



RFP No. DACW17-00-R-0025

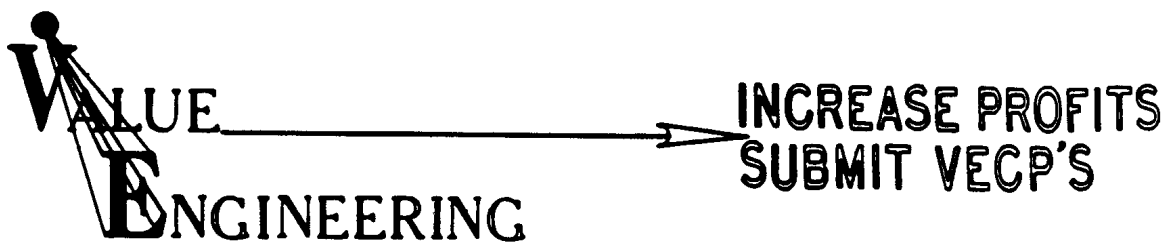
US Army Corps  
of Engineers  
Jacksonville District

---

# Modifications to Sunny Isles Segment And Beach Renourishment at Miami Beach

## Shore Protection Project, Dade County, Florida

### Construction Solicitation and Specifications



06 July 2000

---

2. AMENDMENT/MODIFICATION NO. 0001	3. EFFECTIVE DATE 07/31/00	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
---------------------------------------	-------------------------------	----------------------------------	--------------------------------

6. ISSUED BY CODE	7. ADMINISTERED BY (If other than Item 6) CODE
JACKSONVILLE DISTRICT OFFICE U.S. ARMY CORPS OF ENGINEERS P.O. BOX 4970 JACKSONVILLE, FL 32232-0019 KATHIE DUKE 904-232-3713	ATLANTIC COAST AREA OFFICE U.S. ARMY CORPS OF ENGINEERS ATTN: CESAJ-CO-P, BLDG 738 PATRICK AFB, FL 32925-7478

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)	(✓)	9A. AMENDMENT OF SOLICITATION NO. DACW17-00-R-0025
	(X)	9B. DATED (SEE ITEM 11) 07/06/00
		10A. MODIFICATION OF CONTRACTS/ORDER NO.
		10B. DATED (SEE ITEM 13)

CODE	FACILITY CODE	<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>
------	---------------	--

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers tended.  is extended,  is not extended.

Offers 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 1 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  is not,  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.)

**MODIFICATIONS TO SUNNY ISLES SEGMENT, SHORE PROTECTION PROJECT, DADE COUNTY, FLORIDA**

Any enclosures accompanying this amendment should be inserted in the plans and/or specifications as applicable. All superseded materials should be removed or adequately marked to indicate that they have been superseded.

Proposal Due Date remains 08/15/00 at 4:00 p.m.

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  <i>(Signature of person authorized to sign)</i>	15C. DATE SIGNED
	16B. UNITED STATES OF AMERICA BY <i>(Signature of Contracting Officer)</i>
	16C. DATE SIGNED

SF 30 CONTINUATION SHEET

SPECIFICATIONS: Specifications for this project have been updated on this CD.

A. Asterisks and underlined text or deletions with line/cross-outs appear where revisions have been made to the text on the enclosed revised pages 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, underlining or line/cross-outs.

SECTION 00010 - Delete pages 00010-3 and 00010-7 thru 10 and replace with revised attached pages.

SECTION 02278 - Delete pages 02278-11 and 02278-12 and replace with revised attached pages.

DRAWING CHANGES: D.O. File No. 24-37-823 dated April 1999.

Delete Dwg. Nos. 2/6 and 11/2 and replace with revised attached drawings.

