	BED (UD)
	Corps of Eng		- CESAM		<u> </u>		12	2. TOTAL	SAMPLES	1		0	
	IE OF DRILL						13	. TOTAL	NUMBER CORE BOX	ŒS			
	Construction					PEADING	14	. WATER	DEPTH	49.4 Ft.			
$\boxtimes$	VERTICAL INCLINED	SUKING		DEG. FROI VERTICAL	·	BEARING	15	5. DATE B	ORING	<b>STARTE</b>		COMPL	<b>.ETED</b> 16-13
	CKNESS OF	OVERB	URDEN	N/A		•	16	6. ELEVAT	ION TOP OF BORIN	-			
7. DEP	TH DRILLED	INTO F	OCK	N/A			17	7. TOTAL	RECOVERY FOR BO	RING 100%			
7. DEF	THI DIGIELLO			11//			18	B. SIGNAT	URE AND TITLE OF	INSPECTOR			
8. ТОТ	AL DEPTH O	F BORI	<b>NG</b> 18	3.8 Ft.				Tom	Powers, Geologis	t			
ELEV.	DEPTH	LEGEND	CI	LASSIFICATIO	ON OF	MATERIALS		SAMPLE		LABORATORY R	ESULTS	•	
-50.8	0.0												
-52.3	- - - 1.5		quartz, li			grained sand-s nts, medium (		А			Color: 2. 6 Fines:	5Y 5/1-g 11.3	
-53.3	- - 2.5		(SM)				/						F
-56.6	- 5.8		quartz, tr (SC) CLAY, lea medium g	an, trace woo	ragme od and	grained sand-s nts, medium g oyster shell, sa	ndy,						
-57.6	<u>6.8</u>	$\parallel \parallel \parallel \downarrow$	SILT, ino gray (ML		ndy, pa	ale brown, med	lium /						-
-59.1 -59.8	- 8.3 - 9.0		SAND, s quartz, m	silty, mostly edium brown	fine-( SM)	grained sand-s	ized						<u> </u>
-60.8	10.0		SILT, ino	organic-L, sa edium gray (	andy, ( (ML)	organic fines,	pale	NS					-
		:::: \  ::::	SAND, s quartz, m	silty, mostly edium dark g	fine-q gray (S	grained sand-s SM)	ized						<u> </u>
			Lgrained sa	and-sized qu	artz, m	ly fine to medi nedium gray (Sl woody material							-
	<u>-</u>			. , <b>- 9</b> .		,							E
	F	$ \cdots $											F
	Ē												E
	E												E
	Ė	$[\cdots]$											Ė
	<u> </u>												F
-69.6	18.8	-::- <u> </u>											F
	F												F
	F		NOTES:										F
						ually classified Soils Classifica							<u> </u>
			2. NS =	Sample not		nitted for labora	tory						<u> </u>
				oor elevation ophysical su		rmined from 2	013						
	-												F

