

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE J	PAGE OF PAGES 1 2
2. AMENDMENT/MODIFICATION NO. 0002		3. EFFECTIVE DATE 5-Dec-2001	4. REQUISITION/PURCHASE REQ. NO. W32CS500612937	5. PROJECT NO.(If applicable)	
6. ISSUED BY USA ENGINEER DISTRICT, JACKSONVILLE 400 WEST BAY STREET ATTN: CESAJ-CT (ROOM 867) JACKSONVILLE FL 32202-4412		CODE DACW17	7. ADMINISTERED BY (If other than item 6) See Item 6		
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)				<input checked="" type="checkbox"/>	9A. AMENDMENT OF SOLICITATION NO. DACW17-00-B-0025
				<input checked="" type="checkbox"/>	9B. DATED (SEE ITEM 11) 20-Aug-2001
					10A. MOD. OF CONTRACT/ORDER NO.
					10B. DATED (SEE ITEM 13)
CODE		FACILITY CODE			
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS					
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input checked="" type="checkbox"/> is extended, <input type="checkbox"/> is not extended.					
Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning <u>0</u> copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.					
12. ACCOUNTING AND APPROPRIATION DATA (If required)					
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.					
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.					
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).					
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:					
D. OTHER (Specify type of modification and authority)					
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.					
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) Maintenance Dredging, 12-Foot Project, Intracoastal Waterway, Jacksonville to Miami, Florida, Vicinity of Haulover Canal, Brevard County, Florida This amendment posted on Jacksonville District Web Site Only. A new CD Rom will not be issued for this Amendment. SF 1442: New Bid Opening Date: Tuesday, December 18, 2001 2:00pm, Room 205. (Bids must be delivered to room 867 before 2:00pm, December 18, 2001. See SF 30 Continuation Page for Changes.					
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.					
15A. NAME AND TITLE OF SIGNER (Type or print)			16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)		
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY (Signature of Contracting Officer)		16C. DATE SIGNED 26-Nov-2001	

EXCEPTION TO SF 30
APPROVED BY OIRM 11-84

30-105-04

STANDARD FORM 30 (Rev. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

SF 30 CONTINUATION SHEET

1. **SPECIFICATIONS:**

A. Either asterisks appear before and after the line or lines where revisions have been made to the text on the enclosed revised or added pages or the text changes have been updated with additions noted with underlined text and deletions noted with line/cross-outs, and pertain only to changes made by this amendment.

B. The text changes may have necessitated reformatting of subsequent text or pages. If this is the case, those pages have also been issued as amended pages but are not marked with asterisks or underlined text and line/cross-outs.

ADD the attached Amendment Number 0002 STANDARD FORM 30 to the Specifications.

ADD the attached Amendment Number 0001 STANDARD FORM 30 to the Specifications.

SECTION 00010: STANDARD FORM 1442; DELETE pages 00010-1 through 00010-3 and REPLACE with the attached revised pages 00010-1 through 00010-3. Also DELETE pages 00010-9 through 00010-12 (Wage Rate FL010045, Mod 0 dated 03/02/2001) and REPLACE with the attached revised pages 00010-9 through 00010-11 (Updated Wage Rate FL010045, Mod 1 dated 10/12/2001).

SECTION 01000: GENERAL REQUIREMENTS; DELETE SECTION 01000, excluding the Appendices; however, in APPENDIX 01000-F, DELETE the CORE BORINGS and corresponding GRADATION CURVES for Hole No. CB-BVM97-2 and Hole No. CB-BVM97-14. REPLACE with the attached revised SECTION 01000, excluding the Appendices; however, ADD the attached new APPENDIX 01000-G, CONTROL MONUMENT DESCRIPTIONS.

SECTION 01410: ENVIRONMENT PROTECTION; DELETE SECTION 01410, excluding the Appendices and REPLACE with the attached revised SECTION 01410, excluding the Appendices.

SECTION 01411: TURBIDITY AND DISPOSAL MONITORING; DELETE SECTION 01411, including APPENDIX 01411-A and REPLACE with the attached revised SECTION 01411, including the attached revised/added APPENDIX 01411-A.

SECTION 02325: DREDGING; DELETE SECTION 02325, excluding the Appendices and REPLACE with the attached revised SECTION 02325, excluding the Appendices.

DESCRIPTIVE SPECIFICATION CHANGES: The following are descriptive changes to the specifications. Specifications should be adequately marked to indicate that they have been changed.

Amendment Number 0001 STANDARD FORM 30, page 1:
In Block 9B: CHANGE "16-Aug-2001" to "20-Aug-2001".

SECTION 00800, Special Contract Requirements: REVISE Contract Clause 52.211-10 titled "COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984)" as follows:

On the 3rd line CHANGE "-- 445 calendar days --" to "-- 331 calendar days --".

2. **DRAWINGS:**

D.O. File No. 8H-37,866 dated July 1999 in 26 Sheets + Cover:

DELETE Drawing Numbers 1/2, 1/3, 1/4, 2/1, 2/4, 2/8, 2/16, 2/20 and 3/1 and REPLACE with the attached revised Drawing Numbers 1/2, 1/3, 1/4, 2/1, 2/4, 2/8, 2/16, 2/20 and 3/1.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE	PAGE OF PAGES	
			J	1	2
2. AMENDMENT/MODIFICATION NO. 0001	3. EFFECTIVE DATE 27-Sep-2001	4. REQUISITION/PURCHASE REQ. NO. W32CS500612937	5. PROJECT NO.(If applicable)		
6. ISSUED BY USA ENGINEER DISTRICT, JACKSONVILLE 400 WEST BAY STREET ATTN: CESAJ-CT (ROOM 867) JACKSONVILLE FL 32202-4412	CODE DACW17	7. ADMINISTERED BY (If other than item 6)		CODE	
		See Item 6			
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)			X	9A. AMENDMENT OF SOLICITATION NO. DACW17-00-B-0025	
			X	9B. DATED (SEE ITEM 11) 16-Aug-2001	
				10A. MOD. OF CONTRACT/ORDER NO.	
				10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE			
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS					
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended.					
Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.					
12. ACCOUNTING AND APPROPRIATION DATA (If required)					
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.					
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C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:					
D. OTHER (Specify type of modification and authority)					
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.					
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) MAINTENANCE DREDGING, 12-FOOT PROJECT, INTRACOASTAL WATERWAY, JACKSONVILLE TO MIAMI, FLORIDA, VICINITY OF HAULOVER CANAL, BREVARD COUNTY, FLORIDA THIS SOLICITATION IS HEREBY POSTPONED INDEFINITELY. A NEW BID OPENING DATE AND TIME WILL BE SET BY A SUBSEQUENT AMENDMENT.					
<i>Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.</i>					
15A. NAME AND TITLE OF SIGNER (Type or print)			16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)		
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA	
_____ (Signature of person authorized to sign)				BY _____ (Signature of Contracting Officer)	
				16C. DATE SIGNED 29-Sep-2001	

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

SOLICITATION, OFFER, AND AWARD <i>(Construction, Alteration, or Repair)</i>	1. SOLICITATION NO. DACW17-00-B-0025	2. TYPE OF SOLICITATION <input checked="" type="checkbox"/> SEALED BID (IFB) <input type="checkbox"/> NEGOTIATED (RFP)	3. DATE ISSUED 20 August 2001	PAGE OF PAGES 1 OF
	IMPORTANT - The "offer" section on the reverse must be fully completed by offeror.			
4. CONTRACT NO.	5. REQUISITION/PURCHASE REQUEST NO. W32CS500612937	6. PROJECT NO.		
7. ISSUED BY USA ENGINEER DISTRICT, JACKSONVILLE 400 WEST BAY STREET ATTN: CESAJ-CT (ROOM 867) JACKSONVILLE FL 32202-4412 TEL: FAX:	CODE DACW17	8. ADDRESS OFFER TO <i>(If Other Than Item 7)</i> IF BY HAND, DELIVER TO "ISSUED BY" USAED JACKSONVILLE, P.O. BOX 4970, ATTN: CESAJ-CT JACKSONVILLE FL 32232-0019 TEL: FAX:	CODE DACW17	
9. FOR INFORMATION CALL:	A. NAME WILLIE A MAYS	B. TELEPHONE NO. <i>(Include area code)</i> (NO COLLECT CALLS) 904-232-3535		
SOLICITATION				
NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".				
10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRIBED IN THESE DOCUMENTS <i>(Title, identifying no., date):</i> MAINTENANCE DREDGING, 12-FOOT PROJECT, INTRACOASTAL WATERWAY, JACKSONVILLE TO MIAMI, FLORIDA, VICINITY OF HAULOVER CANAL, BREVARD COUNTY, FLORIDA DRAWING D.O. File No. 8H-37,866 dated July 1999 Description of Work: See page 00010-3 Magnitude of construction is \$5,000,000 to \$10,000,000. This procurement is a Small Business Set-Aside (SBSA). You must be registered in the Central Contractor Registration in order to be eligible to receive an award from this solicitation. Call 1-888-227-2423 for more information.				
11. The Contractor shall begin performance within <u>30</u> calendar days and complete it within <u>331</u> calendar days after receiving <input type="checkbox"/> award, <input checked="" type="checkbox"/> notice to proceed. This performance period is <input checked="" type="checkbox"/> mandatory, <input type="checkbox"/> negotiable. <i>(See Section 00800 .)</i>				
12 A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? <i>(If "YES," indicate within how many calendar days after award in Item 12B.)</i> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			12B. CALENDAR DAYS 10	
13. ADDITIONAL SOLICITATION REQUIREMENTS:				
A. Sealed offers in original and <u>0</u> copies to perform the work required are due at the place specified in Item 8 by <u>02:00:00</u> . (hour) local time <u>12/18/01</u> (date). If this is a sealed bid solicitation, offers must be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due.				
B. An offer guarantee <input checked="" type="checkbox"/> is, <input type="checkbox"/> is not required.				
C. All offers are subject to the (1) work requirements, and (2) other provisions and clauses incorporated in the solicitation in full text or by reference.				
D. Offers providing less than <u>60</u> calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.				

SOLICITATION, OFFER, AND AWARD (Continued)
(Construction, Alteration, or Repair)

OFFER (Must be fully completed by offeror)

14. NAME AND ADDRESS OF OFFEROR (Include ZIP Code)	15. TELEPHONE NO. (Include area code)
	16. REMITTANCE ADDRESS (Include only if different than Item 14)
	See Item 14
CODE	FACILITY CODE

17. The offeror agrees to perform the work required at the prices specified below in strict accordance with the terms of this solicitation, if this offer is accepted by the Government in writing within _____ calendar days after the date offers are due. (Insert any number equal to or greater than the minimum requirements stated in Item 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.)

AMOUNTS	SEE SCHEDULE OF PRICES
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18. The offeror agrees to furnish any required performance and payment bonds.

19. ACKNOWLEDGMENT OF AMENDMENTS
(The offeror acknowledges receipt of amendments to the solicitation -- give number and date of)

AMENDMENT NO.	DATE								

20A. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)	20B. SIGNATURE	20C. OFFER DATE
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AWARD (To be completed by Government)

21. ITEMS ACCEPTED:
SEE SCHEDULE

22. AMOUNT	23. ACCOUNTING AND APPROPRIATION DATA
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24. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified)	ITEM 26	25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO <input type="checkbox"/> 10 U.S.C. 2304(c) <input type="checkbox"/> 41 U.S.C. 253(c)
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26. ADMINISTERED BY NORTH FLORIDA AREA OFFICE SUITE 201 4070 BOULEVARD CENTER DRIVE, JACKSONVILLE, FL 32206-3474 PH: (904) 232-3086	CODE K3M0E00	27. PAYMENT WILL BE MADE BY USACE FINANCE CENTER 5722 INTEGRITY DRIVE ATTN: CEFC-AO-P MILLINGTON, TN 38054-5005	CODE t0b0200
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CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE

<input type="checkbox"/> 28. NEGOTIATED AGREEMENT (Contractor is required to sign this document and return _____ copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all work, requisitions identified on this form and any continuation sheets for the consideration stated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, and (c) the clauses, representations, certifications, and specifications or incorporated by reference in or attached to this contract.	<input type="checkbox"/> 29. AWARD (Contractor is not required to sign this document.) Your offer on this solicitation, is hereby accepted as to the items listed. This award consummates the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.
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30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN (Type or print)	31A. NAME OF CONTRACTING OFFICER (Type or print)
30B. SIGNATURE	30C. DATE
31B. UNITED STATES OF AMERICA BY	31C. AWARD DATE

Maintenance Dredging, 12-Foot Project, IWW, Jacksonville to Miami, Florida,
Vicinity of Haulover Canal, Brevard County, Florida

DESCRIPTION OF WORK: The project work consists of removing shoals along the Intracoastal Waterway (IWW) in the vicinity of Haulover Canal. A depth of 12 feet MLW will be required with an allowable overdepth of two feet. The base bid will require maintenance dredging of Cut BV-1 Station 0+00 to Cut BV-7 Station 0+00 and will total approximately 900,000 cubic yards of material to be removed. Option Bid Item A (if awarded) will require maintenance dredging of Cut BV-7 Station 0+00 to Cut BV-9 Station 43+00 and will total approximately 300,000 cubic yards of material to be removed. All dredged material will be placed in upland disposal area BV-2C located approximately 4.5 miles north of the intersection of Cut BV-5 and Cut BV-6.

General Decision Number FL010045

General Decision Number **FL010045**

Superseded General Decision No. FL000045

State: **Florida**

Construction Type:

DREDGING

County(ies):

STATEWIDE

DREDGING CONSTRUCTION PROJECTS

FLORIDA (All Counties on the Atlantic & Gulf Coast East of the Aucilla River & all tributary waterways).

Modification Number	Publication Date
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0	03/02/2001
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1	10/12/2001
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COUNTY(ies):

STATEWIDE

* ENGI0025E 02/01/2000

	Rates	Fringes
HYDRAULIC DREDGES 20" & OVER		
Leverman	18.08	4.01+a
Engineer	17.01	4.01+a
Derrick Operator	15.78	4.01+a
Mate	14.76	3.81+a
Welder	15.25	3.81+a
Spill Barge Operator	15.47	3.81+a
Spider Barge Operator	15.47	3.81+a
Tug Master	14.43	4.01+a
Tug Mate	13.96	3.81+a
Tug Deckhand	10.84	3.61+a
Carpenter	15.69	4.01+a
Electrician	16.08	4.01+a
Steward	11.94	3.61+a
Oiler	11.58	3.61+a
Deckhand	10.84	3.61+a
Shoreman	10.63	3.61+a
Second Cook	10.84	3.61+a
Messman	10.63	3.61+a
Fill Placer	15.69	4.01+a
Asst. Fill Placer	14.27	4.01+a
HYDRAULIC DREDGES UNDER 20"		
Leverman	10.03	1.73+b
Engineer	9.59	1.73+b
Welder	9.79	1.73+b
Mate	8.82	1.73+b
Oiler & Fireman	8.11	1.73+b
Deckhand	7.77	1.73+b
Launchman	8.19	1.73+b
Shoreman	7.82	1.73+b
Spill Barge Operator	8.68	1.73+b
Spider Barge Operator	8.68	1.73+b
Cook	8.11	1.73+b
Mess Cook	7.71	1.73+b
Messman & Janitor	7.53	1.73+b
CLAMSHELL DREDGES:		

Operator	17.99	4.01+a
Engineer	16.09	4.01+a
Welder	15.01	3.81+a
Mate	14.45	3.81+a
Oiler	11.58	3.61+a
Deckhand	10.84	3.61+a
Launchman	11.58	3.61+a
Scowman	10.99	3.61+a
Handyman	10.84	3.61+a
DIPPER DREDGES:		
Operator	18.16	4.01+a
Engineer	16.84	4.01+a
Welder	15.25	3.81+a
Mate	14.76	3.81+a
Oiler	11.58	3.61+a
Deckhand	10.84	3.61+a
Launchman	11.58	3.61+a
Scowman	10.99	3.61+a
Handyman	10.84	3.61+a

TUGS (TENDING DIPPER & CLAMSHELL DREDGES)

Tug Master	16.30	4.01+a
Engineer	15.46	4.01+a
Tug Mate	14.10	4.01+a
Assistant Engineer	13.92	4.01+a
Deckhand	10.69	3.61+a
Cook	10.99	3.61+a

STEWARD DEPARTMENT (ON DIPPER & CLAMSHELL DREDGES):

Cook	10.57	3.61+a
Mess Cook	9.93	3.61+a
Messman & Janitor	9.78	3.61+a

DRILL BOATS:

Engineer	17.01	4.01+a
Driller	16.38	4.01+a
Blaster	16.38	4.01+a

FOOTNOTE:

- a. New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day and Good Friday. Plus Vacation Contribution of 7% of straight time pay for all hours worked.
- b. New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day. Plus Vacation Contribution of 7% of stright time pay for all hours worked.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.
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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(v)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can

be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
 Wage and Hour Division
 U. S. Department of Labor
 200 Constitution Avenue, N. W.
 Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
 U.S. Department of Labor
 200 Constitution Avenue, N. W.
 Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
 U. S. Department of Labor
 200 Constitution Avenue, N. W.
 Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.
 END OF GENERAL DECISION

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SECTION 01000

GENERAL REQUIREMENTS

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SECTION 01000

GENERAL REQUIREMENTS

PART 1 GENERAL

1.1 PARTNERING

In order to most effectively accomplish this contract, the Government is willing to form a cohesive partnership with the Contractor and its subcontractors. This partnership would strive to draw on the strengths of each organization in an effort to achieve a quality project done right the first time, within budget and on schedule. This partnership would be bilateral in make-up and participation will be totally voluntary. Any cost associated with effectuating this partnership will be agreed to by both parties and will be shared equally by the Government and the Contractor.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

CORPS OF ENGINEERS JACKSONVILLE REGULATION (CESAJR)

CESAJR 385-1-1 (1 Sep 98) Safety and Occupational Health Program

ENGINEERING MANUALS (EM)

EM 385-1-1 (3 Sep 96) Safety and Health Requirements Manual

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70 (1999) National Electrical Code

1.3 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-04 Drawings

As-Built Contract Drawings; FIO. Electronic As-Built Files; FIO.

Refer to paragraph PROJECT RECORD DOCUMENTS for procedure.

1.4 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK

a. Read this paragraph in conjunction with the Clause COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (FAR 52.211-10) of Section 00800 SPECIAL CONTRACT REQUIREMENTS.

b. In addition to the above, the following shall apply: The words "commence work" means "commence dredging." The commencement time of 30 days applies unless precluded by inclement weather as determined by the Contracting Officer.

1.5 LIQUIDATED DAMAGES-CONSTRUCTION

Refer to the Clause LIQUIDATED DAMAGES-CONSTRUCTION (FAR 52.211-12) of Section 00800 SPECIAL CONTRACT REQUIREMENTS.

1.6 PROJECT RECORD DOCUMENTS

This paragraph covers as-built drawings complete, as a requirement of the contract. The terms "drawings," "contract drawings," "drawing files," "working as-built drawings" and "final as-built drawings" refer to contract drawings which are revised to be used for final as-built drawings.