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>			1. CONTRACT ID CODE	PAGE OF PAGES 1   2	
2. AMENDMENT/MODIFICATION NO. 0002	3. EFFECTIVE DATE 08/07/00	4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
6. ISSUED BY CODE		7. ADMINISTERED BY (If other than Item 6) CODE			
JACKSONVILLE DISTRICT OFFICE U.S. ARMY CORPS OF ENGINEERS P.O. BOX 4970 JACKSONVILLE, FL 32232-0019 KATHIE DUKE 904-232-3713		ATLANTIC COAST AREA OFFICE U.S. ARMY CORPS OF ENGINEERS ATTN: CESAJ-CO-P, BLDG 738 PATRICK AFB, FL 32925-7478			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)			<input checked="" type="checkbox"/>	9A. AMENDMENT OF SOLICITATION NO. DACW17-00-R-0025	
			<input checked="" type="checkbox"/>	9B. DATED (SEE ITEM 11) 07/06/00	
				10A. MODIFICATION OF CONTRACTS/ORDER NO.	
				10B. DATED (SEE ITEM 13)	
CODE	FACILITY CODE				

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers tended.  is extended,  is not ex-

Offers 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 1 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  is not,  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.)**

**MODIFICATIONS TO SUNNY ISLES SEGMENT, SHORE PROTECTION PROJECT, DADE COUNTY, FLORIDA**

Delete the existing clause 52.228-15, Performance and Payment Bonds - Construction (Sep 1996) and replace with the attached revised clause dated (July 2000)

**Pen and Ink Changes:**  
 Standard Form 1442, Block 13A - Proposal Due Date is being extended to 08/25/00 at 4:00 p.m.  
 Section 02391, Para 3.4.7 - Delete the 2nd sentence, which begins with "At the fill.....", in its entirety.

This amendment is being issued on the web site only.

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  <i>(Signature of person authorized to sign)</i>		16B. UNITED STATES OF AMERICA  BY _____ <i>(Signature of Contracting Officer)</i>	
15C. DATE SIGNED		16C. DATE SIGNED	

SECTION 00700, Contract Clauses

52.228-15 Performance and Payment Bonds--Construction (July 2000)

(a) *Definitions.* As used in this clause--

"Original contract price" means the award price of the contract; or, for requirements contracts, the price payable for the estimated total quantity; or, for indefinite-quantity contracts, the price payable for the specified minimum quantity. Original contract price does not include the price of any options, except those options exercised at the time of contract award.

(b) *Amount of required bonds.* Unless the resulting contract price is \$100,000 or less, the successful offeror shall furnish performance and payment bonds to the Contracting Officer as follows:

(1) *Performance bonds (Standard Form 25).* The penal amount of performance bonds at the time of contract award shall be 100 percent of the original contract price.

(2) *Payment Bonds (Standard Form 25-A).* The penal amount of payment bonds at the time of contract award shall be 100 percent of the original contract price.

(3) *Additional bond protection.* (i) The Government may require additional performance and payment bond protection if the contract price is increased. The increase in protection generally will equal 100 percent of the increase in contract price.

(ii) The Government may secure the additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(c) *Furnishing executed bonds.* The Contractor shall furnish all executed bonds, including any necessary reinsurance agreements, to the Contracting Officer, within the time period specified in the Bid Guarantee provision of the solicitation, or otherwise specified by the Contracting Officer, but in any event, before starting work.

(d) *Surety or other security for bonds.* The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, individual sureties, or by other acceptable security such as postal money order, certified check, cashier's check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the *Federal Register* or may be obtained from the:

U.S. Department of Treasury  
Financial Management Service  
Surety Bond Branch  
401 14th Street, NW, 2nd Floor, West Wing  
Washington, DC 20227.

(e) *Notice of subcontractor waiver of protection (40 U.S.C. 270b(c)).* Any waiver of the right to sue on the payment bond is void unless it is in writing, signed by the person whose right is waived, and executed after such person has first furnished labor or material for use in the performance of the contract.