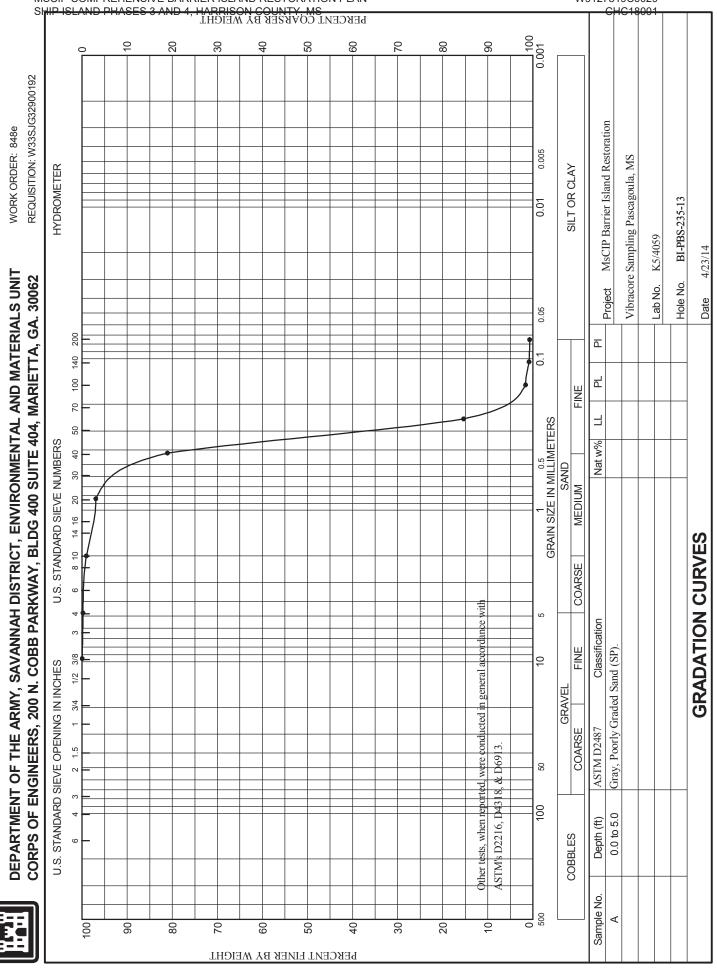
SAM FORM 1836 - MsCIP MAY 2010



# Boring Designation BI-PBS-235-13

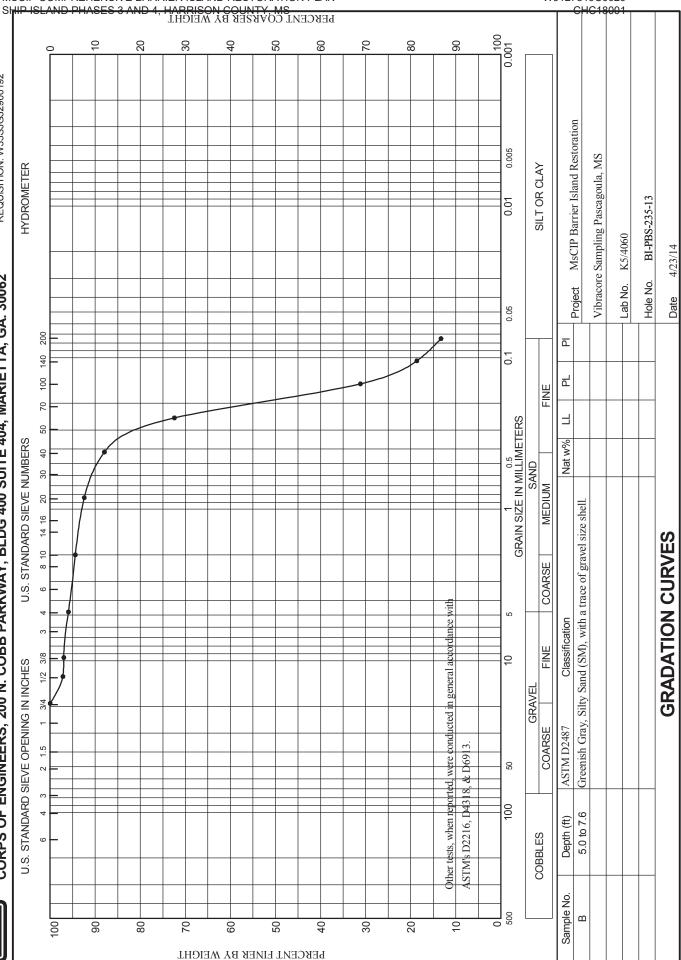
			DIVISIO	ON	1	INC	STALLATIO	ning Designation			HEET 1
DRI	LLING	LOG		uth Atlantic			Mobile Dis			I -	F 1 SHEETS
1. PRO	JECT		300	III Allaniic				TYPE OF BIT N//	· · · · · · · · · · · · · · · · · · ·		F   SHEETS
	/IsCIP Barri	er lele	nd Rectorat	tion	}			NATE SYSTEM/DATUM	HORIZONT	'AL VE	RTICAL
	Petit Bois Pa			uon				Plane, MSE (U.S. Ft.)		- 1	NAVD88
	ING DESIGN			LOCATION COORD	INATES	11.		CTURER'S DESIGNATION			D HAMMER
	3I-PBS-235-			E = 1,106,130			Vibra				UAL HAMMER
3. DRII	LING AGEN	ICY	'		RACTOR FILE NO.	40			DISTURBED	UNDIS	TURBED (UD)
	Corps of Eng		s - CESAM	i		12.	TOTALS	SAMPLES	2	0	
	IE OF DRILL					13.	TOTAL	IUMBER CORE BOXES			
	Construction					14.	WATER	DEPTH	45.6 Ft.		
	ECTION OF I	BORIN	G	DEG. FROM VERTICAL	BEARING				STARTED	' cc	OMPLETED
_	INCLINED				<u> </u>	15.	DATE BO	RING	12-27-	i	12-27-13
6 TUI	CKNESS OF	OVEDI	RIIDDEN	N/A	1	16	FLEVAT	ION TOP OF BORING	-42.5 Ft.		
0. 1111	JKI4200 01	OVEIN	JORDEN	IWA		-		RECOVERY FOR BORING			
7. DEP	TH DRILLED	INTO	ROCK	N/A				URE AND TITLE OF INSI			
8. ТОТ	AL DEPTH C	F BOR	RING 18	8.2 Ft.		10.		Powers, Geologist	PECTOR		
		Ι. Ι	,			Н	10111	rowers, Geologist			
ELEV.	DEPTH	LEGEND	C	LASSIFICATION OF	MATERIALS		SAMPLE	LAB	ORATORY RES	SULTS	