1.6.1 Working As-Built Drawings

The Contractor shall revise 2 sets of paper prints by red-line process to show the as-built conditions during the prosecution of the project. These as-built marked prints shall be kept current on a weekly basis and available on the job site at all times. Changes from the contract plans which are made in the work or additional information which might be uncovered in the course of construction shall be accurately and neatly recorded as they occur by means of details and notes. The working as-built marked prints will be jointly reviewed for accuracy and completeness by the Contracting Officer and the Contractor prior to submission of each monthly pay estimate. If the Contractor fails to maintain the working as-built drawings as specified herein, the Contracting Officer will deduct from the monthly progress payment an amount representing the estimated cost of maintaining the as-built drawings and will continue the monthly deduction of the 10% retainage even after 50% completion of the contract. This monthly deduction will continue until an agreement can be reached between the Contracting Officer and the Contractor regarding the accuracy and completeness of updated drawings. The working as-built drawings shall show the following information, but not be limited thereto:

- a. The location, description, and dimensions of utility lines or other installations of any kind or description known to exist within the construction area.
- b. The location and dimensions of any changes within the building structure.
- c. Correct grade, elevations, cross section, or alignment of roads, earthwork, structures or utilities if any changes were made from contract plans.
- d. Changes in details of design or additional information obtained from working drawings specified to be prepared and/or furnished by the Contractor; including, but not limited to, fabrication, erection, installation plans and placing details, pipe sizes, insulation material, dimensions of equipment foundations, etc.
- e. The topography, invert elevations and grades of drainage installed or affected as part of the project construction.

- f. Changes or modifications which result from the final inspection.
- g. Where contract drawings or specifications present options, only the option selected for construction shall be shown on the final as-built prints.
- h. If borrow material for this project is from sources on Government property, or if Government property is used as a spoil area, the Contractor shall furnish a contour map of the final borrow pit/spoil area elevations.

1.6.2 Preliminary Submittal

At the time of final inspection, the Contractor shall prepare 2 copies of the working as-built prints and these shall be delivered to the Contracting Officer for review and approval. These working as-built marked prints shall be neat, legible and accurate. If the Contractor elects to use references to as-built shop drawings on the working as-built prints, then paper copies of the referenced documents shall be appended at the end of the working set of as-built prints. The index sheet shall be revised to reflect the appended as-built shop drawings. The review by Government personnel will be expedited to the maximum extent possible. Upon approval, the working as-built marked prints will be returned to the Contractor for use in preparation of final as-built drawings. If upon review, the working as-built marked prints are found to contain errors and/or omissions, they will be returned to the Contractor for corrections. The Contractor shall complete the corrections and return the working as-built marked prints to the Contracting Officer within 10 calendar days.

1.6.3 Drawing Preparation

Upon approval of the working as-built prints submittal, the Contractor will be furnished, by the Government, one set of contract drawings with all amendments incorporated, to be used for final as-built drawings. These contract drawings will be furnished as specified by the Using Agency. These drawings shall be modified as may be necessary to correctly show the features of the project as it has been constructed by bringing the contract set into agreement with approved working as-built prints, adding such additional drawings as may be necessary. These drawings are part of the permanent records of this project and the Contractor shall be responsible for the protection and safety thereof until returned to the Contracting Officer. Any drawings damaged or lost by the Contractor shall be satisfactorily replaced by the Contract at no additional cost to the Government.

1.6.4 Computer Aided Design and Drafting (CADD) Drawings

Only personnel proficient in the preparation of CADD drawings shall be employed to modify the contract drawings or prepare additional new drawings. Additions and corrections to the contract drawings shall be equal in quality to that of the originals. Line work, line weights, lettering, layering conventions, and symbols shall be the same as the original line work, line weights, lettering, layering conventions, and symbols. If additional drawings are required, they shall be prepared using the specified electronic file format applying the same guidance specified for original drawings. Any appended as-built shop drawings, if not in electronic format, shall be scanned and further prepared for submission as discussed in this paragraph. The title block and drawing border to be used for any new final as-built drawings or appended as-built shop drawings

shall be identical to that used on the contract drawings. Additions and corrections to the contract drawings shall be accomplished using CADD media files supplied by the Government. These contract drawings will already be compatible with the Using Agency's system when received by the Contractor. The Using Agency uses Microstation by Bentley Systems, Inc., CADD software system. The media files will be supplied on Using Agency's specified media. The Contractor shall be responsible for providing all program files and hardware necessary to prepare final as-built drawings. The Contracting Officer will review final as-built drawings for accuracy and the Contractor shall make all required corrections, changes, additions, and deletions.

a. When final revisions have been completed, the cover sheet drawing shall show the wording "RECORD DRAWING AS-BUILT" followed by the name of the Contractor in letters at least 3/16 inch high. All other contract drawings shall be marked either "AS-BUILT" drawing denoting no revisions on the sheet of "REVISED AS-BUILT" denoting one or more revisions. Original contract drawings shall be dated in the revision block. The Contractor shall sign the cover sheet of the marked-up drawings in the following manner: "I CERTIFY THAT THESE CORRECTED DRAWINGS INDICATE CONSTRUCTION AS ACTUALLY PERFORMED AND ARE AN ACCURATE REPRESENTATION OF THE SPECIFIED WORK. THESE CORRECTED DRAWINGS ARE APPROVED FOR PREPARATION OF AS-BUILT CONSTRUCTION DRAWINGS."

b. After receipt by the Contractor of the approved working as-built prints and the original contract drawings files the Contractor shall, within 30 days for contracts less than \$5 million, make the final as-built submittal. This submittal shall consist of 2 sets of completed final as-built drawings on separate media consisting of both CADD files (compatible with the Using Agency's system on electronic storage media identical to that supplied by the Government) and mylars; 2 blue line prints of these drawings and the return of the approved marked working as-built prints. They shall be complete in all details and identical in form and function to the contract drawing files supplied by the Government. Any transactions or adjustments necessary to accomplish this is the responsibility of the Contractor. The Government reserves the right to reject any drawing files it deems incompatible with its CADD system. All paper prints, drawing files and storage media submitted will become the property of the Government upon final approval. Failure to submit final as-built drawing files and marked prints as specified shall be cause for withholding any payment due the Contractor under this contract. Approval and acceptance of final as-built drawings shall be accomplished before final payment is made to the Contractor.

1.6.5 As-Built Contract Drawings

The Contractor shall maintain a separate set of full-size contract drawings, marked up in red, to indicate as-built conditions. Each as-built contract drawing shall include the Contract Number DACW17-XX-C-XXXX associated with the contract. These drawings shall be maintained in a current condition at all times until completion of the work and shall be available for review by Government personnel at all times. All variations from the contract drawings, for whatever reason, including those caused by modifications, optional materials, and the required coordination between trades, shall be indicated. These variations shall be shown in the same general detail utilized in the contract drawings. Upon completion of the work, the Contractor shall sign the marked-up drawings in the following manner: "I CERTIFY THAT THESE CORRECTED DRAWINGS INDICATE CONSTRUCTION AS

ACTUALLY PERFORMED AND ARE AN ACCURATE REPRESENTATION OF THE SPECIFIED WORK. THESE CORRECTED DRAWINGS ARE APPROVED FOR PREPARATION OF AS-BUILT CONSTRUCTION DRAWINGS." The marked-up drawings shall then be furnished to the Contracting Officer prior to acceptance of the work. The Government reserves the right to withhold final payment until acceptable as-built contract drawings have been submitted.

1.6.6 Electronic As-Built Files

In addition to the As-Built Contract Drawings specified above, the Contractor shall furnish electronic files reflecting the as-built condition. At the Preconstruction Conference, the Contracting Officer's Representative will furnish to the Contractor one set of electronic files which reflect the contract drawings as awarded. The files will be furnished in the latest version of Microstation by Bentley Systems, Inc., on CD-ROM. The Contractor shall download the files into his own system and shall use the downloaded files in creating an electronic file for recording the "as-built" conditions. On a monthly basis, the Contractor shall furnish a copy of the electronic "as-built" files to the Contracting Officer's Representative for review. If the Contractor's approved shop drawings significantly change the contract drawings to the extent that it is not possible to revise the files electronically, then the contract drawing area effected shall be enclosed and cross referenced to the "as-built" shop drawings. Upon completion of construction, and as a condition to final payment, the Contractor shall furnish to the Contracting Officer one set of electronic files, as approved by the Contracting Officer's Representative, reflecting the final "as-built" contract drawings. The files shall be furnished in the latest version of Microstation.

1.7 PHYSICAL DATA

Read this paragraph in conjunction with the Clause PHYSICAL DATA (FAR 52.236-4) of Section 00800 SPECIAL CONTRACT REQUIREMENTS.

1.7.1 Physical Conditions

The indications of physical conditions on the drawings and in the specifications are the result of site investigations by surveys and/or by core borings. When the indicated physical conditions are the result of site investigations by core borings, the core boring logs and laboratory data are appended to the end of Section 01000 GENERAL REQUIREMENTS and the core boring locations are shown on the drawings. While the Government's borings are representative of subsurface conditions at their respective locations and vertical reaches, local variations characteristic of the rocks and subsurface materials of this region are to be expected. The material recovered from the core borings is available for inspection by prospective bidders at the Corps of Engineers District Warehouse, Talleyrand Avenue at 20th Street, Jacksonville, Florida during the entire bid period, and prospective bidders are strongly urged to examine the material and assure themselves that they have made the best possible evaluation of the subsurface conditions. Bidders shall form their own conclusions from this examination prior to submission of their bids. Bidders shall record their core examination visit in a record book maintained at the inspection site.

1.7.2 Location

Haulover Canal is located on the East Coast of Florida in Brevard County.

1.7.3 Weather Conditions

For the project area, the climate is essentially subtropical, marine. Temperatures below freezing are rare. The wet season in the project area is from May through October. The hurricane season is from June through November. In general, the winter months constitute the dry season and rainfall is usually associated with mid-latitude systems (fronts and low pressure systems) and is distributed in a spatially uniform pattern. The summer months comprise the wet season and rainfall is closely associated with convective activity. These rainfall events are normally of short duration and amounts are quite variable spatially. Occasionally, daily rainfall in the dry season can be quite heavy as mid-latitude systems penetrate into Florida. The project site is subject to tropical storms and hurricanes from June through November, and to windy and/or rainy weather throughout the year.

The average number of days in each calendar month with rain equal to, or greater than 0.1 inches is provided for the project area in the paragraph TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER below. This information is based on data obtained from rain gauge "Titusville" located at Latitude 28°37' N. and Longitude 80°50' W. The data were obtained from Climatography of the United States No. 20 Climatic Summaries for Selected Sites in Florida publications by the National Climatic Center, NOAA, for the period of record from 1951 through 1980.

It shall be the Contractor's responsibility to obtain information concerning rain and wind. Reference is made to the following publication that contains climatological and meteorological observations and data. The below publication is available for review in the office at the U.S. Army Corps of Engineers, Jacksonville District Office, 400 West Bay Street, Jacksonville, Florida.

- a. Local Climatological Data - Monthly Summary, published by NOAA, Asheville, North Carolina. Subscription price and ordering information available from the National Climatic Data Center, Federal Building, Asheville, North Carolina 28801. This publication gives hourly wind speed and direction observations for Daytona Beach, Florida. The Annual Summary gives a summary of the observations for the period of record.

1.7.3.1 Wind and Wave Data Publications

The following publications include wind and wave information, and are available for review in the Jacksonville District Office or can be purchased from the agencies indicated.

1. U.S. Coast Pilot, Atlantic Coast: Cape Henry to Key West, U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service. This publication supplements the navigational information shown on the nautical charts. It also provides miscellaneous meteorological data. This publication is available through NOAA.
2. Hindcast Wave Information for the U.S. Atlantic Coast, Wave Information Studies of U.S. Coastlines, WIS Report 33, Waterways Experiment Station. 1995. This report presents 20-year wave hindcast summaries at various stations located along the U.S. Atlantic Ocean shoreline, including a location offshore of the

project area. Available data includes wave height, period, and direction summary tables for two 20-year periods: 1956-75 (excludes tropical disturbances/hurricanes), and 1976-95 (includes tropical disturbances/ hurricanes), summary wind speed and wind direction tables, summary tables of mean wave heights by month and year, largest wave heights by month and year, and a table of extreme wave events. The project site is protected from direct impact from ocean waves, but other meteorological data contained in this publication may be useful. This publication is available from National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22151. Time series listings of wave data for both 20-year periods and some summary information are available at the Waterways Experiment Station website: <http://bigfoot.wes.army.mil/u003.html>.

3. National Data Buoy Center (NDBC) Website. This Internet web site provides a wide range of meteorological and oceanographic buoy data collected worldwide. The project area lies almost midway between two sets of data buoys - buoy #41008, which lies off the Georgia coast near Savannah, and buoys #41009 and #41010, which lie offshore of Cape Canaveral. Data provided on this website includes wind speed, wind gusts, atmospheric pressure, air temperature, sea temperature, wave height, and wave period. In addition, a C-MAN station (station SAUF1, providing meteorological data only - no wave data) is located at the St. Augustine Beach pier, and may provide some data which is applicable to the project area. Gage readings are updated hourly. Archived data is available for these buoys from 1988 to the present. The website address is <http://www.nws.fsu.edu/buoy/>.

1.7.4 Transportation Facilities

1.7.4.1 Major Highway and Waterway Access

The project site is accessible by water from the Intracoastal Waterway and also accessible by land from Interstate 95 and various State and local roads.

1.7.4.2 Contractor Investigation

In addition to the information given in the contract drawings, the Contractor shall make his own investigation of available roads for transportation, load limits for bridges and roads, and other road conditions affecting the transportation of materials and equipment to the site. The Contractor shall investigate the availability of railroad sidings, and shall make all arrangements for use of any sidings for the delivery of any materials and equipment to be used on the work.

1.7.5 Maritime Traffic

Channel Traffic in the project area consists of commercial, pleasure, and small recreational vessels of all types and sizes which can be accommodated by existing depths.

1.7.6 Local Conditions - Water Stages and Tides

1.7.6.1 Water Fluctuations

The below stated water fluctuations are for information only and are not to

be utilized in conjunction with any contract related hydrographic surveying. Reference should be made to the water level datums for surveying purposes as noted on the control drawings(s) of the contract plans.

1.7.6.2 Water Stages

Water levels in the project area are mainly affected by rainfall, local runoff, and tidal fluctuations in the Indian River. The project area is also subject to storm surges from hurricanes, tropical storms, and extratropical storms. National Ocean Service (NOS) tidal data are provided in the following table for a gage near the project site:

FLORIDA 872 1374
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

TIDAL BENCH MARKS

ALLENHURST, HAULOVER CANAL

LATITUDE: 28° 44.2' N LONGITUDE: 80° 45.3' W
NOAA CHART: 11484 USGS QUAD: MIMS

Tidal datums at ALLENHURST, HAULOVER CANAL are based on the following:

LENGTH OF SERIES = 5 MONTHS
TIME PERIOD = DECEMBER 1982 - APRIL 1983
TIDAL EPOCH = 1960-1978
CONTROL TIDE STATION = TITUSVILLE (872 1456)

Elevations of tidal datums referred to mean water level (MWL) are as follows:

HIGHEST OBSERVED WATER LEVEL (03/18/1983) = 0.94 FEET
MEAN WATER LEVEL (MWL) = 0.00 FEET
*NATIONAL GEODETIC VERTICAL DATUM- = -0.47 FEET
 1929 (NGVD)
LOWEST OBSERVED WATER LEVEL (05/06/1983) = -0.61 FEET

*NGVD reference based on adjustment of 1978 and NOS levels of 1982-83.

Bench mark elevation information:

<u>BENCH MARK SAMPLING</u>	<u>ELEVATIONS IN FEET ABOVE:</u>	
		<u>MWL</u>
1374 A 1982		7.62
318 JLR 1962		8.16
IWBV USE 106		7.54
NO 1 1972		4.47
NO 2 1972		4.49
NO 3 1941		9.24

MSL is the local mean sea level and should not be confused with the fixed datums of NGVD (sometimes referred to as Sea Level Datum of 1929) or NAVD 88.

1.7.7 Subsurface Investigations

Refer to core boring logs and laboratory data appended to the end of Section 01000 GENERAL REQUIREMENTS.

1.7.8 Obstruction of Channel

The Government will not undertake to keep the channel free from vessels or other obstructions, except to the extent of such regulations, if any, as may be prescribed by the Secretary of the Army, in accordance with the provisions of Section 7 of the River and Harbor Act approved 8 August 1917.

The Contractor will be required to conduct the work in such manner as to obstruct navigation as little as possible, and in case the Contractor's plant so obstructs the channel as to make difficult or endanger the passage of any vessels, said plant shall be promptly moved on the approach of any vessel to such an extent as may be necessary to afford a practicable passage. Upon completion of the work the Contractor shall promptly remove his plant, including ranges, buoys, piles, and other marks placed by him under the contract in navigable waters or on shore.

1.8 PROGRESS CHARTS

1.8.1 Schedules for Construction Contracts

In conjunction with the Clause SCHEDULES FOR CONSTRUCTION CONTRACTS of Section 00700 CONTRACT CLAUSES, the Contractor shall be guided by the following requirements and procedures as pertain to submission of an initial and subsequent periodic construction progress charts. These charts as approved and updated shall provide the basis for determination of the amounts of partial payments.

1.8.2 Forms 2454

Blank ENG Forms 2454 will be furnished to the Contractor as soon after award as practicable for his use in submitting his contract progress schedules for approval. Three copies of full size and legible monthly updated progress schedules are to be furnished by the Contractor and submitted with all progress payments. Sample ENG 2454 is appended to the end of Section 01000 GENERAL REQUIREMENTS.

1.8.3 Preparation of Progress Chart

The Contractor shall indicate on the progress chart the bid items contained in the contract, showing the amount of the item and its relative weighted percentage of the total contract. The Contractor may separate features of work under each item to show salient work elements such as procurement of materials, plant and equipment, and supplemental work elements such as excavation, reinforcing steel, backfill, etc. These salient features shall total to the cost and weighted percentages shown for the major bid item. When quantity variations impact the weighted percentage of a separate item by five percent or more, the Contractor shall revise the contract progress charts to accurately reflect the impact of such variations.

1.8.4 Modifications

Modifications to the contract which are minor in nature shall be listed and scheduled separately in order of their issuance and as reported on the associated request for partial payment. Completion of work on minor modifications shall be noted as work progresses. When major modifications

are issued in which one or more of the bid items are significantly changed monetarily or in time of completion, the progress schedule should be revised to incorporate such changes showing revised item completion dates and overall new completion date, as applicable.

1.9 LAYOUT OF WORK

1.9.1 Established Monuments

The Government has established monuments, control data and elevations for the work site(s) as indicated on the contract drawings. Control monument descriptions are appended to the end of Section 01000 GENERAL REQUIREMENTS.