(End of clause)

BM-DC

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE OF PAGES

1 8

2. AMENDMENT/MODIFICATION NO.

0003

3. EFFECTIVE DATE

08/16/00

4. REQUISITION/PURCHASE REQ. NO.

5. PROJECT NO. (If applicable)

6. ISSUED BY

CODE

7. ADMINISTERED BY (If other than Item 6)

CODE

JACKSONVILLE DISTRICT OFFICE
U.S. ARMY CORPS OF ENGINEERS
P.O. BOX 4970
JACKSONVILLE, FL 32232-0019
KATHIE DUKE 904-232-3713

ATLANTIC COAST AREA OFFICE
U.S. ARMY CORPS OF ENGINEERS
ATTN: CESAJ-CO-P, BLDG 738
PATRICK AFB, FL 32925-7478

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)

(v)

9A. AMENDMENT OF SOLICITATION NO.

DACW17-00-R-0025

X

9B. DATED (SEE ITEM 11)

07/06/00

10A. MODIFICATION OF CONTRACTS/ORDER NO.

10B. DATED (SEE ITEM 13)

CODE

FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers tended.

X

is extended,

is not ex-

Offers 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 1 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.

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 is not, 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.)

MODIFICATIONS TO SUNNY ISLES SEGMENT, SHORE PROTECTION PROJECT, DADE COUNTY, FLORIDA

Any enclosures accompanying this amendment should be inserted in the plans and/or specifications as applicable. All superseded materials should be removed or adequately marked to indicate that they have been superseded.

Proposal Due Date is being extended to 08/31/00 at 4:00 p.m.

This amendment is being issued via E-Mail and posted on the Jacksonville District's web site.

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

15C. DATE SIGNED

16B. UNITED STATES OF AMERICA

16C. DATE SIGNED

(Signature of person authorized to sign)

BY

(Signature of Contracting Officer)

SF 30 CONTINUATION SHEET

SPECIFICATIONS: Make the following pen and ink changes:

STANDARD FORM 1442, BLOCK 13A - Proposal Due Date is being extended to 08/31/00 at 4:00 p.m.

SECTION 00010 - Add the following to the end of page 00010-3:

NOTICE: (SEE SECTION 01000, PARAGRAPH 1.20, PAGE 16, FOR DETAILS ON THE NTP DATES and SECTION 02391, PARAGRAPH 1.3 FOR DETAILS ON THE ORDER OF WORK)

The Government intends to award and issue the NTP for the option work at Miami Beach as the first order of work if environmental clearances are obtained prior to 15 February 2001. Issuance of the NTP for the base work, Sunny Isles, is not anticipated until Spring 2001. This will target commencement of work for the Sunny Isles base work in the April time frame. Beach fill north of the pipeline corridor at Sunny Isles, including Golden Beach, shall be constructed first. Immediately following completion of sand placement on the north segment (Golden Beach) of Sunny Isles, the Contractor will begin construction of the offshore breakwaters. No sooner than 30 days after completion of the breakwaters, the Contractor is expected to return to the northern end of the project and place additional material as needed to reshape the shoreline behind the breakwaters back to the specified template.

SECTION 00100, SOURCE SELECTION INFORMATION, Delete Paragraph 3.2.1, PERFORMANCE SCHEDULE in its entirety and substitute the following:

3.2.1. Performance Schedule. The offeror must submit a completed construction progress chart demonstrating how the offeror plans to complete the work in accordance with the construction sequence as described in the Plans and Specifications. The offered construction schedule will be incorporated into the contract and will become the required performance period for all contract purposes including assessment of liquidated damages. The offeror's schedule will be used as part of the evaluation in all areas including the technical approach. Please refer to Section 01000, Paragraph 1.20, NOTICE TO PROCEED and Section 02391, Paragraph 1.3, ORDER OF WORK. Offeror's presentation needs to address both possible "Orders of Work", taking into account the considerations and requirements listed in these sections.

SECTION 00800, In the clause, COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK, change "275" to read "245".