-42.5	0.0	$\Box$				$\dashv$					
	=		CAND »	sorty graded most	ly fine to medium	$\neg$					
	Ė.	-:::	grained s	oorly-graded, most and-sized quartz, f	iy fine to medium ew shell fragments	-					E
	E	::::	It. gray (S		ow orien magnicino	'					E
	E	l: ::::	0 , .	,			Α	Classification:		GLEY1 10	
	E						A	D50: 0.3	329 mm %	Fines: 0.7	E
	E	.··.									E
	F	-::-i									F
-47.5	5.0					4					E_5
			SAND, s quartz, li (SM)	silty, mostly fine- little shell fragme	grained sand-sized nts, medium gray	d /	В	Classification: D50: 0.1		GLEY1 10 Fines: 13.3	0Y 5/1-
-50.1	7.6					4					
-54.7				lean, few shell gray (CL)	fragments, sandy	,					-  -  -  -  -  -  -
	E		CLAY, fat	it, sandy, It. and me	edium gray and pale	•	NS				Ē
	E		green and	d pale orange (CH)	•						E
	E										F
	<u> </u>										<u>E</u> 1
	E										E '
	E										E
	Ė.										E
60.7	F 19 2										Ę
-00.7	18.2 					+					<del></del> F
	F		NOTES								Ę
	Ė		NOTES:								Ę,
			Soi accordand System.	ils are field visuce with the Unified	ually classified in Soils Classification	וו					-2  -  -  -
	F		-	- Camania	ittad for tel						F
	E			<ul> <li>Sample not subn from this interval.</li> </ul>	nitted for laboratory	/					E
	Ė		analysis i								F
	F			eafloor elevation	determined from	1					F
	E		10/28/20 <sup>-</sup>	14 USACE survey.							-2
	ŧ .										F
	E										F