1.9.2 Layout

From the monuments, control data and elevations established by the Government, the Contractor shall complete the layout of the work and shall be responsible for all measurements that may be required for the execution of the work to the location and limit marks prescribed in the specifications or on the contract drawings, subject to such modifications as the Contracting Officer may require to meet changed conditions or as a result of necessary modifications to the contract work.

1.9.3 Survey

The Contractor shall furnish, at his own expense, such stakes, templates, platforms, equipment, tools and material, and all labor as may be required in laying out any part of the work from the monuments, control data and elevations established by the Government. It shall be the responsibility of the Contractor to maintain and preserve all stakes and other marks established by the Contracting Officer until authorized to remove them, and if such marks are destroyed by the Contractor or through his negligence, prior to their authorized removal, they may be replaced by the Contracting Officer, at his discretion, and the expense of replacement will be deducted from any amounts due or to become due the Contractor. The Contracting Officer may require that work be suspended at any time when location and limit marks established by the Contractor are not reasonably adequate to permit checking of the work.

1.10 INSPECTION

1.10.1 Quality Assurance Representative (QAR)

The QAR shall be notified prior to the establishment of horizontal control work (baseline layout, ranges, station flags, shore-based control for EPS/RPS, etc.) and vertical control work (tide staff(s), upland cross sections, construction elevations top/invert, maximum/minimum elevations of dredged materials within disposal area(s), etc.), but the presence or absence of the QAR shall not relieve the Contractor of his responsibility for proper execution of the work in accordance with the specifications. The Contractor will be required:

- a. To furnish, on the request of the Contracting Officer or any QAR, the use of such boats, boatmen, laborers, and material forming a part of the ordinary and usual equipment and crew of the dredging plant as may be reasonably necessary in inspecting and supervising the work. [However, the Contractor will not be required to furnish such facilities for the surveys prescribed in the paragraph FINAL EXAMINATION AND ACCEPTANCE of Section 01000 GENERAL REQUIREMENTS.]

b. To furnish, on the request of the Contracting Officer or any QAR, suitable transportation from all points on shore designated by the Contracting Officer to and from the various pieces of plant, and to and from the [disposal area] [beach placement].

1.10.2 Failure to Comply

In conjunction with the Clause INSPECTION OF CONSTRUCTION of Section 00700 CONTRACT CLAUSES, should the Contractor refuse, neglect, or delay compliance with these requirements, the specific facilities may be furnished and maintained by the Contracting Officer and the cost thereof will be deducted from any amounts due or to become due the Contractor.

1.11 FINAL EXAMINATION AND ACCEPTANCE

1

1.11.1 Final Examination of Work

As soon as practicable and no later than three (3) weeks after the completion of the entire work or any section thereof (if the work is divided into sections) as in the opinion of the Contracting Officer will not be subject to damage by further operations under the contract, such work will be thoroughly examined at the cost and expense of the Government by sounding or by sweeping, or both, as determined by the Contracting Officer. Should any shoals, lumps, or other lack of contract depth be disclosed by this examination, the Contractor will be required to remove same by dragging the bottom or by dredging at the contract rate of dredging. The Contractor or his authorized representative will be notified when soundings and/or sweepings are to be made and will be permitted to accompany the survey party. When the area is found to be in a satisfactory condition, it will be accepted finally. Should more than two sounding or sweeping operations by the Government over an area be necessary by reason of work for the removal of shoals disclosed at a prior sounding or sweeping, the cost of such third and any subsequent soundings or sweeping operations will be charged against the Contractor at the rate of \$5,500 per day for each day in which the Government plant is engaged in sounding or sweeping and/or is enroute to or from the site or held at or near the said site for such operation.

1.11.2 Final Acceptance

Final acceptance of the whole or a part of the work and the deductions or corrections of deductions made thereon will not be reopened after having once been made, except on evidence of collusion, fraud or obvious error, and the acceptance of a completed section shall not change the time of payment of the retained percentages of the whole or any part of the work.

1.12 SHOALING

If, before the contract is completed, shoaling occurs in any section previously accepted, including shoaling in the finished channel because of the natural lowering of the side slopes, redredging at contract price, within the limits of available funds may be done if agreeable to both the Contractor and the Contracting Officer.

1.13 CONSTRUCTION PROJECT SIGNS

Except when otherwise directed by the Contracting Officer, the Contractor shall furnish, install, and maintain the construction project signs at the

worksite(s) covered under this contract. The construction project signs (a project identification sign and a safety performance sign) shall be as indicated in the appendix at the end of Section 01000 GENERAL REQUIREMENTS, and shall be erected, where directed, within thirty (30) calendar days after receipt of the Notice to Proceed. The sample Safety Scoreboard sign appended to the end of Section 01000 GENERAL REQUIREMENTS shall be used on board the dredge in lieu of the safety performance sign. This applies only to the dredge. The signs shall be of the construction, size, format, and style indicated, shall be neatly and sturdily constructed, and shall be securely erected in a workmanlike manner to support the sign properly for the life of the contract. The name of the facilities shown in the appendix are for illustration only. No sign shall be prepared until the facility name applicable to the work under the contract has been furnished by the Contracting Officer

1.13.1 Signage Removal

Upon completion of construction and when so directed by the Contracting Officer, the construction project signs shall be removed by the Contractor during the final cleanup process. The signs shall be disposed of by the Contractor in a manner satisfactory to the Contracting Officer.

1.13.2 Signage Costs

All costs connected with the furnishing, installation, maintenance, and removal of the construction project signs shall be included in the total contract price of the items listed in the Bidding Schedule.

1.14 WATER

a. The responsibility shall be upon the Contractor to provide and maintain at his own expense an adequate supply of water for his use for construction, and to install and maintain necessary supply connections and piping for same, but only at such locations and in such manner as may be approved by the Contracting Officer. In the event water is made available by the Government, the Contractor shall, at his own expense, install a meter to determine the amount of water used by him and such water will be paid for by, or charged to, the Contractor at prevailing rates or at reasonable rates as determined by the Contracting Officer. Before final acceptance, temporary connections and piping installed by the Contractor shall be removed in a manner satisfactory to the Contracting Officer.

b. The Contractor shall provide and maintain his own temporary toilet and washing facilities. Toilet and washing facilities shall be installed and maintained in compliance with the provisions of the latest version of EM 385-1-1 in a location approved by the Contracting Officer.

1.15 ELECTRICITY

a. All electric current required by the Contractor shall be furnished at his own expense. All temporary connections for electricity shall conform to the requirements of the latest versions of EM 385-1-1, CESAJR 385-1-1, and NFPA 70, and be subject to the approval of the Contracting Officer. In the event electricity is made available by the Government, the Contractor shall, at his own expense, install a meter to determine the amount of current used by him and such electricity will be paid for by, or charged to, the Contractor at prevailing rates

or at reasonable rates as determined by the Contracting Officer. All temporary lines will be furnished, installed, connected, and maintained by the Contractor in a workmanlike manner satisfactory to the Contracting Officer and shall be removed by the Contractor in like manner at his expense prior to completion of the construction.

b. In accordance with the latest versions of EM 385-1-1, CESAJR 385-1-1, and NFPA 70, the Contractor shall provide Ground Fault Circuit Interruption (GFCI) on all 120 volt, 15 and 20 ampere, single phase receptacles used for construction power. Ground Fault Circuit Interrupters are not an acceptable substitute for grounding.

1.16 HURRICANE AND SEVERE STORM PLAN

1.16.1 Plan Contents

Within 20 calendar days after the Notice of Award, the Contractor shall submit as an attachment to his Accident Prevention Plan, a Hurricane and Severe Storm Plan for review and acceptance. This plan shall include but not be limited to the following:

- a. Types of storms anticipated (Winter storm, Hurricane, Tornado).
- b. Time intervals before storms when action will be taken and details of the actions taken.
- c. List of the equipment to be used on the job and its ability to handle adverse weather.
- d. List of safe harbors and the distance from the work area to these harbors and the time required to move the equipment to these harbors. Copies of letters of approval for the use of these safe harbors (local authorities, U.S. Coast Guard, etc.) where applicable.
- e. Method of securing equipment in these safe harbors.
- f. List of equipment to be utilized to make this move to safe harbors (tug boats, work boats, etc.), to include the name and horsepower of this equipment.
- g. Methods of securing equipment not moved; i.e., pipelines (floating or submerged), pumpout stations, etc.
- h. Plan of evacuation to include interim measures, i.e., immediate reaction plans to be taken for all storm occurrences, particularly sudden/flash storms.
- i. Operating procedures to be undertaken when critical dredge equipment fails during sudden and severe adverse weather conditions, to include breaking of spuds, swing wires, anchor wires, or other mooring equipment or facilities.

1.16.2 Sample Plan

Appended to the end of Section 01000 GENERAL REQUIREMENTS is a sample Hurricane and Severe Storm Plan to be used for illustrative purposes only.

1.16.3 Monitoring of Weather

The Contractor shall maintain full-time monitoring of the NOAA marine weather broadcasts, and avail themselves of such other local commercial weather forecasting services as may be available. These information broadcasts shall be the Contractor's primary source in the decision process to implement action under the approved storm plan.

1.17 PRECONSTRUCTION CONFERENCE

A Preconstruction Conference will be arranged by the Contracting Officer's Representative after award of contract and shall be held before Notice to Proceed is issued. The Contracting Officer's Representative will notify the Contractor of the time and date set for the meeting. At this conference, the Contractor shall be oriented with respect to Government procedures and line of authority, contractual, administrative, and construction matters. Additionally, a schedule of required submittals will be discussed. Minutes of the meeting shall be prepared by the Contracting Officer or Contracting Officer's Representative and signed by both the Contractor and the Contracting Officer or Contracting Officer's Representative. The minutes shall become a part of the contract file. There may also be occasions when subsequent conferences will be called to reconfirm mutual understanding.

1.17.1 Preconstruction Conference Submittal Items

Within twenty (20) calendar days after the date of the Notice of Award, the Contractor shall submit the following items in either completed or draft form for review by the Contracting Officer's Representative prior to the preconstruction conference:

Letter Appointing Superintendent

Power of Attorney and Certified Copy of Resolution for local representatives (if local representative will be allowed to sign contract documents)

Affirmative Action Plan (Refer to Clause EQUAL OPPORTUNITY of Section 00700 CONTRACT CLAUSES.)

Drug-Free Workplace (Refer to Clause DRUG-FREE WORKPLACE of Section 00700 CONTRACT CLAUSES.)

List of Subcontractors

Accident Prevention Plan (including Activity Hazards Analysis as outlined in EM 385-1-1, Appendix A and Figure 1 of Section 1, Hurricane and Severe Storm Plan, and Employee Safety and Health Indoctrination (ESHI) (sample ESHI appended to the end of Section 01000 GENERAL REQUIREMENTS)).

Hazard Communication Program, Refer to Clause HAZARD COMMUNICATION of Section 00800 SPECIAL CONTRACT REQUIREMENTS.

Confined Space Entry Plan, Refer to Clause CONFINED SPACE ENTRY of Section 00800 SPECIAL CONTRACT REQUIREMENTS.

Hurricane and Severe Storm Plan, Refer to paragraph HURRICANE AND SEVERE STORM PLAN of Section 01000 GENERAL REQUIREMENTS.

Diving Plan (including Activity Hazards Analysis), Refer to Clause

DIVING PLAN of Section 00800 SPECIAL CONTRACT REQUIREMENTS.

Quality Control Plan, Refer to Section 01451 CONTRACTOR QUALITY CONTROL.

Completed Electronic Submittal Register

Progress Charts, Refer to Clause SCHEDULES FOR CONSTRUCTION CONTRACTS
of Section 00700 CONTRACT CLAUSES.

Environmental Protection Plan, Refer to Section 01410 ENVIRONMENT
PROTECTION.

Traffic Control Plan

Other Items as May be Specified Elsewhere

Each Plan shall be submitted as an enclosure to a letter, signed by a
Corporate Official of the Contractor. The letter shall state that the Plan
complies with all requirements of the contract.

1.17.2 Failure to Comply

Failure to comply with the above requirements within the time prescribed
will be considered a condition endangering the performance of the contract
and may be considered grounds for termination of the contract in accordance
with the Clause DEFAULT (FIXED-PRICE CONSTRUCTION) of Section 00700
CONTRACT CLAUSES.

1.17.3 Contracting Officer Representative Responsibility

1.17.3.1 Report Preparation Instruction

Instruct the Contractor in the preparation of the Daily Report(s) which the
Contractor will submit.

1.17.3.2 Contractor Indoctrination

Inform the Contractor of the requirements to indoctrinate ALL personnel on
job site safety prior to the employee commencing any work. The
indoctrination shall be signed and dated by the employee and the
Supervisor. A copy shall be maintained by the Contractor at the job site.

1.17.3.3 Letter of Record

The letter of record will be written documenting all items discussed at the
conference and a copy will be furnished by the Contracting Officer's
Representative to all in attendance.

1.18 NOTICE TO PROCEED

The Notice to Proceed (NTP) will not be issued to the Contractor until
after the Preconstruction Conference has been completed. However, if the
Contractor fails to submit an acceptable Quality Control (QC) Plan,
Environmental Protection Plan, Accident Prevention Plan, or other plan(s)
required under these specifications, within the time prescribed,
construction SHALL NOT start unless an acceptable interim plan is
submitted. While the Contractor is operating under an acceptable interim
plan, the Contracting Officer may retain funds from progress payments in
accordance with the Clause PAYMENTS UNDER FIXED-PRICE CONSTRUCTION

CONTRACTS of Section 00700 CONTRACT CLAUSES until such time as the Contractor submits an acceptable final plan. If an acceptable final plan is not submitted within a reasonable time, as determined by the Contracting Officer, the Contracting Officer may order the Contractor to stop work until such time as an acceptable plan has been submitted. Any such stop work order shall not be considered a suspension of work for an unreasonable period of time under the Clause SUSPENSION OF WORK of Section 00700 CONTRACT CLAUSES and the Contractor shall not be entitled to pay adjustments as a result of the stop work order.

1.19 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER (31 OCT 1989)

This provision specifies the procedure for the determination of time extensions for unusually severe weather in accordance with the Clause DEFAULT (FIXED-PRICE CONSTRUCTION) of Section 00700 CONTRACT CLAUSES. In order for the Contracting Officer to award a time extension under this clause, the following conditions must be satisfied:

- a. The weather experienced at the project site during the contract period must be found to be unusually severe; that is, more severe than the adverse weather anticipated for the project location during any given month.
- b. The unusually severe weather must actually cause a delay to the completion of the project. The delay must be beyond the control and without the fault or negligence of the Contractor.

1.19.1 Schedule

The following schedule of monthly anticipated adverse weather delays is based upon National Oceanic and Atmospheric Administration (NOAA) or similar data for the project location and will constitute the base line for monthly weather time evaluations. The Contractor's progress schedule must reflect these anticipated adverse weather delays in all weather dependent activities.

MONTHLY ANTICIPATED ADVERSE WEATHER DELAY WORK
DAYS BASED ON 5-DAY WORK WEEK

Average Number of Days Per Month With Rainfall > 0.1 Inches

Gage Name	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Titusville	4	5	5	3	5	9	11	10	10	8	4	4

1.19.2 Contractor Responsibility

Upon acknowledgment of the Notice to Proceed (NTP) and continuing throughout the contract, the Contractor will record on the daily CQC report the occurrence of adverse weather and resultant impact to normally scheduled work. Actual adverse weather delay days must prevent work on critical activities for 50 percent or more of the Contractor's scheduled work day. The number of actual adverse weather delay days shall include days impacted by actual adverse weather (even if adverse weather occurred in previous month), be calculated chronologically from the first to the last day of each month, and be recorded as full days. If the number of actual adverse weather delay days exceeds the number of days anticipated in paragraph (b) above, the Contracting Officer will convert any qualifying delays to calendar days, giving full consideration for equivalent fair

weather work days, and issue a modification in accordance with the Clause
DEFAULT (FIXED PRICE CONSTRUCTION) of Section 00700 CONTRACT CLAUSES.

1.20 CONSTRUCTION PROGRESS CHART, ENG FORM 2454

See APPENDIX 01000-A at the end of this Section (1 page).

1.21 CONSTRUCTION PROJECT SIGNS

See APPENDIX 01000-B at the end of this Section (5 pages).

1.22 DECLARATION OF INSPECTION FOR REFUELING

See APPENDIX 01000-C at the end of this Section (3 pages).

1.23 SAMPLE - HURRICANE AND SEVERE STORM PLAN

See APPENDIX 01000-D at the end of this Section (5 pages).

1.24 SAMPLE - GUIDE FOR EMPLOYEE SAFETY AND OCCUPATIONAL HEALTH
INDOCTRINATION

See APPENDIX 01000-E at the end of this Section (2 pages).

1.25 CORE BORING LOGS AND LABORATORY DATA

See APPENDIX 01000-F at the end of this Section (154 pages).

1.26 CONTROL MONUMENT DESCRIPTIONS

See APPENDIX 01000-G at the end of this Section (9 pages).

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

-- End of Section --

*

APPENDIX 01000-G

CONTROL MONUMENT DESCRIPTIONS

*

*

Monument ID: BE BRE B 0034

Locality-Project : IWW-BREVARD
 Latitude X(E) : 0° 0' 0.00000"
 Zone : FLE
 Horizontal Datum : NAD-27
 Order : THIRD
 State : FL
 Monument Set By : USACOE

Monument Type : DISK
 Longitude Y(N) : 0° 0' 0.00000"
 Elevation :
 Vertical Datum : NGVD-29
 Linear Units : FEET
 Date Set : 1935
 County : BREVARD

Date Added : 871214

Date Changed : 011108

Recovered By :
 Company (1) 3001SD (2)
 Person (1) COMEAUX (2)
 Date (1) 7/94 (2)
 Condition (1) GOOD (2)

LOCATED SOUTH OF SHILOH, FLORIDA, ON THE NORTH SIDE OF HAULOVER CANAL ON THE GROUNDS OF ALLEN HURST FISHING CAMP.

TO REACH FROM OAK HILL, GO SOUTH ON U.S. HIGHWAY NO. 1, 1 MILE TO A PAVED ROAD LEADING EAST, THEN EAST 3.9 MILES ON PAVED ROAD TO SHILOH, POST OFFICE. CONTINUE ON PAVED ROAD 4.9 MILES SOUTH TO THE ALLEN HURST FISHING CAMP ON THE NORTH SIDE OF HAULOVER CANAL AND STATION LOCATION.

STATION IS LOCATED APPROXIMATELY 40 FEET NORTH OF TOP OF NORTH BANK OF HAULOVER CANAL, 24 FEET EAST OF EAST SIDE OF PAVED ROAD, 11 FEET EAST OF A COQUINA ROCK WALL, 9 FEET SOUTH OF SOUTH EDGE OF ROCK TERRACE RETAINING WALL AND BEARS S 74 DEG 30 MIN EAST, 34.8 FEET FROM SOUTHEAST CORNER OF ALLEN HURST FISHING CAMP BUILDING, S 24 DEG EAST, 32.8 FEET FROM SOUTHWEST CORNER OF ALLEN HURST FISHING CAMP BUILDING AND IS REFERENCED BY A U.S. RIGHT-OF-WAY REFERENCE MARK (IWBV-103) FROM WHICH BM-B-34 BEARS S 47 DEG 30 MINUTES EAST 8.4 FEET AND S 23 DEG 30 MIN EAST, 24.9 FEET FROM USC&GS BM NO. 3, 1941.