SECTION 01000 - Delete paragraph 1.20, NOTICE TO PROCEED in its entirety and substitute the following:

1.20 NOTICE TO PROCEED

The Notice to proceed (NTP) will be issued to the Contractor in two (2) parts and only 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 CO/COR 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 CO/COR, the CO/COR 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 CONTRACTOR CLAUSES and the Contractor shall not be entitled to pay adjustments as a result of the stop work order.

At this time, environmental clearances have not been obtained for the option work at Miami Beach, but, clearances are expected prior to 30 November 2000. The Government's preferred order of work is to perform the option work at Miami Beach first and the base work at Sunny Isles, to include the breakwaters, second. If the Government does not receive the environmental clearances in sufficient time to perform the Miami Beach work as the first order of work, the Government retains the right to exercise the option at the conclusion of the Sunny Isles work.

Issuance of the First Partial NTP:

First Partial NTP for performance of the pre-condition surveys on the operational boxes located at Miami Beach and Sunny Isles will be issued at the conclusion of the preconstruction conference. The pre-condition survey report on the operational boxes must be provided to and approved by the COR 30 days prior to mobilization of equipment to each area.

Issuance of Second Partial NTP:

The performance period as specified in the Clause COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK of Section 00800 SPECIAL CONTRACT REQUIREMENTS is applicable to the issuance of the second partial NTP.



If Environmental Clearances are received prior to 15 February 2001:

The Government anticipates issuing the second partial NTP for the Miami Beach work no earlier than 30 days after the Preconstruction Conference and no later than 15 February 2001. Within these dates, the Government agrees to allow the contractor to select the date of issuance of the NTP. The Government's intention for allowing the contractor to select the date of NTP is to accommodate the dredge size intended for use, allowing dredging to start and finish at Miami Beach and immediately begin work at Sunny Isles, bearing in mind that the Sunny Isles work may not begin until 1 April 2001. The Contractor must notify the Contracting Officer prior to completion of the Preconstruction Conference of the desired date for NTP. If the Contractor fails to comply with any contractual prerequisites for issuing NTP (e.g., failure to provide acceptable bonds, failure to provide required plans) and such failure delays the issuance of the NTP, the Government will be released from this agreement at no cost to the Government.

If Environmental Clearances are not received prior to 15 February 2001:

Second partial NTP will be issued for Sunny Isles no earlier than 1 March 2001. No activity is allowed on Sunny Isles prior to 1 April 2001. If environmental clearances are received prior to demobilization of the Contractor's equipment from Sunny Isles, the Government reserves the right to exercise the Miami Beach Option work to commence after completion and acceptance of the Sunny Isles work.

SECTION 01410 - Paragraph 1.9., PAYMENT, subparagraph b., in line 2 of the text delete the word "unit" and insert in lieu thereof "lump sum".

SECTION 01411 - Paragraph 3.1.2.1, STATION DESCRIPTIONS. Add the following paragraph c. behind paragraph b.:

c. Breakwater Sites (During Excavation Only)

(1) Turbidity samples shall be taken at a point no more than 150 meters downcurrent from the point of excavation within the densest portion of any visible turbidity plume. Samples shall be collected from the surface and 1-meter above the bottom.

(2) A background turbidity sample shall be collected at a point approximately 500 meters downcurrent from the point of excavation in the opposite direction of the prevailing current flow, clearly outside of the influence of any turbidity plume. Samples shall be collected from the surface and 1-meter above the bottom.

SECTION 01411 - Paragraph 3.1.2.2, COLLECTION FREQUENCY. Add the following paragraph c. behind paragraph b.:

c. Breakwater Excavation Sites. Breakwater excavation site and background samples shall be collected four times daily at least 4 hours apart.

SECTION 02278 - Paragraph 2.1.1.3, Stone Source Acceptance, line 3 of the Stone Acceptance Criteria Table, Sulfate Soundness, delete "5%" and insert in lieu thereof "12%".