SAM FORM 1836 - MsCIP MAY 2010 Lat = 30.15642° Long = -88.44769°





WORK ORDER: 848e REQUISITION: W33SJG32900192

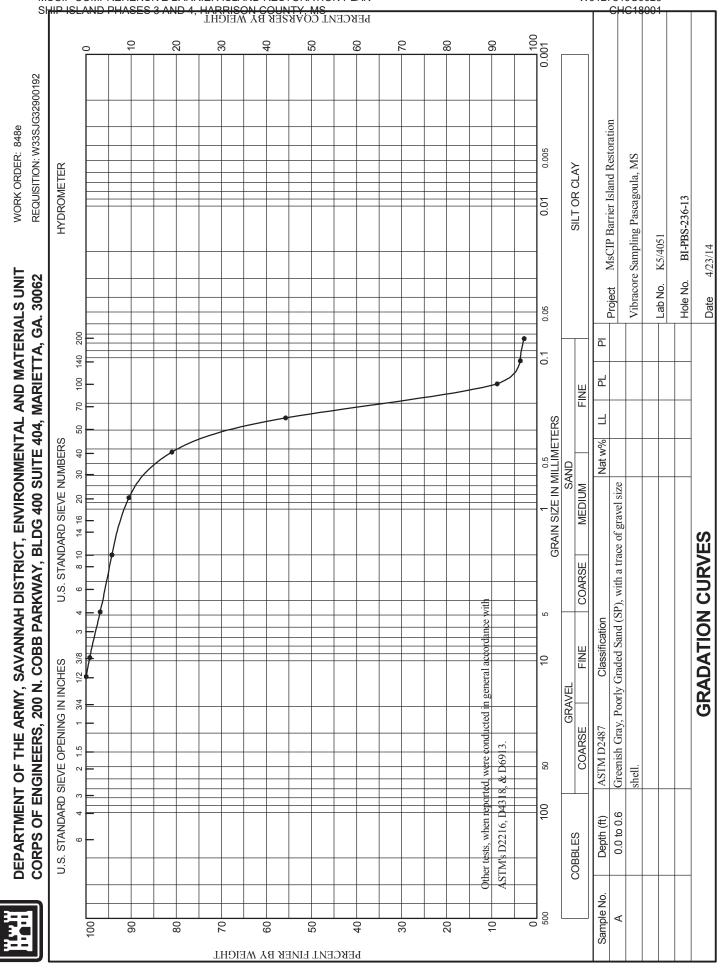


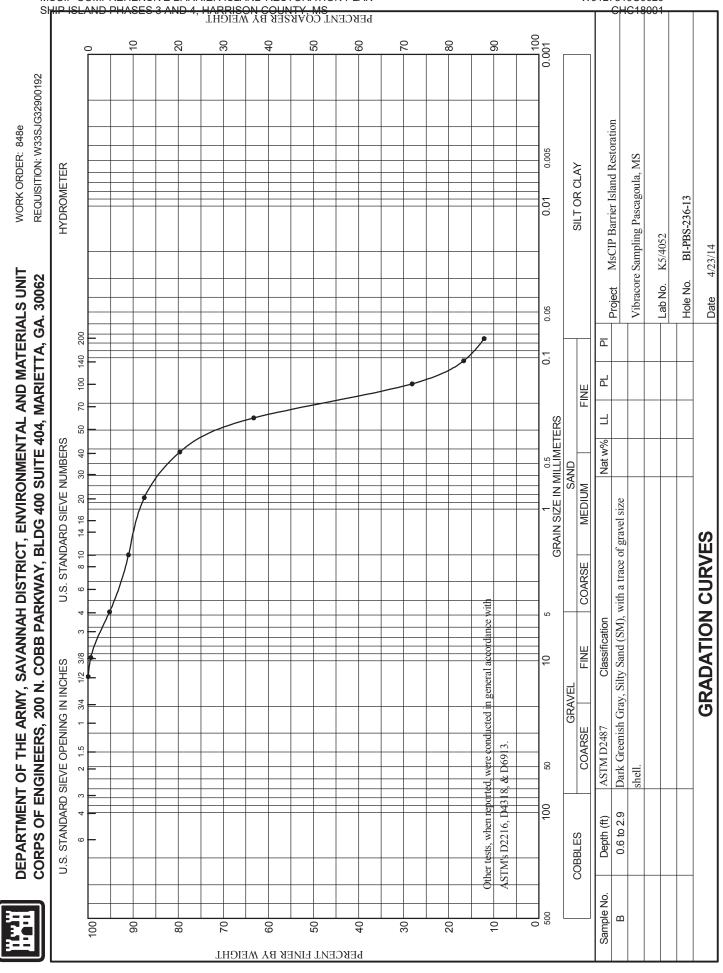
# Boring Designation BI-PBS-236-13

			DIVISIO	)N		INS	TALLATIO	on		SHEET	1
DR	ILLING	LOG		th Atlantic		1	Mobile Dis			1	SHEETS
1. PRO	JECT								/A		
l 1	AsCIP Barrie	er Isla	nd Restorati	ion				NATE SYSTEM/DATUM		TAL VERTICA	\L
	Petit Bois Pa						State	Plane, MSE (U.S. Ft	.)   NAD83	NAVI	288
2. BOF	RING DESIGN	IOITAI	N .	LOCATION COORD	INATES	11.	MANUFA	ACTURER'S DESIGNAT	ION OF DRILL	AUTO HAMI	MER
	3I-PBS-236-	_		E = 1,105,676	N = 237,686		Vibra	core		MANUAL H	AMMER
	LLING AGEN			CONT	TRACTOR FILE NO.	12.	TOTAL S	SAMPLES	DISTURBED	UNDISTURB	ED (UD)
	Corps of Eng		s - CESAM						2	0	
	NE OF DRILL		iono Intorno	tional Inc		13.	TOTAL I	NUMBER CORE BOXES			
	Construction				BEARING	14.	WATER	DEPTH	49.3 Ft.		
$\boxtimes$	VERTICAL INCLINED		-	DEG. FROM VERTICAL		15.	DATE BO	DRING	<b>STARTED</b> 12-27-	<b>COMPLE</b> 13 12-27	
6. THI	CKNESS OF	OVER	BURDEN	N/A		16.	ELEVAT	ION TOP OF BORING	-47.8 Ft.		
7. DEP	TH DRILLED	INTO	ROCK	N/A		17.	TOTAL F	RECOVERY FOR BORIN	<b>G</b> 100%		
° TOT	AL DEPTH O	E BOB		).8 Ft.		18.		URE AND TITLE OF IN:	SPECTOR		
0. 101	T DEFIN O	I a I	19	7.011.		Щ	Iom	Powers, Geologist			
ELEV.	DEPTH	LEGEND	CL	LASSIFICATION OF	MATERIALS		SAMPLE	LA	BORATORY RES	BULTS	
-47.8	0.0										-0
-48.4	0.6		s SAND. po	oorly-graded, mos	tly fine to medium	╌┟	Α	Classification		GLEY1 10Y 6/1	· Æ"