MARK IS AN INTRACOASTAL WATERWAY SURVEY DISK SET IN THE TOP OF CONCRETE POURED IN A 3 INCH IRON PIPE PROJECTING 0.4 FEET ABOVE THE GROUND AND IS STAMPED: B-34.

*

*

Monument ID: BE AESCH

Locality-Project : TITUSVILLE
 Latitude : 0° 0' 0.00000"
 X(E)
 Zone : FLE
 Horizontal Datum : NAD-27
 Order : GPS
 State : FL
 Monument Set By : USC&GS

Monument Type : DISK
 Longitude : 0° 0' 0.00000"
 Y(N)
 Elevation :
 Vertical Datum :
 Linear Units : FEET
 Date Set : 1982
 County : BREVARD

Date Added : 940822

Date Changed : 011108

Recovered By :
 Company (1) 3001SD (2)
 Person (1) COMEAUX (2)
 Date (1) 7/94 (2)
 Condition (1) RECONDITIONED W/CONCRETE (2)

TO REACH STATION FROM RAILROAD BRIDGE NORTH OF TITUSVILLE BRIDGE, GO NORTH
 ON INTRACOASTAL WATERWAY APPROXIMATELY 1.0 MILE TO WHITE TANKS AND PLANT
 ON WEST SIDE OF INTRACOASTAL WATERWAY AND SMALL ISLAND JUST NORTH OF
 PLANT.

STATION IS SET ON EASTERN MOST POINT ON ISLAND.

STATION IS A STANDARD BRONZE COASTAL GEODETIC SURVEY DISK SET IN CONCRETE
 MONUMENT 1.5 FEET ABOVE GROUND AND STAMPED: "AESCH, 1982".

* NOTE * MONUMENT WAS RECONDITIONED WITH CONCRETE BY A/E CONTRACTOR 3001
 S.D. 7/94.

*

Monument ID: BE IWBV 0007

Locality-Project : TITUSVILLE
 Latitude X(E) : 0° 0' 0.00000"
 Zone : FLE
 Horizontal Datum : NAD-27
 Order : THIRD
 State : FL
 Monument Set By : USACOE

Monument Type : DISK
 Longitude Y(N) : 0° 0' 0.00000"
 Elevation :
 Vertical Datum : NGVD--29
 Linear Units : FEET
 Date Set : 1952
 County : BREVARD

Date Added : 940713

Date Changed : 011108

Recovered By :
 Company (1) VFM (2)
 Person (1) COMEAUX (2)
 Date (1) 7/94 (2)
 Condition (1) GOOD (2)

STATION IS LOCATED ON THE TITUSVILLE BEACH ROAD BRIDGE.

TO REACH: FROM U.S. HIGHWAY 1 IN NORTH TITUSVILLE, GO EAST ON THE TITUSVILLE BEACH ROAD 1.0 MILE TO THE NORTHEAST END OF THE BRIDGE ACROSS THE INTRACOASTAL WATERWAY, THENCE SOUTHWEST TO A POINT WHICH IS 50 FEET NORTHEAST OF THE NORTHEAST END OF DRAW AND STATION LOCATION.

STATION IS LOCATED ON THE NORTH SIDE OF THE DRAW IN THE CENTER OF THE SIDEWALK, 41 FEET NORTHEAST OF THE EAST END OF DRAW SPAN AT A POINT IN THE CENTER OF NORTH SIDEWALK AND BEARS N 49 DEG. 45 MIN. E FROM STATION "NP", S 45 DEG. 30 MIN. W, 54.02 FEET FROM RP-1 AND N 45 DEG. W, 28.17 FEET FROM RP-2.

MARK IS A STANDARD U.S.A.C.O.E. BRONZE DISK GROUDED FLUSH IN CONCRETE SIDEWALK AND IS STAMPED: "IWBV-7, 1957".

RP-1 IS A CROSS CUT IN CENTER OF NORTH SIDEWALK WITH RP-1 CUT ALONGSIDE.

RP-2 IS A CROSS CUT IN CENTER OF SOUTH SIDEWALK WITH RP-2 CUT ALONGSIDE.

*

Monument ID: BE IWBV 0231 GPS

Locality-Project : TITUSVILLE
 Latitude : 0° 0' 0.00000"
 X (E) :
 Zone : FLE
 Horizontal Datum : NAD-27/79
 Order : GPS
 State : FL
 Monument Set By : 3001SD

Monument Type : DISK
 Longitude : 0° 0' 0.00000"
 Y (N) :
 Elevation :
 Vertical Datum : NGVD-29
 Linear Units : FEET
 Date Set : 1994
 County : BREVARD

Date Added : 940822

Date Changed : 011108

Recovered By :
 Company (1)
 Person (1)
 Date (1)
 Condition (1)

(2)
 (2)
 (2)
 (2)

TO REACH THE STATION FROM TITUSVILLE MARINE POLICE PATROL AT BOAT RAMP ON EAST SIDE OF TITUSVILLE BRIDGE, GO WEST TO ENTRANCE OF TITUSVILLE MUNICIPAL MARINA AND STATION ON LEFT.

STATION IS 33 FEET FROM LIGHT POLE NEAR PAVILLION, 43 FEET FROM BENCH NEAR WATERS EDGE, AND 25 FEET FROM POINT OF GRASS WHERE SIDEWALK SPLITS OFF.

STATION IS A STANDARD USACOE BRONZE DISK SET IN ASPHALT SIDEWALK, 5 FEET FROM EDGE OF SIDEWALK AND STAMPED: "IWBV-231 1994".

*

*

Monument ID: BE IWBV 0232 GPS

Locality-Project : TITUSVILLE
 Latitude X(E) : 0° 0' 0.00000"
 Zone : FLE
 Horizontal Datum : NAD-27
 Order : GPS
 State : FL
 Monument Set By : 3001SD

Monument Type : DISK
 Longitude Y(N) : 0° 0' 0.00000"
 Elevation :
 Vertical Datum : NGVD-29
 Linear Units : FEET
 Date Set : 1994
 County : BREVARD

Date Added : 940822

Date Changed : 011108

Recovered By :
 Company (1)
 Person (1)
 Date (1)
 Condition (1)

(2)
 (2)
 (2)
 (2)

TO REACH STATION FROM TITUSVILLE MARINA POLICE PATROL AT BOAT RAMP ON EAST SIDE OF TITUSVILLE BRIDGE, GO NORTH ON INTRACOASTAL WATERWAY TO RAILROAD BRIDGE, GO TO SOUTHWEST SIDE OF RAILROAD BRIDGE WHERE IT MEETS LAND.

STATION IS 26 FEET NORTHEAST OF POWER POLE WITH WITNESS SIGN ATTACHED, 24 FEET WEST OF A PALM TREE AND 28 FEET SOUTH OF RAILROAD TRACKS.

STATION IS A STANDARD USACOE BRONZE DISK SET IN A 4 INCH CONCRETE FILLED PVC PIPE PROJECTING 0.50 FEET ABOVE GROUND AND STAMPED: "IWBV-232, 1994".

*

*

Monument ID: BE IWBV 0233 GPS

Locality-Project : TITUSVILLE
 Latitude : 0° 0' 0.00000"
 X (E) :
 Zone : FLE
 Horizontal Datum : NAD-27/79
 Order : GPS
 State : FL
 Monument Set By : 3001SD

Monument Type : DISK
 Longitude : 0° 0' 0.00000"
 Y (N) :
 Elevation :
 Vertical Datum : NGVD-29
 Linear Units : FEET
 Date Set : 1994
 County : BREVARD

Date Added : 940822

Date Changed : 011108

Recovered By :
 Company (1)
 Person (1)
 Date (1)
 Condition (1)

(2)
 (2)
 (2)
 (2)

TO REACH STATION FROM TITUSVILLE BRIDGE, GO NORTH ON INTRACOASTAL WATERWAY
 TO ENTRANCE OF HAULOVER CANAL AND STATION ON LEFT IN A CLUSTER OF ROCKS,
 10 FEET NORTH OF A MANATEE WARNING SIGN.

STATION IS A STANDARD BRONZE USACOE DISK SET IN A CLUSTER OF ROCKS AND
 STAMPED: "IWBV-233 1994".

*

*

Monument ID: BE IWBV 0234 GPS

Locality-Project : TITUSVILLE
 Latitude : 0° 0' 0.00000"
 X(E)
 Zone : FLE
 Horizontal Datum : NAD-27
 Order : GPS
 State : FL
 Monument Set By : 3001SD

Date Added : 940822

Recovered By :
 Company (1)
 Person (1)
 Date (1)
 Condition (1)

Monument Type : DISK
 Longitude : 0° 0' 0.00000"
 Y(N)
 Elevation :
 Vertical Datum : NGVD-29
 Linear Units : FEET
 Date Set : 1994
 County : BREVARD

Date Changed : 011108

(2)
 (2)
 (2)
 (2)

TO REACH STATION FROM ALLENHURST BRIDGE, GO NORTH ON HAULOVER CANAL TO MOUTH OF CANAL AND STATION ON LEFT AT END OF ROCKS.

STATION IS SET ON TOP OF HILL, 13.0 FEET SOUTHWEST OF PALM TREE AND 17.0 FEET WEST-SOUTHWEST OF MANATEE WARNING SIGN.

STATION IS A STANDARD BRONZE USACOE DISK SET IN A 4 INCH CONCRETE FILLED PVC PIPE AND STAMPED: "IWBV-234 1994".

*

*

Monument ID: BE IWBV 0235 GPS

Locality-Project : TITUSVILLE
 Latitude : 0° 0' 0.00000"
 X(E) : 0° 0' 0.00000"
 Zone : FLE
 Horizontal Datum : NAD-27
 Order : THIRD
 State : FL
 Monument Set By : 3001SD
 Date Added : 940822
 Monument Type : DISK
 Longitude : 0° 0' 0.00000"
 Y(N)
 Elevation :
 Vertical Datum : NGVD-29
 Linear Units : FEET
 Date Set : 1994
 County : BREVARD
 Date Changed : 011108

Recovered By :
 Company (1)
 Person (1)
 Date (1)
 Condition (1)
 (2)
 (2)
 (2)
 (2)

TO REACH STATION FROM THE MAX BREWER BRIDGE ON COUNTY ROAD NO. 406 IN TITUSVILLE, FLORIDA,

GO NORTH 2.3 MILES ALONG THE INTRACOASTAL WATERWAY CHANNEL TO A RAILROAD BRIDGE, THEN GO 0.73 MILE ON AN AZIMUTH OF 33 DEGREES TO AN ISLAND ON THE EAST SIDE OF THE INTRACOASTAL WATERWAY.

STATION IS LOCATED ON THE SOUTHWEST SIDE OF THE ISLAND, APPROXIMATELY 20 FEET FROM WATERS EDGE AT LOW TIDE.

STATION IS A STANDARD BRONZE USACOE DISK SET IN A 4 INCH CONCRETE FILLED PVC PIPE AND STAMPED: "IWBV-235 1994".

*

*

Monument ID: BE IWBV 0236 GPS

Locality-Project : TITUSVILLE
 Latitude : 0° 0' 0.00000"
 X(E)
 Zone : FLE
 Horizontal Datum : NAD-27
 Order : THIRD
 State : FL
 Monument Set By : 3001SD

Monument Type : DISK
 Longitude : 0° 0' 0.00000"
 Y(N)
 Elevation :
 Vertical Datum : NGVD-29
 Linear Units : FEET
 Date Set : 1994
 County : BREVARD

Date Added : 940822

Date Changed : 011108

Recovered By :
 Company (1)
 Person (1)
 Date (1)
 Condition (1)

(2)
 (2)
 (2)
 (2)

TO REACH THE STATION FROM THE MAX BREWER BRIDGE ON COUNTY ROAD NO. 406 IN TITUSVILLE, FLORIDA,

GO NORTH ALONG THE INTRACOASTAL WATERWAY CHANNEL 2.3 MILES TO A RAILROAD BRIDGE, CONTINUE ALONG THE INTRACOASTAL WATERWAY ANOTHER 3.9 MILES TO DAY MARKER NO. 8, THEN ON AN AZIMUTH OF 359 DEGREES, GO 0.25 MILE TO AN ISLAND ON THE WEST SIDE OF THE INTRACOASTAL WATERWAY CHANNEL.

STATION IS LOCATED ON THE SOUTHEAST SIDE OF THE ISLAND, 25 FEET FROM THE WATERS EDGE AT LOW TIDE.

STATION IS A STANDARD BRONZE USACOE DISK SET IN A 4 INCH CONCRETE FILLED PVC PIPE AND STAMPED: "IWBV-236 1994".

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-- End of Section Table of Contents --

SECTION 01410

ENVIRONMENT PROTECTION

PART 1 GENERAL

1.1 SCOPE

This section covers prevention of environmental damage as the result of construction operations under this contract and for those measures set forth in other Technical Requirements of these specifications. For the purpose of this specification, environmental damage is defined as the presence of hazardous, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances; affect other species, biological communities, or ecosystems; or degrade the quality of the environment for aesthetic, cultural, and/or historical purposes. The control of environmental damage requires consideration of land, water, and air, and includes management of visual aesthetics, noise, solid waste, radiant energy and radioactive materials, as well as other pollutants.

1.2 REFERENCES

1.2.1 Miscellaneous Environmental Laws And Regulations

There are numerous environmental laws and regulations. At the Federal level, the applicable laws and regulations include compliance with the Clean Water Act (CWA); Clean Air Act (CAA); Coastal Zone Management Act (CZMA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Endangered Species Act (ESA); Fish and Wildlife Coordination Act (FWCA); Marine Protection, Research, and Sanctuaries Act (MPRSA); National Environmental Policy Act (NEPA); National Historic Preservation Act (NHPA); National Pollution Discharge Elimination System (NPDES); Research and Sanctuaries Act; Native American Graves Protection and Repatriation Act (NAGPRA); Resource Conservation and Recovery Act (RCRA); Rivers and Harbors Act (R&H); Safe Drinking Water Act (SDWA); Toxic Substance Control Act (TSCA); Wild and Scenic Rivers Act (WSRA); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Code of Federal Regulations (CFRs); Executive Orders; and, Environmental Protection Agency (EPA) requirements. NEPA compliance measures specified in an Environmental Assessment (EA) or Environmental Impact Statements (EIS) are also applicable with regard to compliance.

1.2.2 Publication Reference(s)

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

ENGINEERING MANUALS (EM)

EM 385-1-1	(1996) Safety and Health Requirements
EM 1110-1-1003	(1996) NAVSTAR Global Positioning System Surveying

1.3 QUALITY CONTROL

The Contractor shall establish and maintain quality control for environmental protection of all items set forth herein. The Contractor shall record on daily quality control reports or attachments thereto, any problems in complying with laws, regulations and ordinances, and corrective action taken.

1.4 PERMITS AND AUTHORIZATIONS

The Contractor shall comply with all requirements under the terms and conditions set out in the following authorization(s) obtained by the Corps of Engineers listed below. These permit(s) and authorization(s) are available for review by contacting the Jacksonville District, Operations and Technical Support Section at 904-232-2539.

Florida Department of Environmental Protection ERP Water Quality Certification No. 0156700-001-EI; Effective Date: October 23, 2000; Expiration Date: October 23, 2010.

1.5 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals having an "FIO" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-08 Statements

Environmental Protection Plan; G|PD.

Within 20 calendar days after the date of Notice of Award, the Contractor shall submit an Environmental Protection Plan for review and acceptance by the Contracting Officer. The Government will consider an interim plan for the first 30 days of operations. However, the Contractor shall furnish an acceptable final plan no later than 30 calendar days after receipt of Notice to Proceed. Approval of the Contractor's plan shall not relieve the Contractor of his responsibility for adequate and continuing control of pollutants and other environmental protection measures. Approval of the plan is conditional and predicated on satisfactory performance during construction. The Government reserves the right to require the Contractor to make changes to the Environmental Protection Plan or operations if the Contracting Officer determines that environmental protection requirements are not being met. No physical work at the site shall begin prior to acceptance of the Contractor's plan or an interim plan covering the work to be performed. The Environmental Protection Plan shall include but not be limited to the following:

- a. A list of Federal, State, and local laws, regulations, and permits concerning environmental protection, pollution control, and abatement that are applicable to the Contractor's proposed operations and the requirements imposed by those laws, regulations, and permits.
- b. Methods for protection of features to be preserved within authorized work areas. The Contractor shall prepare a listing of methods to protect resources needing protection, i.e., trees, shrubs, vines, grasses and ground cover, landscape features, air and water quality, fish and wildlife, soil, historical, archeological, and

cultural resources.

c. Procedures to be implemented to provide the required environmental protection and to comply with the applicable laws and regulations. The Contractor shall provide written assurance that immediate corrective action will be taken to correct pollution of the environment due to accident, natural causes, or failure to follow the procedures set out in accordance with the environmental protection plan.

d. A permit or license for and the location of the solid waste disposal area.

e. Drawings showing locations of any proposed temporary excavations or embankments for haul roads, stream crossing, material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials.

f. Environmental monitoring plans for the job site, including land, water, air, and noise monitoring.

g. Spill prevention. The Contractor shall specify all potentially hazardous substances to be used on the job site and intended actions to prevent accidental or intentional introduction of such materials into the air, ground, water, wetlands, or drainage areas. The plan shall specify the Contractor's provisions to be taken to meet Federal, State, and local laws and regulations regarding labeling, storage, removal, transport, and disposal of potentially hazardous substances.

h. Spill contingency plan for hazardous, toxic, or petroleum material.

i. A statement as to the person who shall be responsible for implementation of the Environmental Protection Plan. The Contractor personnel responsible shall report directly to the Contractor's top management and shall have the authority to act for the Contractor in all environmental protection matters.

j. Recycling and waste management plan. Executive Order 12873 of 20 October 1993 requires a number of considerations in planning a project.

Fallen trees should not be burned or buried. Mulching, composting, and other uses for trees should be considered. Also, recovery of metals at the job site, including aluminum cans, should be considered with proceeds to be retained by the Contractor. Non-Federal recycling and waste minimization efforts shall also be incorporated into this plan.

k. Appendices (permits and Ocean Dredged Material Disposal Site Monitoring and Management Plan if applicable). A copy of all permits (and Ocean Dredged Material Disposal Site Monitoring and Management Plans) applicable to the project shall be attached as appendices to the Environmental Protection Plan.

SD-18 Records

Logs/Final Summary Report; FIO.

Contractor shall submit as specified, logs and final summary report of sightings and incidents with endangered species.

Project Environmental Summary Sheet; FIO.

Contractor shall submit within 30 days following completion of the project, a written report of the absence or occurrence of environmental incidents. In addition, for construction activities whose anticipated duration is more than one calendar year, the Contractor shall complete a sheet each May 31st (plus/minus 14 days).

1.6 SUBCONTRACTORS

Assurance of compliance with this section by subcontractors shall be the responsibility of the Contractor.

1.7 NOTIFICATION

The Contracting Officer will notify the Contractor in writing of any observed noncompliance with the aforementioned Federal, State, or local laws or regulations, permits and other elements of the Contractor's environmental protection plan. The Contractor shall, after receipt of such notice, inform the Contracting Officer of proposed corrective action and take such action as may be approved. If the Contractor fails to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions shall be granted or costs or damages allowed to the Contractor for any such suspension.

Additionally, the Contractor shall notify the Authorized Contracting Officer's Representative (ACOR), in writing, of the absence or occurrence of environmental incidents, as required on the Project Environmental Summary Sheet, copy appended to the end of this Section. (Refer to paragraph SUBMITTALS above.)

1.8 TRAINING OF CONTRACTOR PERSONNEL IN POLLUTION CONTROL

The Contractor shall train his personnel in all phases of environmental protection. The training shall include methods of detecting and avoiding pollution, familiarization with pollution standards, both statutory and contractual, and careful installation and monitoring of the project to ensure adequate and continuous environmental pollution control. Quality Control and supervisory personnel shall be thoroughly trained in the proper use of monitoring devices and abatement equipment, and shall be thoroughly knowledgeable of Federal, State, and local laws, regulations, and permits as listed in the Environmental Protection Plan submitted by the Contractor.

Quality Control personnel will be identified in the Quality Control Plan submitted in accordance with Section 01451 CONTRACTOR QUALITY CONTROL.

1.9 PAYMENT

No separate payment or direct payment will be made for the work covered under this section.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 PROTECTION OF ENVIRONMENTAL RESOURCES

For contract work, the Contractor shall comply with all applicable Federal, State, or local laws and regulations. The environmental resources within the project boundaries and those affected outside the limits of permanent

work under this contract shall be protected at least during the entire period of this contract. The Contractor shall confine his activities to areas defined by the drawings and specifications. Deviations from drawings or specifications (e.g., proposed alternate borrow areas, disposal areas, staging areas, and alternate access routes) could result in the need for the Government to reanalyze and re-approve the project from an environmental standpoint. Environmental protection shall be as stated in the following subparagraphs.

3.1.1 General Project Environmental Design and Installation Criteria

Some project sites have features that shall not be impacted in any way, including cultural, historic, or archeological features. At all sites, project plans should minimize disturbance to existing features at the site to the extent possible, including vegetative, topographic, and drainage pattern features. Wetland impacts (temporary access, detours, staging areas, and other work area impacts) to project sites should be avoided and may require separate permitting action. Any wetlands temporarily impacted shall have its soil and/or vegetation restored upon project completion. Expansion of previously permitted project footprints may likewise require separate permitting action.

In all cases, the design and/or installation of project system shall provide for protection of the environment during handling, installing, storing, utilizing, transporting, servicing, testing, refilling, transferring, pumping, processing, removing waste products, repairing and maintaining systems and their components. Necessary design protection shall also be considered that would prevent contamination of the environment from impacts to the system caused by storm water runoff and flooding. Retrofit of connected systems on project sites to modern environmental protection design standards shall also be considered.

In the event environmental protection measures fail, the Contractor shall implement procedures to control and correct environmental damage.

3.1.1.1 Petroleum-Based Systems Environmental Design and Installation Criteria

For petroleum-based systems, a statement of site suitability shall be provided and shall include what would be necessary to prevent adverse impact to water quality; natural resources; habitat; historic, cultural, and archeological sites; and fragile local resources in the event of a fuel spill. Human error and mechanical/electrical failure of components without human intervention shall also be considered in the design with regard to spills. Additionally, appropriate noise and emissions controls shall be incorporated into the design, including vapor and exhaust controls.

At a minimum, environmental protection design requirements shall also include the following: (1) stationary tanks and piping shall have secondary containment features; (2) approved materials and corrosion protection systems shall be utilized; (3) system leaks shall be readily detected and contained without human intervention; and, (4) overflow containment systems shall be provided.

Applicable Federal, State, and local codes and requirements shall be strictly adhered to in the design, including those of the U.S. Environmental Protection Agency (EPA), the State of Florida, the St. Johns River Water Management District (SJRWMD), and other local governing agencies such as those of counties and municipalities. In the case of the

State, requirements include Chapter of the Florida Administrative Code (FAC) such as 62-17 (Approved Materials), 62-252 (Vapor Emissions), 62-296 (Emissions), 62-761 (Underground Storage Tanks), and 62-762 (Aboveground Tanks). Note that Chapters 62-761 and 62-762 of the FAC may be combined into one Chapter. Best Management Practices from the applicable agencies shall also be adhered to in the design.

3.1.1.2 Sewage-Based Systems Environmental Design and Installation Criteria

In general, there shall be no waste or debris discharges of any kind for a project unless authorized by the Contracting Officer. This shall include the Contractor's providing sufficient temporary sanitary equipment and facilities for the project. The design and/or installation of temporary or permanent sewage systems shall ensure that waters will be free of effects of sewage discharges. Applicable Federal, State, or local codes and requirements regarding sewage shall be strictly adhered to in the design, such as those of the EPA and, in the case of the State, Chapter 62-620 (Wastewater Facilities) of the FAC. Best Management Practices from the applicable agencies shall also be adhered to in the design.

3.1.2 Protection of Land Resources

Prior to the beginning of any construction, the Contractor shall identify all land resources to be preserved or avoided within the Contractor's work area. Materials displaced into uncleared areas shall be removed. The Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms without special permission from the Contracting Officer. The Contractor shall engage a qualified tree surgeon to perform all tree surgery. The Contractor shall be responsible to repair injuries to bark, trunk, branches, and roots of protected trees by dressing, cutting, and painting as specified for Class I Fine Pruning, of the National Arborist Association Pruning Standards for Shade Tree or as per State's Agricultural Extension Agency Guidelines, immediately as occurrences arise. No ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized. Where such special emergency use is permitted, the Contractor shall provide effective protection for land and vegetation resources at all times as defined in the following subparagraphs.

3.1.2.1 Work Area Limits

Prior to any construction, the Contractor shall mark the areas that are not required to accomplish all work to be performed under this contract. Isolated areas within the general work area which are to be saved and protected shall also be marked or fenced. The Contractor shall protect from damage all existing trees designated to remain. Protection of tree roots shall be provided against noxious materials in solution caused by run-off or spillage. Fires shall be located outside the canopy of protected trees. No materials, trailers, or equipment shall be stored within the drip line of any protected tree. Monuments and markers shall be protected before construction operations commence. Where construction operations are to be conducted during darkness, the markers shall be visible. The Contractor shall convey to his personnel the purpose of marking and/or protection of all necessary objects.

3.1.2.1 Protection of Landscape

Trees and their roots, shrubs, vines, grasses, land forms, and other landscape features [indicated and defined on the drawings to be preserved]

shall be clearly identified and protected by fencing or any other approved techniques. Protection of trees shall be as illustrated in the Tree Protection Plan Detail appended to the end of this Section. Tree protection fencing shall be placed before excavation or grading is begun and maintained in place until construction is complete. Branches of protected trees, if required, shall be removed to clear for construction and pruning shall subsequently be performed to restore the natural shape of the entire tree. Branches or roots, if required, shall be cut with sharp pruning instruments and not broken or chopped. Protected trees shall be fertilized to compensate for root loss with 6-6-6 as per manufacturer's application direction. Any damage to tree crowns or roots shall be repaired promptly after damage occurs.

a. Trench or Bore Under Trees. Where trenching for utilities is required within tree driplines, the Contractor shall hand dig under and around roots or bore under them. The Contractor shall protect roots from drying and cover exposed roots within an hour as specified in subparagraph "Excavation for Structures" below. No lateral roots which interfere with new construction shall be cut. Boring is permitted.

b. Excavation for Structures. Where excavating for new construction is required within tree drip lines, the Contractor shall hand excavate to minimize damage to root systems. The Contractor shall use narrow tine pitchforks and comb soil to expose roots. The Contractor shall relocate roots in backfill areas. If large, main lateral roots are encountered that are exposed beyond the excavation limits, the Contractor shall bend and relocate these roots without breaking or girdling. If roots are encountered immediately adjacent to new construction such that relocation is not practical, the Contractor shall saw roots approximately 3" back from the new construction, seal with tree wound dressing, and protect any exposed embankment of roots from drying by covering with straw and black plastic. The Contractor shall irrigate affected areas daily until final grade conditions are established and the exposed roots are backfilled properly for continued plant growth.

c. Replacement. The Contractor shall remove dead or damaged protected trees determined, by the Government, to be incapable of restoration to normal health growth. The Contractor shall replace each removed tree up to 4" caliper with tree of equal specie and size. For each tree removed larger than a 4" caliper, the Contractor shall replace the tree with one 4" caliper tree per 4" caliper increment or fraction thereof.

3.1.2.2 Unprotected Erodible Soils

Earthwork brought to final grade shall be finished as indicated. Side slopes and back slopes shall be protected as soon as practicable upon completion of rough grading. All earthwork shall be planned and conducted to minimize the duration of exposure of unprotected soils. Except in instances where the constructed feature obscures borrow areas, quarries, and waste material areas, these areas shall not initially be totally cleared. Clearing of such areas shall progress in reasonably sized increments as needed to use the areas developed as approved by the Contracting Officer.

3.1.2.3 Disturbed Areas

The Contractor shall effectively prevent erosion and control sedimentation through approved methods including, but not limited to, the following:

- a. Retardation and Control of Runoff. Runoff from the construction site or from storms shall be controlled, retarded, and diverted to protected drainage courses by means of diversion ditches, benches, and by any measures required by area wide plans approved under paragraph 208 of the Clean Water Act.
- b. Erosion and Sedimentation Control Devices. The Contractor shall construct or install temporary and permanent erosion and sedimentation control features as directed by the Contracting Officer's Representative. Temporary velocity dissipation devices shall be placed along drainage courses so as to provide for non-erosive flows. Temporary erosion and sediment control measures such as berms, dikes, drains, sediment traps, sedimentation basins, grassing, mulching, baled hay or straw, and silt fences shall be maintained until permanent drainage and erosion control facilities are completed and operative. For silt fences, the filter fabric is to be of nylon, polyester, propylene, or ethylene yarn of at least 50 lb/in strength and able to withstand a flow rate of at least 0.3 gal/ft sq/minute. The fabric should contain ultraviolet ray inhibitors and stabilizers and be a minimum of 45 inches in width. The toe of the fence shall be buried at least 8 inches deep to prevent undercutting and shall be secured to posts by suitable staples, tie wire, or hog rings. Posts shall have a cross section of at least 2"x4" and a minimum of 4 foot in length. Fence shall be overlapped to the next post if fabric joints are necessary.
- c. Sediment Basins. Sediment from construction areas shall be trapped in temporary or permanent sediment basins in accordance with basin plans shown on the drawings. The basins shall accommodate the runoff of a local 5-year storm. After each storm, the basins shall be pumped dry and accumulated sediment shall be removed as necessary to maintain basin effectiveness. Overflow shall be controlled by paved weir or by vertical overflow pipe, draining from the surface. The collected topsoil sediment shall be reused for fill on the construction site, and/or conserved (stockpiled) for use at another site(s). The Contractor shall institute effluent quality monitoring programs as required by State and local environmental agencies.

3.1.2.4 Contractor Facilities and Other Work Areas

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in areas designated on the drawings or as directed by the Contracting Officer. Temporary movement or relocation of Contractor facilities shall be made when approved by the Contracting Officer. Borrow areas shall be managed to minimize erosion and to prevent sediment from entering nearby watercourses, wetlands, or lakes. Spoil areas shall be managed and controlled to limit spoil intrusion into areas designated on the drawings and to prevent erosion of soil or sediment from entering nearby watercourses, wetlands, or lakes. Spoil areas shall be developed in accordance with the grading plan indicated on the drawings. Temporary excavation and embankments for plant and/or work areas shall be controlled to protect adjacent areas from despoilment. If there is suspicion that sediment may be unsuitable for disposal at a specified location, the Contractor shall immediately take measures to contain the suspect sediment and notify the Contracting Officer.

3.1.2.5 Solid Wastes

Solid wastes (excluding clearing debris) shall be placed in containers which are emptied on a regular schedule. All handling and disposal shall be conducted to prevent contamination.

Disposal of Solid Waste by Removal from Government Property. The Contractor shall transport solid waste off Government property and dispose of it in compliance with Federal, State, and local requirements for solid waste disposal.

3.1.2.6 Fuel, Oil, and Lubricants

Fuel, oil, and lubricants shall be managed so as to prevent spills and evaporation. To prevent spills, fuel dispensers shall have a 4-foot square, 16-gauge metal pan with borders banded up and welded at corners right below the bibb. Edges of the pans shall be 8-inch minimum in depth to ensure that no contamination of the ground takes place. Pans shall be cleaned by an approved method immediately after every dispensing of fuel and wastes disposed of offsite in an approved area. Should any spilling of fuel occur, the Contractor shall immediately recover the contaminated ground and dispose of it offsite in an approved area. Petroleum waste generated shall be stored in marked corrosion-resistant containers and recycled or disposed of in accordance with 40 CFR 279, State, and local regulations.

3.1.2.7 Hazardous Waste

Hazardous wastes are defined in 40 CFR 261. The Contractor shall ensure that hazardous wastes are stored and disposed of in accordance with 40 CFR 261 and State and local regulations. The Contractor shall ensure that hazardous wastes are packed, labeled, and transported in accordance with 49 CFR 173 and State and location regulations.

3.1.2.8 Hazardous Materials

The Contractor shall ensure that hazardous materials are labeled, stored, and transported in accordance with 49 CFR 173, State, and local regulations.

3.1.2.9 Disposal of Other Materials

Other materials than previously discussed (Construction and Demolition, vegetative waste, etc.) shall be handled as directed.

3.1.3 Preservation and Recovery of Historic, Archeological, and Cultural Resources

3.1.3.1 Applicable Law

A number of Federal laws require protection of cultural resources. Two laws, in particular, can be potentially involved with dredging activities: (1) the National Historic Preservation Act, as amended; and, (2) the Abandoned Shipwreck Act.

3.1.3.2 Known Resources

Known historic, archeological and cultural resources within the Contractor's work area(s) are designated as a "sensitive environmental area" on the contract drawings or other documents. If so designated, the Contractor shall install protection for these resources and shall be responsible for their preservation during the contract's duration. The

Contractor shall not distribute maps or other information on these resource locations except for distribution among the Contractor's staff with a "need to know" technical responsibility for protecting the resources.

3.1.3.3 Inadvertent Discoveries

If, during or other construction activities, the Contractor observes items that may have historic or archeological value, such observations shall be reported immediately to the Contracting Officer so that the appropriate Corps staff may be notified and a determination for what, if any, additional action is needed. Examples of historic, archeological and cultural resources are bones, remains, artifacts, shell, midden, charcoal or other deposits, rocks or coral, evidences of agricultural or other human activity, alignments, and constructed features. The Contractor shall cease all activities that may result in the destruction of these resources and shall prevent his employees from further removing, or otherwise damaging, such resources.

The possibility of encountering submerged cultural resources is inherent in dredging and snagging operations. Such findings could include shipwrecks, shipwreck debris fields (such as streamed engine parts), prehistoric watercraft (such as log "dugouts"), and other structural features intact or displaced. The materials may be deeply buried in sediment, resting in shallow sediments or above them, or protruding into water. Suspected cultural materials inadvertently gathered from a water-saturated context should be kept moist by re-immersion, spraying, or some other expedient means of wetting until the appropriate Corps staff provide further directives. No interviews or other contact with media shall occur without clear authorization from the Contracting Officer or the appropriate Corps representative.

3.1.3.4 Claims for Downtime due to Inadvertent Discoveries

Upon discovery and subsequent reporting of a possible inadvertent discovery of cultural resources, the Contractor shall seek to continue work well away from, or otherwise protectively avoiding, the area of interest, or in some other manner that strives to continue productive activities in keeping with the contract. Should an inadvertent discovery be of the nature that substantial impact(s) to the work schedule are evident, such delays shall be coordinated with the Contracting Officer.

3.1.4 Protection of Water Resources

The Contractor shall keep construction activities under surveillance, management, and control to avoid pollution of surface, ground waters, and wetlands. The Contractor shall plan his operation and perform all work necessary to minimize adverse impact or violation of the water quality standard. Special management techniques as set out below shall be implemented to control water pollution by the listed construction activities which are included in this contract. The Contractor's construction methods shall protect wetland and surface water areas from damage due to mechanical grading, erosion, sedimentation and turbid discharges. There shall be no storage or stockpiling of equipment, tools, or materials within wetlands or along the shoreline within the littoral zone unless specifically authorized.

3.1.4.1 Washing and Curing Water

Waste waters directly derived from construction activities shall not be

allowed to enter water areas. These waste waters shall be collected and placed in retention ponds where suspended materials can be settled out or the water evaporates so that pollutants are separated from the water. Analysis shall be performed and results reviewed and approved by Corps staff before water in retention ponds is discharged.

3.1.4.2 Cofferdam and Diversion Operations

Construction for dewatering, removal of cofferdams, tailrace excavation, and tunnel closure shall be controlled at all times to limit the impact of water turbidity on the habitat for wildlife and impacts on water quality for downstream use.

3.1.4.3 Stream Crossings

Stream crossings shall be controlled during construction. Crossings shall provide movement of materials or equipment without violating water pollution control standards of the Federal, State, or local government.

3.1.4.4 Monitoring of Water Areas

Monitoring of water areas affected by construction activities shall be the responsibility of the Contractor. All water areas affected by construction activities shall be monitored by the Contractor.

3.1.4.5 Turbidity

The Contractor shall conduct his dredging and disposal operations in a manner to minimize turbidity and shall conform to all water quality standards as prescribed by Chapter 62-302, State of Florida, Department of Environmental Protection (FDEP). FDEP surface water quality standards can be obtained from the following web sites:

<http://www.dep.state.fl.us/ogc/documents/rules/shared/62-302.pdf> and
<http://www.dep.state.fl.us/ogc/documents/rules/shared/62.302t.pdf>.