	-	+ +	grained sa	and-sized quartz, li	ttle shell fragments	5, /		Classificatio		Fines: 2.8	—/ F
	E	-	\lit. gray (S	SP)		ا	В			r: 2.5Y 5/1-gray Fines: 12.1	E
-50.7	2.9		SAND, s	ilty, mostly fine-	grained sand-sized	d 📗					
	-			tle shell fragments	, It. to medium gray	y /[					F
	<u>F</u>		\(SM)			۱ ۲					F
-52.7	4.9		SAND, cl	ayey, mostly fine	-grained sand-sized	d					E_5
-53.7	E 5.9		\ quartz, fe\ (SC)	w shell fragments	, It. to medium gray	<sup>y</sup> /[					E,
-30.7	- 0.0		1			ا/ر′					F
	E		\CLAY, lea	an, sandy, It. gray	(CL)	ا_					E
-55.8	8.0		SAND, cl	ayey, mostly fine	-grained sand-sized	d					Ē
-56.6	- 8.8			tle shell fragments	, It. to medium gray	у / [					E
-30.0	- 0.0		\ <u>(SC)</u>			-∕∦					F
-58.0	10.2		CLAY, lea	an, sandy, It. gray	(CL)	۱/					E <sub>10</sub>
00.0	- 10.2		\ SAND, cl	ayey, mostly fine	-grained sand-sized	d /					F
	F	V//	\quartz, lt.	to medium gray (	SC)	] [	NS				F
-59.8	F 12.0		CLAY, lea	an, It. to medium gi	ay (CL)	٨	. 10				E
	E		\ At El59	.1 Ft., sandy, very	loose consistency	/, /					E
	F		\lt. gray			۱ ۲					F
	F		CLAY, fat	t, sandy, It.and me	edium gray and pale	e					F
	E		orange (C	<b>ΣΠ)</b>							E 15
	Ē										<b>E</b> "
	Ē										E
	Ė										Ė.
	Ė										E
	F										F
07.0	F.,										F
-67.6	- 19.8 					$\dashv$					
	E		NOTES:								E
	Ė			_							Ė
	F				ually classified in						F
	E		System.	Se with the Unifled	Soils Classification	"					E
	Ę										Ē
	E			Sample not subr rom this interval.	nitted for laboratory	У					F
	F		•								-25
	<u> </u>			afloor elevation 14 USACE survey.	determined fron	n					