3.1.4.6 Oil, Fuel, and Hazardous Substance Spill Prevention and Mitigation

The Contractor shall prevent oil, fuel, or other hazardous substances from entering the air, ground, drainage, local bodies of water, or wetlands. This shall be accomplished by design and procedural controls. In the event that a spill occurs despite the design and procedural controls, the following shall occur:

- (1) Immediate action shall be taken to contain and cleanup any spill of oil, fuel or other hazardous substance.
- (2) Spills shall be immediately reported to the Contracting Officer.
- (3) Spill contingency planning shall be strictly in accordance with the criteria of 40 CFR, Part 109.
- (4) To control the spread of any potential spill, absorbent materials shall be readily available and capable of absorbing the contents of the single largest tank.
- (5) To control the spread of any potential spill, the Contractor shall provide a written certification of commitment of manpower, equipment, and materials required to expeditiously cleanup and

dispose of spill materials.

a. Spill Preventive Systems

System design and installation requirements have been discussed at the beginning of this Section. Temporary or portable tanks shall conform to applicable Federal, State, and local codes and requirements and shall not be placed where they may be affected by storm, flooding, or washout. Diversionary structures for spills shall be put in place in advance where practical. Both spill preventive systems and any deviations from associated requirements must be approved by the Contracting Officer prior to implementation.

b. Liabilities

The Contractor shall be liable in the amounts established in 40 CFR, Part 113 when it can be shown that oil was discharged as a result of willful negligence or willful misconduct. The penalty for failure to report the discharge of oil shall be in accordance with the provision of 33 CFR, Part 153.

3.1.5 Protection of Fish and Wildlife Resources

The Contractor shall keep construction activities under surveillance, management, and control to minimize interference with, disturbance to, and damage of fish and wildlife. Species that require specific attention along with measures for their protection shall be listed in the Contractor's Environmental Protection Plan prior to the beginning of construction operation.

3.1.5.1 Endangered Species Protection

The Contractor shall instruct all personnel associated with the project of the potential presence of manatees and the need to avoid collisions with manatees.

a. Civil and Criminal Penalties. All construction personnel shall be advised that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act of 1972, the Endangered Species Act of 1973, and the Florida Manatee Sanctuary Act. The Contractor may be held responsible for any manatee harmed, harassed, or killed as a result of construction activities.

b. Siltation Barriers. If siltation barriers are used, they shall 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.

c. Vessel/Boat Operation. All vessels associated with the project shall operate at "no wake/idle" speeds at all times while in waters where seagrasses are present or the draft of the vessel provides less than a four-foot clearance from the bottom, and vessels shall follow routes of deep water whenever possible. Boats used to transport personnel shall be shallow-draft vessels, preferably 17 feet in length or less, where navigational safety permits. Flat sided barges used on this project shall be equipped with stand-off bumpers to prevent crushing a manatee between the barge and another vessel during tie-up.

d. Manatee Sighting. If a manatee(s) is sighted within 100 yards of the project area, all appropriate precautions shall be implemented by the Contractor to ensure protection of the manatee. These precautions shall include the operation of all moving equipment no closer than 50 feet of a manatee. If a manatee is closer than 50 feet to moving equipment or the project area, the equipment shall be shut down and all construction activities shall cease within the waterway to ensure protection of the manatee. Construction activities shall not resume until the manatee has departed the project area.

e. Manatee Signs. Prior to commencement of construction, each vessel involved in construction activities shall display at the vessel control station or in a prominent location, visible to all employees operating the vessel, a temporary sign at least 8-1/2" x 11" reading, "CAUTION: MANATEE HABITAT/IDLE SPEED IS REQUIRED IN CONSTRUCTION AREA." In the absence of a vessel, a temporary 3' x 4' sign reading "CAUTION: MANATEE AREA" will be posted adjacent to the issued construction permit. A second temporary sign measuring 8-1/2" x 11" reading "CAUTION: MANATEE HABITAT. EQUIPMENT MUST BE SHUTDOWN IMMEDIATELY IF A MANATEE COMES WITHIN 50 FEET OF OPERATION" shall be posted at the dredge operator control station and at a location prominently adjacent to the issued construction permit. The Contractor shall remove the signs upon completion of construction. Sample Manatee Caution Signs are appended to the end of this Section.

f. Manatee Sighting Reports. Any collisions with a manatee or sighting of any injured or incapacitated manatee shall be reported immediately to the Corps of Engineers. The order of contact within the Corps of Engineers shall be as follows:

Order of Contact of Corps Personnel for Dredging
 Contractor to Report Manatee Death or Injury

<u>Title</u>	<u>Telephone Number</u>	
	<u>Work Hours</u>	<u>After Hours</u>
Corps, Inspector	On site	Lodging Location
Mr. George Cooper Russ Tolle, Area Engineer, South North Florida Area Office (CESAJ-CO-PN) Provided	407-783-8702	904-232-2086 To be
Chief, Environmental Branch, Planning Division (CESAJ-PD-E)	904-232-1685	To be Provided
Mr. Charles McGehee, Chief, Construction Branch, Construction-Operations Division (CESAJ-CO-C)	904-232-1122	To be Provided
Mr. Gordon M. Butler, Jr., Chief, Construction-Operations Division (CESAJ-CO)	904-232-3765	To be Provided

The Contractor shall also immediately report any collision with and/or injury to a manatee to the Florida Marine Patrol "Manatee Hotline" 1-800-342-5367 as well as the U.S. Fish and Wildlife Service, Vero Beach Field Office at 561-562-3909 for South Florida.

g. Manatee Monitoring. At least one person shall be designated as a manatee observer when in-water work is being performed. That person shall have experience in manatee observation, and be equipped with polarized sunglasses to aid in observation. The manatee observer must be on site during all in-water construction activities and will advise personnel to cease operation upon sighting a manatee within 50 feet of any in-water construction activity. Movement of a work barge, other associated vessels, or any in-water work shall be minimized to the greatest extent possible when performed after sunset, since the possibility of spotting manatees is negligible.

h. Report Submission. The Contractor shall maintain a log detailing sightings, collisions, or injuries to manatees occurring during the contract period. The data shall be recorded on forms provided by the Contracting Officer (sample Daily Manatee Reporting Log is appended to the end of this Section). All data in original form shall be forwarded directly to ~~Dr. Hanley K. Smith~~, the Acting Chief, Environmental Branch, P. O. Box 4970, Jacksonville, Florida, 32232-0019, within 10 days of collection and copies of the data shall be supplied to the Contracting Officer. Following project completion, a report summarizing the above incidents and sightings shall be submitted to the following:

Florida Fish and Wildlife Conservation Commission
Bureau of Protected Species Management
620 South Meridian Street
Tallahassee, Florida 32399-1600

Chief, Environmental Branch
U.S. Army Corps of Engineers (CESAJ-PD-E)
P.O. Box 4970
Jacksonville, Florida 32232-0019

Area Engineer, ~~Atlantic Coast~~North Florida Area Office
U.S. Army Corps of Engineers (CESAJ-CO-PN)
~~1635 Redstone Road, Building 738~~
~~Patrick AFB, Florida 32925-3438~~
4070 Boulevard Center Drive, Suite 201
Jacksonville, Florida 32207

U.S. Fish and Wildlife Service
P. O. Box 2676
Vero Beach, Florida 32961-2676

3.1.6 Seagrass and Hardbottom Protection Measures

a. The Contractor shall instruct all personnel associated with the project of the presence of seagrasses, especially the Federally-listed threatened Johnson's Seagrass (Halophlia johnsonii), and the need to avoid contact with seagrasses.

b. All construction personnel shall be advised that there are civil and criminal penalties for harming or destroying seagrasses, especially Johnson's Seagrass which is protected under the Endangered Species Act of 1973, as amended. The Contractor may be held responsible for any seagrasses harmed or destroyed due to construction activities.

c. The Contractor shall not anchor, place pipeline, or stage equipment in a manner that will cause any damage to seagrasses. Anchoring, placing pipeline, or staging equipment shall avoid these sensitive

areas. During all in-water pipeline transportation, relocation and installation activities, the fixed pipeline to the upland dredged material management area and dredge pipeline shall be floated and maneuvered into position prior to flooding and dropping the line, and re-floated for removal and relocation, to minimize scarring of the lagoon substrate; thereby preserving as much of the existing seagrass rhizome/root structure as possible. Any actual or potential incident involving damage to, or disturbance of, seagrasses shall be reported.

3.1.7 Protection of Air Resources

The Contractor shall keep construction activities under surveillance, management, and control to minimize pollution of air resources. All activities, equipment, processes and work operated or performed by the Contractor in accomplishing the specified construction shall be in strict accordance with the applicable air pollution standards of the State of Florida (Florida Statute, Chapter 403 and others and Chapters 200 series of the FAC) and all Federal emission and performance laws and standards, including the U.S. Environmental Protection Agency's Ambient Air Quality Standards. Information regarding Florida Statutes can be obtained from the following websites:

<http://www.dep.state.fl.us/ogc/documents/statutes/text/403.doc>;

<http://www.dep.state.fl.us/ogc/documents/rules/aiur/62-213.doc>; and,

<http://www.dep.state.fl.us/ogc/documents/rules/mainrule.htm>.

3.1.7.1 Particulates

Particulates, such as dust, shall be controlled at all times, including weekends, holidays, and hours when work is not in progress. The Contractor shall maintain excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, spoil areas, borrow areas, and work areas within or outside the project boundaries free from particulates that would cause air pollution standards to be exceeded or that would cause a hazard or nuisance. The Contractor shall have the necessary equipment and approved methods to control particulates as the work proceeds and before a problem develops.

3.1.7.2 Odors

Odors shall be controlled at all times for all construction activities.

3.1.8 Protection of Sound Intrusions

The Contractor shall keep construction activities under surveillance and control to minimize damage to the environment by noise.

3.2 POSTCONSTRUCTION CLEANUP

The Contractor shall clean up any area(s) used for construction.

3.3 PRESERVATION AND RESTORATION OF LANDSCAPE AND MARINE VEGETATION DAMAGES

The Contractor shall restore all landscape features and marine vegetation damaged or destroyed during construction operations outside the limits of the approved work areas. Such restoration shall be a part of the Environmental Protection Plan as defined in subparagraph "Environmental Protection Plan" of paragraph SUBMITTALS above. This work shall be accomplished at the Contractor's expense.

3.4 MAINTENANCE OF POLLUTION CONTROL FACILITIES

The Contractor shall maintain all constructed facilities and pollution control facilities and devices for the duration of the contract or for that length of time construction activities create the particular pollutant.

3.5 TREE PROTECTION PLAN DETAIL

See APPENDIX 01410-A at the end of this Section (1 page).

3.6 SAMPLE - MANATEE CAUTION SIGNS

See APPENDIX 01410-B at the end of this Section (2 pages).

3.7 SAMPLE - DAILY MANATEE REPORTING LOG

See APPENDIX 01410-C at the end of this Section (1 page).

3.8 PROJECT ENVIRONMENTAL SUMMARY SHEET

See APPENDIX 01410-D at the end of this Section (2 pages).

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SECTION 01411

TURBIDITY AND DISPOSAL MONITORING

PART 1 GENERAL

1.1 SCOPE

The work covered by this section consists of furnishing all labor, materials, and equipment, and performing all work required to obtain, analyze, and report the results of turbidity and disposal monitoring.

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals having an "FIO" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-06 Instructions

Calibration Standard; FIO.

The Contractor shall furnish to the Contracting Officer's Representative (COR) a copy of the operating instructions and standards used in calibrating equipment used in collecting samples for turbidity.

SD-09 Reports

Turbidity Monitoring; FIO.

All required turbidity test reports shall be submitted (preferably by electronic mail) to the COR, the Environmental Quality Section (CESAJ-PD-ES), and the Florida Department of Environmental Protection (FDEP) within 24 hours after completion of each test.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 MONITORING REQUIREMENTS

3.1.1 General

Nearshore or inland water samples shall be obtained and analyzed for turbidity. Sampling shall be conducted in accordance with techniques described in the latest edition of "Standard Methods" published by the American Public Health Association (APHA), American Waterworks Association (AWWA), and Water Pollution Control Federation (WPCF), and other current techniques recognized by the scientific community and approved by the Jacksonville District, Corps of Engineers. Samples obtained for turbidity analysis shall be analyzed within 30 minutes of collection. Samples shall be taken with a sampler obtaining samples uncontaminated by water from any other depth.

3.1.1.1 Turbidity Monitoring Equipment

Monitoring required for turbidity shall be measured in Nephelometric Turbidity Units (NTU) using a standard Nephelometer. All sampling locations shall be recorded using "GPS" Global Positioning System and indicated on the appropriate recording forms and maps.

3.1.2 Dredging and Disposal Locations

Routine monitoring shall occur at the following locations:

3.1.2.1 Station Descriptions

a. Station 1 (Compliance Turbidity)

No more than 150 meters downcurrent of the dredge or point of discharge and in the direction of any visible plume.

b. Station 2 (Background Turbidity)

At least 300 meters upcurrent from the dredge or point of discharge and outside of any turbidity generated by the project.

3.1.2.2 Turbidity

Samples to be analyzed for turbidity shall be taken twice daily at least 4 hours apart during all dredging and during discharges from the disposal site. Additional sampling shall be performed when the Contracting Officer determines that there may be non-compliance with water quality standards.

a. ~~Dredging Site Compliance at Stations 1:~~ At mid-depth, no more than 150 meters down current from the dredge ~~ex~~and discharge point of return water to the Indian River Lagoon, within the densest portion of any visible turbidity plume.

b. ~~Dredging Site Background at Stations 2:~~ At mid-depth, at least 300 meters upcurrent from the dredge ~~ex~~and discharge point of return water to the Indian River Lagoon, and clearly outside the influence of any turbidity generated by the project.

3.2 TURBIDITY TESTS

3.2.1 Testing

The Contractor shall provide the Government with a certification, attesting to the accuracy of his testing equipment and procedure. The Contractor shall also provide the Government with a duplicate of the standard used to calibrate his testing instrument as well as a complete set of operating instructions for the turbidity testing equipment. The Contractor and the Corps will use this standard throughout the project to maintain the calibration of the equipment. Whenever there is doubt as to the adequacy of the testing or validity of the results, the COR may direct that additional tests be performed at no additional cost to the Government.

3.2.2 Reporting

The monitoring data shall be recorded on forms that contain the pertinent information in the following paragraphs. ~~Ex~~Sample forms are appended to the end of this Section. Other data shall be submitted in the form

supplied by the laboratory chosen to do the analysis. All data shall be forwarded (preferably electronically) to the COR, Environmental Quality Section (CESAJ-PD-EEA) within 24 hours of collection. Electronic mail addresses of the Corps personnel to receive these reports are provided below. Reports shall be provided in a common format such as Excel Spreadsheet (.xls) files, Word (.doc) files, and Web Graphics (Joint Photographic Group or .jpg) files.

NAME	ORGANIZATION	E-MAIL ADDRESS
John Cooper	USACE COR	john.g.cooper@usace.army.mil
Russ Tolle	USACE COR	russ.tolle@saj02.usace.army.mil
Diana Gerland	USACE COR	diana.r.gerland@usace.army.mil
Mark White	USACE PD EE	mark.white@usace.army.mil
Matt Miller	USACE PD-EA	matthew.j.miller@usace.army.mil

3.2.2.1 Report Contents

- a. Permit application number.
- b. Dates of sampling and analysis.
- c. A statement describing the methods used in collection, handling, storage, and quality control methods used in the analysis of the samples.
- d. A map indicating the sampling location and plume configuration, if any (~~ex~~sample map appended to the end of this Section along with x. y coordinates of the sample locations, dredge location and discharge pipe end location).
- e. A statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection, and accuracy of the data.
- f. Results of the analyses.
- g. A description of any factors influencing the dredging or disposal operation or the sampling program. Reports shall be furnished daily even when no sampling is conducted. When sampling is not conducted, a brief statement shall be given in the report explaining the reason for not conducting the sampling, such as "dredge not working due to mechanical problems" or "no sampling taken due to high seas".

3.2.2.2 Monitoring Reports

Monitoring reports shall also include the following information for each day that samples are taken:

- a. Time of day and date samples were taken.
- b. Depth of water body.
- c. Depth of sample.
- d. Antecedent weather conditions.
- e. Tidal stage and direction of flow.
- f. Water temperature, C degrees (heavy metal and ammonia analysis only).
- g. Dredge or disposal location (station location and map).
- h. Water sample location.
- i. Wind direction and velocity.

3.2.2.3 Notification

If turbidity exceeds background levels by more than 29 NTU in the Indian River or by more than 5 NTU within the Indian River Lagoon, the Contractor shall immediately notify the Chief, Environmental Branch at 904-232-1685

and the COR, or on the morning of the following work day if it occurs after normal work hours. In addition, all dredging or disposal activity shall cease immediately and all measures to reduce turbidity shall be taken. Dredging or disposal shall not resume until corrective measures have been taken and turbidity has returned to acceptable levels as determined by proper testing described in subparagraph "Dredging and Disposal Locations" above.

3.3 WORK DELAY

Delays in work due to the fault or negligence of the Contractor or the Contractor's failure to comply with this specification shall not be compensable. Any adjustments to the contract performance period or price that are required as a result of compliance with this section shall be made in accordance with the provisions of the Clause SUSPENSION OF WORK of Section 00700 CONTRACT CLAUSES.

3.4 SAMPLE - TURBIDITY MONITORING TEST REPORT

See APPENDIX 01411-A at the end of this Section (with ~~ex~~sample location map appended) (34 pages).

-- End of Section --

PROJECT:
DEP PERMIT NUMBER:

SAMPLE
DAILY TURBIDITY MONITORING FORM

DATE: _____; TIME: _____; COLLECTOR: _____

LOCATION INFORMATION: _____ Dredge or _____ Disposal Site
Dredging in progress? _____ Yes _____ No
Disposal in progress? _____ Yes _____ No
Station: _____ Range: _____ Cut: _____

WEATHER AND WATER OBSERVATIONS

Wind velocity: _____, Wind direction from: _____, Current direction to: _____
Tidal stage: _____ Predicted tidal stage (EST): High _____ Low _____

WEATHER CONDITIONS: _____

<u>COMPLIANCE STATION DATA:</u>	<u>SURFACE</u>	<u>MID-DEPTH</u>	<u>ONE FOOT ABOVE BOTTOM</u>
Collection Depth	_____	_____	_____
Depth of Water Body	_____	_____	_____
Collection Time	_____	_____	_____
Analysis Time	_____	_____	_____
Turbidity (NTU)	_____	_____	_____
Analysis Date	_____	_____	_____

<u>BACKGROUND STATION DATA:</u>	<u>SURFACE</u>	<u>MID-DEPTH</u>	<u>ONE FOOT ABOVE BOTTOM</u>
Collection Depth	_____	_____	_____
Depth of Water Body	_____	_____	_____
Collection Time	_____	_____	_____
Analysis Time	_____	_____	_____
Turbidity (NTU)	_____	_____	_____
Analysis Date	_____	_____	_____

TURBIDITY REVIEW:
Compliance minus Background (NTU) _____

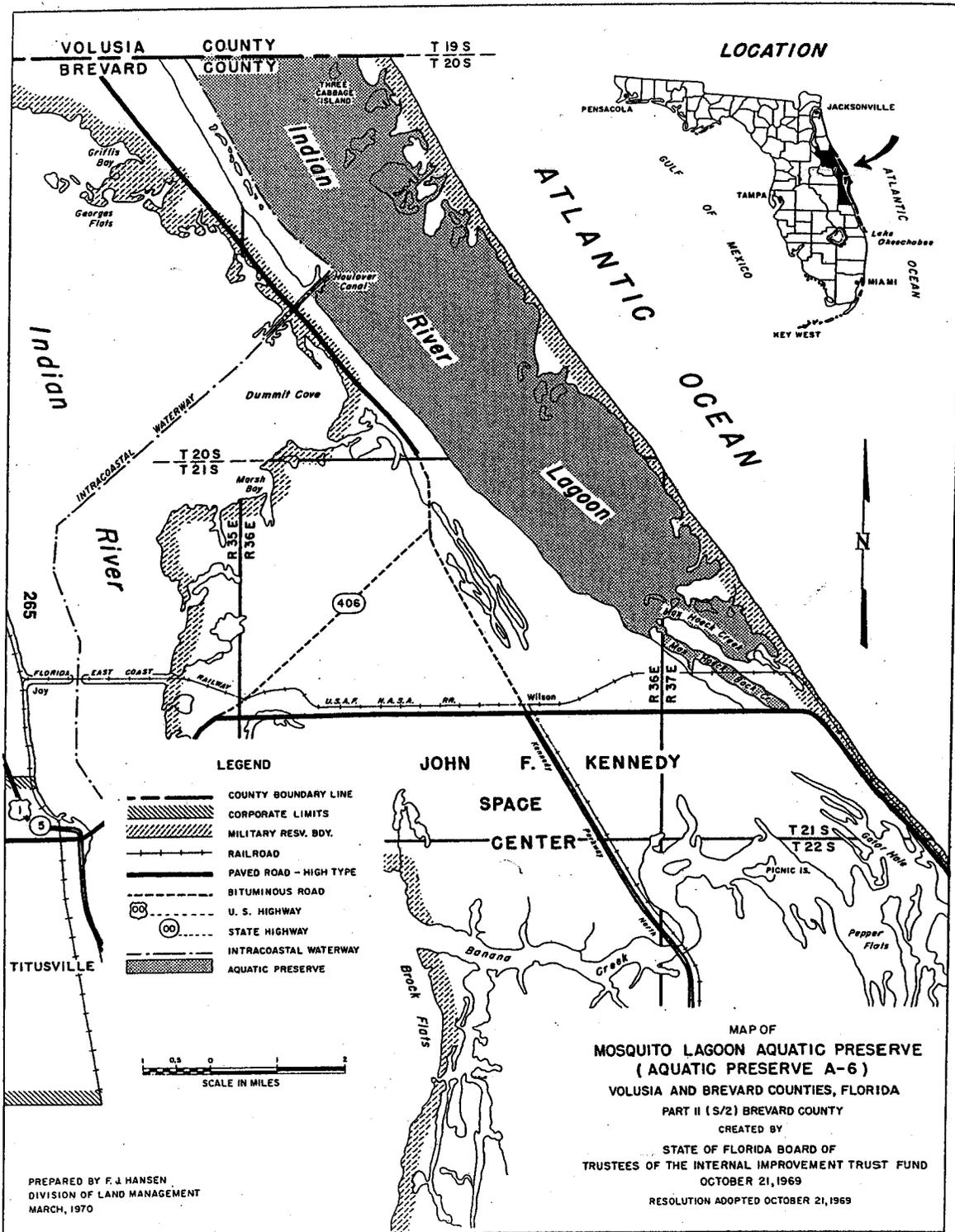
Compliance NTU _____ did _____ did not exceed background NTU by more than 29 NTU.

COMMENTS ON SAMPLING EVENT (describe the methods used in collection, handling, storage, and analysis or other remarks regarding the sampling):

STATION LOCATIONS AND PLUME CONFIGURATION IF ANY, ARE PRESENTED ON A MAP ATTACHED.

STATEMENT OF AUTHENTICITY AND ACCURACY:

Signature/Date



PREPARED BY F. J. HANSEN
 DIVISION OF LAND MANAGEMENT
 MARCH, 1970

MAP OF
MOSQUITO LAGOON AQUATIC PRESERVE
 (AQUATIC PRESERVE A-6)
 VOLUSIA AND BREVARD COUNTIES, FLORIDA
 PART II (S/2) BREVARD COUNTY
 CREATED BY
 STATE OF FLORIDA BOARD OF
 TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND
 OCTOBER 21, 1969
 RESOLUTION ADOPTED OCTOBER 21, 1969

NATCO Limited Partnership
 Vessel: Dodge Island
 FDEP Permit #: 0126527-001-JC

Modifications to Sunny Isles Segment and
 Beach Renourishment at Miami Beach
 Dade County, Florida

DACW17-00-C-0041
 Turbidity Monitoring
 Weekly Report

Load Data		Testing		Turbidity				Conditions		Locations						Compl Dist												
Date	Time	Load #	Area	Compliance	Background	Difference	Compliance	Mid-depth	Background	Difference	Compliance	Bottom*1m	Depth of	Seas (ft)	Tide & Current	Windspeed & Direction	Collector	Nothing	Easting	Nothing	Easting	Background	Nothing	Easting	Dredge	Nothing	Easting	Distance (meters)
07/09/01	55:189	Borrow	5.9	2.1	3.8	0.0	0.0	0.0	6.7	2.4	4.3	12	1	1	S to N	5kts W	AS	589080	789880	586221	789825	589094	789451	130.86				
07/09/01	03:25	190	Borrow	7.0	0.7	6.3	9.9	1.2	8.7	13.5	1.0	12.5	39	1	S to N	5kts NW	AS	502436	798193	503100	798437	502644	798279	66.67				
07/09/01	04:48	190	Beach	4.5	1.0	3.5	5.9	1.3	4.6	10	1	10	1	1	S to N	5kts NW	AS	589000	789860	586392	790023	589094	789451	127.95				
07/09/01	09:06	191	Borrow	12.2	1.8	10.4	13.0	1.2	11.8	14.4	4.4	10.0	38	1-2	1.0 S to N	5-10kts S	NC	502951	798239	500304	798268	502067	798163	270.51				
07/09/01	12:55	191	Beach	1.7	1.5	0.2	1.6	1.7	-0.1	1.1	1-2	1-2	11	1-2	1.4 S to N	5kts W	NC	591002	790107	594655	790087	591358	789591	191.13				
07/09/01	16:09	192	Borrow	11.3	1.6	9.7	14.0	1.6	12.4	13.5	1.8	11.7	38	1-2	2 S to N	15kts W	NC	502240	797902	504267	797996	502744	797866	154.05				
07/09/01	19:15	192	Beach	2.3	1.5	0.8	2.1	1.6	0.5	1.2	1-2	1-2	12	1-2	1.6 N to S	5-10kts W	NC	591288	790242	594460	790216	591558	789595	213.74				
07/09/01	22:20	193	Borrow	13.6	0.7	12.9	19.2	1.8	17.4	19.3	1.1	18.2	40	1-2	1.5 S to N	5kts SE	AS	502622	797906	501123	798540	501962	798054	206.22				
07/10/01	03:57	194	Borrow	6.1	1.0	5.1	7.2	1.5	5.7	9	1-2	1-2	9	1-2	1.59 S to N	5-10kts S	AS	589150	789720	586140	789730	589095	789459	81.32				
07/10/01	07:06	194	Beach	7.7	0.3	7.4	6.6	0.6	6.0	7.5	0.9	6.6	39	1-2	1.51 S to N	5-10kts S	AS	503276	797830	503194	798546	502945	797823	100.94				
07/10/01	10:13	195	Beach	8.0	2.8	5.2	3.4	2.9	4.2	1.2	6.8	12	5.6	9	1-2	1.4 S to N	10kts SW	AS	589385	790090	585016	789888	589444	789459	6.00			
07/10/01	13:03	195	Beach	2.4	1.0	1.4	5.0	1.3	3.7	2	6.1	2	11	1	1	10-15 S	NC	590590	798590	503939	798248	502	789451	52.00				
07/10/01	16:23	195	Borrow	8.4	2.3	6.1	1.7	4.7	2	6.1	2	11	1	1	1	10-15 S	NC	590590	798590	503939	798248	502	789451	185.35				
07/10/01	19:23	195	Beach	2.2	2.0	0.2	3.9	1.9	2	1.1	11	1	1	1	1	1-5 S	NC	590590	798590	503939	798248	502	789451	168.27				
07/10/01	22:28	197	Borrow	15	1.5	14.5	1.6	16.2	1.5	15	4	3	1	1	1	5-10kts S	AS	502410	798160	503753	797750	5024	789510	55.49				
07/10/01	12:18	197	Beach	3.8	1.0	2.8	4.2	1.1	3.1	4.2	1.1	3.1	1-2	1-2	5-10 S	AS	589200	789	586318	789923	5890	789370	190.42					
07/10/01	04:03	198	Borrow	5.2	0.3	4.9	5.0	0.9	4.1	8.9	1.0	7.9	9	2-4	10-15 S	AS	500880	798	499307	797770	5008	798047	48.82					
07/11/01	7:10	199	Beach	2.3	2.3	0	3.6	1.0	2.6	9	1-2	1-2	9	1-2	5kts S	AS	589160	789	589095	789459	589095	789459	172					
07/11/01	09:54	199	Borrow	10.4	2.7	7.7	8.9	6.2	2.7	2.2	7.4	4.8	38	1-2	1.65 S to N	5-15kts S	NC	502650	79826	500879	798236	502271	789459	117.39				
07/11/01	13:05	199	Beach	3.9	2.2	1.7	3.6	2.4	1.2	1.2	12	12	12	12	1.61 S to N	5kts SE	NC	591650	79011	588525	790134	591820	789655	139.02				
07/11/01	16:19	20	Borrow	11	2.9	8.3	10	3.3	6.7	10.6	2.9	7.7	39	calm	1.5 S to N	~10kts S	NC	500690	797670	499246	797176	500367	797578	102.39				
07/11/01	19:38	200	Beach	2.1	2.0	0.1	2.7	2.8	-0.1	11	11	11	11	11	calm	1.5 S to N	5kts S	NC	589030	789950	592160	790121	588994	789518	132.16			
07/11/01	22:16	201	Borrow	10.3	2.1	8.2	9.7	2.2	7.5	11.7	2.1	9.6	40	2-3	1.89 S to N	~15kts SW	AS	502810	798048	503902	797294	502509	797967	95.03				
07/12/01	14:20	201	Beach	3.3	1.0	2.3	3.4	1.1	2.3	9	2-3	9	9	2-3	1.92 S to N	~15kts SW	AS	589287	789976	586379	789952	589045	789517	158.20				
07/12/01	04:30	202	Borrow	9.0	0.7	8.3	17.1	1.0	16.1	19.3	0.8	18.5	39	2-3	1.09 S to N	~15kts SW	AS	500410	798160	499572	798339	500082	798061	104.46				
07/12/01	7:28	202	Beach	2.8	1.6	1.2	2.6	1.4	1.2	11	11	11	11	11	calm	2.4 S to N	5kts SE	NC	588660	789960	591790	790175	588993	789450	185.70			
07/12/01	10:05	203	Borrow	8.9	3.1	5.8	7.6	2.0	5.6	10.4	2.8	7.6	38	1-2	1.43 S to N	5-10kts S	NC	502700	798196	500560	798072	502763	798011	59.58				
07/12/01	13:09	203	Beach	2.7	1.8	0.9	2.9	1.7	1.2	10	1-2	10	10	1-2	1.57 S to N	5kts S	NC	589070	789960	585100	789780	588993	789517	142.50				
07/12/01	16:13	204	Borrow	4.2	1.1	3.1	6.8	1.3	5.5	9.3	2.7	6.6	39	2-3	1.0 S to N	5-20kts S	NC	501343	797827	500258	797730	500160	797843	360.70				
07/12/01	19:26	204	Beach	2.8	2.9	-0.1	2.5	2.5	0.0	16	1-2	16	16	1-2	1.6 S to N	8kts SW	MF	588740	790010	586060	790184	588921	789470	173.64				
07/12/01	22:02	205	Borrow	6.5	1.6	4.9	4.6	1.3	3.3	5.8	2.7	3.1	40	2-3	1.25 S to N	15kts SW	MF	502440	797975	504450	798062	502538	798126	54.88				
07/13/01	11:5	205	Beach	2.5	0.9	1.6	2.4	1.4	1.0	16	1-2	16	16	1-2	1.52 S to N	10kts SW	MF	588860	790010	585953	790141	588788	789517	151.90				
07/13/01	04:32	206	Borrow	8.4	1.7	6.7	6.9	1.4	5.5	7.8	1.4	6.4	37	1-2	1.99 S to N	10kts SW	MF	500110	798258	502139	798244	500176	798127	44.72				
07/13/01	7:35	206	Beach	2.7	1.6	1.1	4.0	1.7	2.3	12	1-2	12	12	1-2	1.34 S to N	~5kts SW	NC	588810	789960	585943	790009	589790	789519	113.27				
07/13/01	10:17	207	Borrow	15.8	1.6	14.2	17.8	0.8	17.0	9.6	4.6	5.0	39	calm	1.06 S to N	~10kts SW	NC	502420	798161	504326	798130	502623	797860	110.69				
07/13/01	13:16	207	Beach	2.1	1.2	0.9	2.7	0.9	1.8	10	10	10	10	10	calm	1.36 S to N	15kts S	NC	588970	789850	585901	789860	588444	789519	107.98			
07/13/01	16:39	208	Borrow	13.2	2.1	11.1	11.0	0.7	10.3	14.9	1.3	13.8	37	2-3	1.1 S to N	15kts S	NC	500710	798105	502810	797998	500876	797904	79.48				
07/13/01	19:47	208	Beach	1.9	1.5	0.4	1.5	1.7	-0.2	16	1-2	16	16	1-2	1.07 S to N	10kts NW	MF	588820	789860	585905	790164	588790	789519	104.36				
07/13/01	22:40	209	Borrow	14.3	1.5	12.8	10.2	1.2	9.0	10.1	0.9	9.2	40	2-3	1.8 S to N	15kts SW	MF	502400	798252	503951	798243	502547	798099	64.69				

*

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SECTION 02325

DREDGING

PART 1 GENERAL

1.1 SCOPE

The work covered by this section consists of furnishing all labor, materials, and equipment, and performing all excavation and disposal of all material as specified herein or indicated on the drawings. This scope also includes all necessary measures for protection of the environment. Environmental protection requirements under this contract are as important to overall completion of the work as other technical aspects. Failure to meet the requirements of these specifications for environmental protection may result in work stoppages or termination for default. No part of the time lost due to any such work stoppages shall be made the subject of claims for extensions of time or for excess costs or damages by the Contractor. If the Contractor fails or refuses to promptly repair any damage caused by violation of the provisions of these specifications, the Contracting Officer may have the necessary work performed and charge the cost thereof to the Contractor.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

ENGINEERING MANUALS (EM)

EM 1110-1-1000	(1993) Photogrammetric Mapping
EM 1110-1-1002	(1990) Survey Markers and Monumentation
EM 1110-1-1003	(1996) NAVSTAR Global Positioning System Surveying
EM 1110-1-1004	(1994) Deformation Monitoring and Control Surveying
EM 1110-1-2909	(1998; Chg 2) Geospatial Data and Systems
EM 1110-2-1003	(1994) Hydrographic Surveying

FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS (FBPSM)

FBPSM	Minimum Technical Standards, Chapters 177, 472, 61G17
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TRI-SERVICE STANDARDS (TSS)

TSS	(1999) A/E/C CADD Standards
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1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals having an "FIO" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-18 Records

Notice of Intent to Dredge; FIO.

Prior to commencement of work on this contract, the Contractor shall notify the Commander, Seventh Coast Guard District of his intended operations to dredge and request that it be published in the Local Notice to Mariners. This notification must be given in sufficient time so that it appears in the Notice to Mariners at least two weeks prior to the commencement of this dredging operation. A copy of the notification shall be provided to the COR.

Relocation of Navigation Aids; FIO.

The Contractor shall not remove, change the location of, obstruct, willfully damage, make fast to, or interfere with any aid to navigation. The Contractor shall notify the Commander, Seventh Coast Guard District, Miami, Florida, in writing, with a copy to the Contracting Officer, 30 days in advance of the time he plans to dredge adjacent to any aids which require relocation to facilitate dredging. The Contractor shall contact the U.S. Coast Guard for information concerning the position to which the aids will be relocated. A copy of the notification shall be provided to the COR.

Notification of Discovery of Historical Period Shipwreck Sites; FIO.

The Contractor shall immediately notify the COR if any shipwreck, artifact, or other objects of antiquity that have scientific or historical value, or are of interest to the public, are discovered, located, and/or recovered.

Notice of Need for Dredging Survey; FIO.

The Contractor shall give 10 days advance notice, in writing, to the COR of the need for a pre-dredging survey or after-dredging survey for final acceptance for each acceptance section.

Daily/Monthly Report of Operations; FIO.

The Contractor shall prepare and submit three (3) copies of the Daily Report of Operations, using either ENG Form No. 27A or ENG Form No. 4267, for each dredge and/or unloader working. This report shall be submitted on a daily basis and not in groups (groups = multi-days reports packaged together at one time) except as noted in subparagraph a. below. A copy of these forms are appended to the end of this Section. In addition to the daily report, the Contractor shall prepare a Monthly Report of Operations for each month or partial month's work on either ENG Form No. 27A or ENG Form No. 4267. The monthly report shall be submitted on or before the 7th of each month, consolidating the previous month's work. Upon completion of the job, the Contractor shall submit a consolidated job report, combining the monthly reports. The Contractor shall distribute one copy of each report to the following:

- a. District Engineer; ATTN: CESAJ-EN-C; U.S. Army Engineer District,

Jacksonville, P.O. Box 4970; Jacksonville, Florida 32232-0019. Reports shall be submitted on a monthly basis with daily reports accompanying the monthly report and job report.

b. Quality Assurance Representative (QAR) assigned to the dredge/project.

Additionally, one copy of these shall be maintained by the Contractor on the dredge(s) for the Government's inspection purpose. Further instructions on the preparation of the reports will be furnished at the Preconstruction Conference.

Notice of Misplaced Material; FIO.

The Contractor shall notify the U.S. Coast Guard Marine Safety Office of any misplaced material as stated in the Clause OBSTRUCTION OF NAVIGABLE WATERWAYS of Section 00700 CONTRACT CLAUSES.

1.4 ORDER OF WORK

There is no order of work specified relative to performance of the dredging.

1.5 PUMPING OF BILGES

Contractors are warned that pumping oil or bilge water containing oil into navigable waters, or into areas which would permit the oil to flow into such waters, is prohibited by Section 13 of the River and Harbor Act of 1899, approved 3 March 1899 (30 Stat. 1152; 33 U.S.C. 407). Violation of this prohibition is subject to the penalties under the referenced Acts.

1.6 HISTORICAL PERIOD SHIPWRECK SITES

If any shipwreck, artifact, or other objects of antiquity that have scientific or historical value, or are of interest to the public, are discovered, located, and/or recovered, the Contractor acknowledges that:

- a. The site(s), articles, or other materials are the property of the State of Florida, with title vested in the Department of State, Division of Historical Resource; and that,
- b. He will immediately notify the Contracting Officer.