SAM FORM 1836 - MsCIP MAY 2010

Lat = 30.15303° Long = -88.44914°

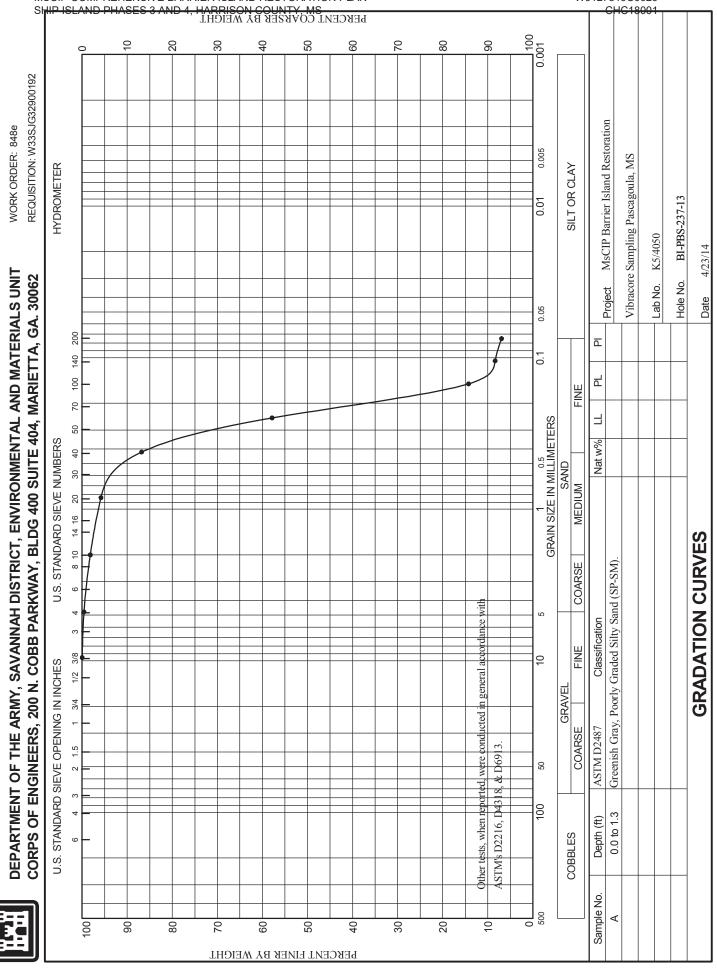




## Boring Designation BI-PBS-237-13

			1			I			550		<del></del>	
DRI	LLING	LOG	DIVISIO			1	STALLATIO			I	SHEET	SHEETS
1. PRO	JECT		J 3001	th Atlantic		-	Mobile Dis	TYPE OF BIT	'Δ		JF I	SHEETS
		or Iela	nd Restorati	ion				NATE SYSTEM/DATUM	HORIZON	TAL I	VERTIC	ΔL
	Petit Bois Pa			ion				Plane, MSE (U.S. Ft.		- 1		/D88
	ING DESIGN			LOCATION COORD	INATES	11.		ACTURER'S DESIGNATI			TO HAN	
	3I-PBS-237-			E = 1,106,930	N = 236,835		Vibra	core				AMMER
	LING AGEN			CONT	RACTOR FILE NO.	12	. TOTAL S	AMDI ES	DISTURBED	i		BED (UD)
	Corps of Eng		s - CESAM			<u> </u>	. IOIAL	AMP LLO	1	<u> </u>		
	E OF DRILL			Alamat Ina		13	. TOTAL N	NUMBER CORE BOXES				
	CONSTRUCTION OF E		ions Interna		BEARING	14	. WATER	DEPTH	49.7 Ft.			
$\boxtimes$	VERTICAL INCLINED			DEG. FROM VERTICAL		15.	. DATE BO	DRING	<b>STARTED</b> 12-19-	i	<b>COMPL</b> 12-1	<b>ETED</b> 19-13
6. THI	CKNESS OF	OVER	BURDEN	N/A	•	16	. ELEVAT	ION TOP OF BORING	-47.5 Ft.			
7 DED	TH DRILLED	INTO	BOCK	N1/A		17	. TOTAL F	RECOVERY FOR BORIN	<b>G</b> 100%			
7. DEP	IH DKILLED	INIO	ROCK	N/A		18	. SIGNAT	URE AND TITLE OF INS	PECTOR			
8. ТОТ	AL DEPTH O	F BOR	ring 19	9.7 Ft.			Tom	Powers, Geologist				
ELEV.	DEPTH	LEGEND	CI	LASSIFICATION OF	MATERIALS		SAMPLE	LA	BORATORY RE	SULTS		