1.7 UTILITY CROSSINGS

1.7.1 General

It is the Contractor's responsibility to investigate the location of all utility crossings. The Contractor shall take precautions against damages which might result from his operations in the vicinity of the utility crossings. If any damage occurs as a result of his operations, the Contractor will be required to suspend dredging until the damage is repaired and approved by the Contracting Officer. Costs of such repairs and downtime of the dredge and attendant plant shall be at the Contractor's expense.

1.8 PERMITS

The Contractor's attention is directed to the Clause PERMITS AND RESPONSIBILITIES of Section 00700 CONTRACT CLAUSES and the paragraph

PERMITS AND AUTHORIZATIONS of Section 01410 ENVIRONMENT PROTECTION.

1.9 FINAL CLEANUP

Final cleanup, as stated in the paragraph COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK of Section 00800 SPECIAL CONTRACT REQUIREMENTS, shall include the removal of all the Contractor's plant and equipment either for disposal or reuse. Plant and/or equipment and/or materials to be disposed of shall **ONLY** be disposed in a manner and at locations approved by the COR.

Unless otherwise approved by the COR, the Contractor will not be permitted to abandon any equipment in the disposal area or other areas adjacent to the worksite.

a. Failure to promptly remove all plant, pipeline, equipment, and materials upon completion of the dredging will be considered a delay in the completion of the final cleanup and demobilization work. In such case, the Government will exercise its right as stated in Clause DEFAULT (FIXED-PRICE CONSTRUCTION) of Section 00700 CONTRACT CLAUSES to remove any plant and/or equipment and/or materials at the Contractor's expense.

1.10 MEASUREMENT

Refer to Section 01270 MEASUREMENT AND PAYMENT.

1.11 PAYMENT

Refer to Section 01270 MEASUREMENT AND PAYMENT.

1.12 WORK VIOLATIONS

Work done in violation of these specifications or a verbal or written stop order of the Contracting Officer or his Authorized Representative will be considered as unsatisfactory progress for purposes of progress payments in accordance with Clause PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS of Section 00700 CONTRACT CLAUSES.

PART 2 PRODUCTS

2.1 CHARACTER OF MATERIALS

Cuts: BV-1, BV-2, BV-3, BV-4, BV-5, BV-6, BV-7, BV-8, and BV-9.

The materials to be excavated from the Canal consist of the shoaling that has occurred since the channel was last dredged. Thirty-eight core borings were drilled in 1997 to document the shoal deposits. Thirty-five core borings were drilled in calendar year 2000 primarily to document the materials in the side slopes.

The history of the canal construction and previous maintenance events is uncertain. We believe the canal was originally constructed to elevation -12 and was originally constructed 125 feet wide with 3:1 side slopes. The core borings indicate that most of the Canal was originally excavated in quartz sand (SP-SM) containing variable amounts of shell and sand sized shell fragments. Excavation outside the excavation limits will encounter firm quartz sands with shell and some firm clayey materials.

The shoal materials are primarily soft to very soft clays, silts, clayey sands, and silty sands. The sands are composed of fine to medium quartz

sands with variable amounts of shell and shell fragments. The shell is sand sized to gravel sized. Currents in portions of the canal create coarser deposits of sand and shell that will be encountered during dredging.

Core boring logs are included in the specifications. (Appended to the end of SECTION 01000: GENERAL REQUIREMENTS): CB-BVM97-1 through 38 and CB-IWW00-BV4-1 through BC-IWW00-BV9-35.

Rock. Excavation of insitu rock, if encountered will not be required; but. its location shall be reported to the Contracting Officer.

PART 3 EXECUTION

3.1 NOTIFICATION OF COAST GUARD

3.1.1 Navigation Aids

Navigation aids located within or near the areas required to be dredged will be removed, if necessary, by the U.S. Coast Guard in advance of dredging operations. The Contractor shall not remove, change the location of, obstruct, willfully damage, make fast to, or interfere with any aid of navigation.

3.1.2 Dredging Aids

The Contractor shall obtain approval from the U.S. Coast Guard for all buoys, dredging aid markers to be placed in the water, and dredging aid markers affixed with a light prior to the installation. Dredging aid markers and lights shall not be colored or placed in a manner that they will obstruct or be confused with navigation aids.

3.2 WORK AREA

The Contractor will be permitted to exclude the public from the work areas in the immediate vicinity of his dredging, transporting, and disposal operations. Enforcement shall be the Contractor's responsibility at no additional cost to the Government. The enforcement shall be coordinated with local enforcement agencies and will be subject to approval of the COR.

3.2.1 Access

The Contractor shall be responsible for providing and maintaining access necessary for his equipment and plant to and from the work site, mooring area, and disposal area. The Contractor shall ascertain the environmental conditions which can affect the access such as climate, winds, currents, waves, depths, shoaling, and scouring tendencies.

3.2.2 Protection of Existing Waterways

The Contractor shall conduct his operations in such a manner that material or other debris are not pushed outside of dredging limits or otherwise deposited in existing side channels, basins, docking areas, or other areas being utilized by vessels. The Contractor will be required to change his method of operations as may be required to comply with the above requirements. Should any bottom material or other debris be pushed into areas described above, as a result of the Contractor's operations, the same must be promptly removed by and at the expense of the Contractor to the satisfaction of the COR.

3.2.3 Adjacent Property and Structures

Any damage to private or public property or structures resulting from the disposal or dredging operations shall be repaired promptly by the Contractor at his expense. Any damage to structures as a result of Contractor's negligence will result in suspension of dredging and require prompt repair at the Contractor's expense as a prerequisite to the resumption of dredging.

3.2.4 Subaqueous Cable Crossings

The Contractor shall be responsible for verifying the locations and depths of all utility crossings and take precautions against damages which might result from his operations, especially the sinking of dredge spuds and/or anchors into the channel bottom, in the vicinity of utility crossings. If any damage occurs as a result of his operations, the Contractor will be required to suspend dredging until the damage is repaired and approved by the COR. Costs of such repairs and downtime of the dredge and attendant plant shall be at the Contractor's expense.

3.3 DISPOSAL OF EXCAVATED MATERIAL

3.3.1 General

Material excavated shall be transported to and deposited in the disposal areas designated on the drawings. The average distance to which the material will have to be transported is approximately 8.5 miles and the maximum distance will be approximately 10.5 miles.

3.3.2 Upland Disposal Area

3.3.2.1 Maximum Height of Dredged Materials

The Contractor shall not allow water to pond higher than 2.0 feet below the top on the exterior dike of the upland disposal area. However, the Contractor may temporarily stack dredged material within the disposal area to higher elevations during the dredging process provided that such stacked material is not placed within 20 feet of any dike. Upon completion of dredging, the Contractor shall degrade stacked material and redistribute it within the disposal area so that no dredged material has an elevation higher than 2.0 feet below the top of the exterior dike unless directed otherwise by the COR.

3.3.2.2 Location of Pipeline Discharge

Dredged material shall be discharged into the disposal area at a location or locations that provides for a maximum flow distance from the point of discharge to the weirs. In addition, the dredged material shall be discharged into the disposal area in such a manner that the existing disposal area dikes are not scoured or damaged. If any such scour or damage occurs, the dikes shall be repaired to their original pre-award condition by the Contractor at no additional cost to the Government.

3.3.2.3 Disposal Area Drainage

The Contractor shall, if necessary, excavate and maintain ditches to drain all low areas in the dredged material and disposal area to the weirs. The ditches shall be of adequate number and size to eliminate all ponding of water within the limits of the disposal area.

a. Drainage of areas adjacent to the diked disposal area shall not be blocked or impaired in any manner by the Contractor's operations. The Contractor shall excavate and maintain ditches necessary to prevent blocking or impairing drainage. The ditches shall be of adequate number and size to eliminate all blockage or impairment of drainage adjacent to the diked disposal area.

3.3.2.4 Weir Outfall Connection

The Contractor shall furnish and install a temporary watertight pipeline from the existing weir outfall, through the existing railroad underpass sleeve, and into the Indian River. The temporary pipeline shall be the property of the Contractor and shall be removed by the Contractor at the completion of disposal area operations. The pipeline shall be of sufficient size to handle the effluent discharge from the disposal area as well as storm water runoff from the interior of the disposal area. The contractor shall make a watertight connection to the existing ~~42" corrugated aluminum~~ 36" HDPE weir outfall pipe. The Contractor shall take whatever measures are necessary to prevent scour and re-suspension of river bottom material that may be caused by discharge from the pipeline into the Indian River.

3.3.2.5 Disposal Area Drawdown

Upon completion of dredging operations, the Contractor shall continue to monitor and operate the disposal area for a minimum of 15 days for the purpose of water level drawdown. During this period the Contractor shall monitor and control water flow over the weirs to achieve drawdown of water level as rapidly as possible while still meeting all requirements specified in SECTION 01410 "ENVIRONMENT PROTECTION" and/or SECTION 01411 "TURBIDITY AND DISPOSAL MONITORING".

3.3.3 Overflow and Spillage

Water and dredged materials shall not be permitted to overflow or spill out of barges or dump scows or hopper dredges during transport to the disposal site(s). Failure to repair leaks or change the method of operation which is resulting in overflow or spillage will result in suspension of dredging operations and require prompt repair or change of operation to prevent overflow or spillage as a prerequisite to the resumption of dredging.

3.3.4 Placing of Dredged Material

During placement of dredged material in the disposal areas, the Contractor will be required to provide constant radio contact between the dredge and the disposal areas. This will enable the Contractor's personnel at the disposal areas to immediately notify the dredge in the event of dike or pipeline failure. In the event of dike or pipeline failure, the dredging operations shall be immediately suspended and require prompt repair of the dike or pipeline as a prerequisite to the resumption of dredging.

3.3.5 Dredge Pipelines

3.3.5.1 Dredge Discharge Pipeline

The Contractor shall plainly mark the pipeline access routes with conspicuous stakes, targets and/or buoys to be maintained throughout the contract operations. A tight dredge discharge pipeline shall be maintained

to prevent spilling of dredged material or dredge water outside of the disposal area. The Contractor shall provide and maintain radio communication between the dredge and the disposal areas and the dredge and the COR. The pipeline shall be inspected at least twice daily for leaks. Failure to immediately repair leaks in the discharge pipeline will result in suspension of dredging operations and require prompt repair of pipeline as a prerequisite to the resumption of dredging. Any damage to private or public property resulting from the Contractor's operations shall be repaired by the Contractor at his expense.

3.3.5.2 Submerged Pipeline

In the event the Contractor elects to submerge his pipeline, the pipeline shall rest on the bottom, and the top of the submerged pipeline and any anchor securing the submerged pipeline shall be no higher than the required project depth for the channel in which the submerged pipeline is placed. Should the Contractor elect to use a pipeline material which is buoyant or semi-buoyant, such as PVC pipe or similar low density materials, the Contractor shall securely anchor the pipeline to prevent the pipeline from lifting off the bottom under any conditions. The Contractor shall make daily underwater inspections of the submerged pipeline to ensure buoyancy has not loosened the anchors. The Contractor shall remove all anchors when the submerged pipeline is removed. The location of the entire length of submerged pipeline shall be marked with signs, buoys, lights, and flags conforming to U.S. Coast Guard regulations.

3.3.5.3 Floating Pipeline

Should the Contractor's pipeline not rest on the bottom, it will be considered a floating pipeline and shall be visible on the surface and clearly marked. In no case will the Contractor's pipeline be allowed to fluctuate between the surface and the bottom, or lie partly submerged. Lights shall be installed on the floating pipeline as required in paragraph SIGNAL LIGHTS of Section 00800 SPECIAL CONTRACT REQUIREMENTS. The lights shall be supported either by buoys or by temporary piling, provided by the Contractor and approved by the COR. Where the pipeline does not cross a navigable channel, the flashing yellow all-around lights shall be spaced not over 200 feet apart, unless closer spacing is required by U.S. Coast Guard personnel, in which case the requirements of the U.S. Coast Guard shall govern, at no additional cost to the Government.

3.3.6 Booster Pumps

Any booster pumps installed by the Contractor shall be located at least 300 feet from any residential-type building or house. Booster pumps shall be positioned and anchored in a manner that causes the least impact to seagrasses. Impacts from anchoring should be considered as well as impacts caused by shading or casting of a shadow. If practicable, booster pumps shall be positioned so that no shadows are cast on seagrass beds.

3.3.7 Misplaced Materials

Materials deposited outside of the disposal areas will be classified as misplaced material and will result in a suspension of dredging operations and require the removal of such materials as a prerequisite to the resumption of dredging. In addition, the Contractor must notify the COR and the Environmental Protection Agency within 24 hours of a misplaced dump or any other violation of the Site Monitoring and Management Plan for Fernandina ODMDS. Corrective actions must be implemented by the next dump

and the COR must be informed of actions taken.

3.4 REQUIRED DEPTH, ALLOWABLE OVERDEPTH, AND SIDE SLOPES

3.4.1 Required Depth

The material actually removed from within the specific areas to be dredged to a depth of not more than the required depth shown on the drawings will be estimated and paid for in accordance with the provisions contained in the paragraphs MEASUREMENT and PAYMENT above.

3.4.2 Allowable Overdepth

To cover the inaccuracies of the dredging process, material actually removed from the specified areas to be dredged, to a depth below the required depth of not more than the allowable overdepth shown on the drawings, will be measured and paid for in accordance with the provisions contained in the paragraphs MEASUREMENT and PAYMENT above.

3.4.3 Side Slopes

Side slopes may be formed by box cutting or dredging along the side slope. Material actually removed, within the limits approved by the COR, to provide for final side slopes not flatter than that shown on the contract drawings, but not in excess of the amount originally lying above this limiting side slope, will be measured and paid for in accordance with the provisions contained in the paragraphs MEASUREMENT and PAYMENT above. Such amount will be estimated and paid for whether dredged in original position or by box cut dredging whereby a space is dredged below the allowable side slope plane on the bottom of the slope for upslope material capable of falling into the cut. End slopes and transition slopes will not be estimated or paid for under this contract. In such cases, a 0 horizontal on 1 vertical will be used with no upslope allowance provision applied outside the required prism.

3.4.4 Excessive Dredging

Material taken from beyond the limits as described in subparagraphs "Allowable Overdepth" and "Side Slopes" above, will be deducted from the total amount dredged as excessive overdepth dredging, or excessive side slope dredging, for which payment will not be made. Nothing herein shall be construed to prevent payment for the removal of shoals performed in accordance with the applicable provisions of the paragraphs FINAL EXAMINATION AND ACCEPTANCE or SHOALING of Section 01000 GENERAL REQUIREMENTS.

3.5 SURVEYS

3.5.1 General

The COR shall be notified, in writing, 10 days in advance of the need for pre-dredging and after-dredging surveys. Surveys will be performed in accordance with the paragraph QUANTITY SURVEYS of Section 00800 SPECIAL CONTRACT REQUIREMENTS; paragraph LAYOUT OF WORK of Section 01000 GENERAL REQUIREMENTS; Section 01451 CONTRACTOR QUALITY CONTROL; EM's EM 1110-1-1000, EM 1110-1-1002, EM 1110-1-1003, EM 1110-1-1004, EM 1110-1-2909, and EM 1110-2-1003; FBPSM; and, TSS. A copy of the EM's can be downloaded from the following website:
<http://www.usace.army.mil/inet/usace-docs/eng-manuals/em.htm>. A copy of

the TSS can be downloaded from the following website:
<http://tsc.wes.army.mil>.

3.5.2 Contractor Representative

All in-place measurement surveys and final acceptance sweep surveys will be performed with a representative of the Contractor on board the Government platform during the full execution of the survey. No in-place measurement or final acceptance sweep survey will be performed without a representative of the Contractor on board the survey vessel. The Contractor's representative shall be fully knowledgeable in offshore construction subsurface surveying procedures, techniques, equipment, and horizontal and vertical calibration methods, and state-of-the-art horizontal and vertical accuracy limitations. The Contractor's representative shall observe and review, in progress, the adequacy and accuracy of the survey for in-place payment purposes, and for the potential existence of collusion, fraud, or obvious error in the data.

3.5.3 Survey Certification

a. Immediately upon completion of any survey, the Contractor's representative shall, based on his on-site review of the survey execution, determine that the survey contains no evidence of collusion, fraud, obvious error, and that subsequent horizontal and vertical corrections are accurately annotated on the subsurface record.

b. The Contractor's authorized representative shall bring aboard the survey vessel a blank copy of the Certification Statement and shall attest to an acceptable survey by signing the Certification Statement before leaving the vessel. Sample copy of the Certification Statement is appended to the end of Section 02325 DREDGING.

c. In the event the Contractor's authorized representative observes (and quantifies) specific documentary evidence of either fraud, collusion, or obvious error, the survey will be immediately rerun. Resurveys will totally supersede any previously run survey and will be run over the full reach of any particular Acceptance section.

d. If acceptability is not acquired after performing one resurvey of an Acceptance Section, a meeting shall be held between the Contractor and the COR to expeditiously resolve the issue causing rejection of the survey. Contractor equipment and personnel standby time to resolve acceptability of the survey shall be at the Contractor's expense.

e. In no case shall a previously unacceptable survey be later judged acceptable by the Contractor; unless such a reassessment/reevaluation is performed within 24 hours after the original survey, and prior to initiating any resurvey action based upon identifiable collusion, fraud, or obvious error.

f. Should the Contractor or his authorized representative refuse to certify to the acceptability of a survey for contract payment without identifiable collusion, fraud, or obvious error, then the following actions will follow:

- (1) Preconstruction (pre-dredging) Survey

Excavation shall not commence until representatives of the Contractor and COR have met and resolved the basis for refusal of certification. Should

the Contractor commence excavation prior to obtaining an acceptable survey, he shall be liable for any excavation performed. If a resurvey is performed, and accepted, prior excavation will not be measured, estimated, or paid for.

(2) Post-construction (after-dredging) Survey

The 3 week survey window allowed under paragraph MEASUREMENT above will be indefinitely extended until a final survey is accepted. Any material accretion which might occur due to such a time extension will neither be measured, estimated, or paid for.

(3) Refusal to Certify

Contractor equipment and personnel standby time to resolve his refusal to certify to the acceptability of a survey when there is no identifiable collusion, fraud, or obvious error shall be at the Contractor's expense and resultant delays shall not be the basis for time extensions of the contract.

g. Intermediate surveys taken between the pre-dredging and post-dredging surveys will not be considered for the purposes of determining quantities for final payment and acceptance of the area dredged.

3.6 NOISE CONTROL

All hauling and excavating equipment and dredges used on this work shall be equipped with satisfactory mufflers or other noise abatement devices. The Contractor shall conduct his operations so as to comply with all Federal, State and local laws pertaining to noise.

3.7 DAILY REPORT OF OPERATIONS

See APPENDIX 02325-A at the end of this Section (4 pages).

3.8 CERTIFICATION STATEMENT

See APPENDIX 02325-B at the end of this Section (1 page).

-- End of Section --