-47.5	0.0					╛						
-48.8			SAND, p	oorly-graded with	silt, mostly fine	<b>-</b> -	Α	Classification:	SP-SM Co	olor: 2.5Y % Fines:	′ 6/1-gr 7	ay E
-40.0	_ 1.3 -		grained sa It. gray (S	and-sized quartz, fo SP-SM)	ew shell fragments	³, /t		500.	J.220 Hilli	0111100.		<del></del> E
-65.4			CLAY, lea	an, trace shell frag ray and pale orang		0	NS					
	Ē		SAND, cla	ayey, little shell frag	gments (SC)							Ē
-67.2	19.7					$\dashv$						<u>_</u>
	-		NOTES:	ls are field visu	ually classified in	n						-2 - - - - - -
			System.  2. NS =	ce with the Unified Sample not subn								
	<u> </u>		analysis fr	rom this interval.								-2
	Ē.		<ol><li>Seafle USACE se</li></ol>	oor elevation dete urvey.	rmined from 2014	4						E

SAM FORM 1836 - MsCIP MAY 2010 Lat = 30.15068° Long = -88.44518°





#### **BORROW AREA VOLUME REPORT**

### MSICP COMPREHENSIVE BARRIER ISLAND RESTORATION PLAN - SHIP ISLAND PHASE III & IV

	Required Dredge Volume (CY)	Allowable Dredge Volume (CY)
Petit Bois Pass – OCS West Borrow		Allowable Dredge Volume (C1)
	PBP-OCS-WEST 2	
PBP-OCS-WEST 2	796,317	451,601
PBP-OCS-WEST 2 North Allowable	0	109,673
PBP-OCS-WEST 2 South Allowable	0	67,079
Borrow Area Total	796,317	628,353
	Horn Island Pass Borrow Area	
Horn Island Pass Borrow Area	0	466,687
Borrow Area Total	0	466,687