SECTION 02391 - Paragraph 1.3, ORDER OF WORK, delete paragraph in its entirety and substitute the following:

### 1.3 ORDER OF WORK

a. This solicitation is being selected as a Best Value to the Government using Oral Presentations. In accordance with Section 00100, SOURCE SELECTION INFORMATION, Paragraph 3.2.1, Performance Schedule, the Contractor must submit a completed construction progress chart demonstrating how the offeror plans to complete the work. Using the following, the Contractor is to present his/her plans for performing the work, adhering to all considerations/requirements listed in paragraph c. below and taking into consideration whether the environmental clearances are received or not. (Refer to Section 00100, Source Selection Information, Paragraph 3.2.1)

b. The Government intends to award and issue the Notice to Proceed (NTP) for the Option work at Miami Beach as the first order of work if environmental clearances are obtained prior to 15 February 2001. Issuance of the NTP for the Base work, Sunny Isles, is not anticipated until spring 2001. This will target commencement of work for the Sunny Isles Base work in the April time frame. (See Section 01000, Paragraph 1.20, NOTICE TO PROCEED)

If Environmental Clearances are not received prior to 15 February 2001, the second partial NTP will be issued for Sunny Isles no earlier than 1 March 2001. No activity is allowed on Sunny Isles prior to 1 April 2001. If environmental clearances are received prior to demobilization of the Contractor's equipment from Sunny Isles, the Government reserves the right to exercise the Miami Beach Option work to commence after completion and acceptance of the Sunny Isles work. (See Section 01000, paragraph 1.20, NOTICE TO PROCEED)

c. In prosecution of the work, the Contractor must comply with the following conditions/requirements:

- No activity can occur on the beach at Sunny Isles prior to 1 April 2001.
- Only one mobilization can take place at each site.
- Once pipeline has been placed, it must stay in place until work is completed and accepted.
- Due to the Government allowing the Contractor to select an NTP date, standby costs associated with the transition between Miami Beach and Sunny Isles are not authorized.
- Beach fill north of the pipeline corridor at Sunny Isles, including Golden Beach, shall be constructed first. Immediately following completion of sand placement on the north segment of Sunny Isles, including Golden Beach, the contractor shall begin construction of the offshore breakwaters. All pipe north of the pipeline corridor must be removed upon completion of initial beach fill. Construction of the breakwaters shall proceed continuously without interruption until completion.
- Beach fill south of the pipeline corridor and breakwaters construction may be done concurrently.
- No sooner than 30 days after completion of the breakwaters, the Contractor is expected to return to the north end of the project and place additional material as needed to reshape the shoreline behind the breakwaters back to the specified template.

d. Completion of the beach fill at Sunny Isles and Golden Beach will be viewed in terms of the segments located north and south of the pipeline corridor (Y=589,295).

1.3.1 North of the Pipeline Corridor (Y=589,295)

1.3.1.1 Beach Fill North of the Pipeline Corridor (Y=589,295)

Construction of the beach north of the pipeline corridor shall begin at the pipeline corridor and proceed continuously without intervening gaps until completion except as noted. In order to reduce beach fill losses in the vicinity of the proposed breakwaters, the Contractor shall only place beach fill north of the pipeline corridor during the spring and summer months. Specifically, in the area north of the pipeline corridor, the Contractor shall not be allowed to commence filling operations prior to 1 April.

#### 1.3.1.2 Breakwaters Construction

Immediately following completion of the beach fill north of the pipeline corridor (Y=589,295), the Contractor shall begin construction of the breakwaters. Construction of the breakwaters shall proceed continuously without interruption until completion.

#### 1.3.2 South of the Pipeline Corridor (Y=589,295)

Construction of the beach south of the pipeline corridor may commence following completion of the north segment. Once filling operations have started, the Contractor shall proceed continuously without intervening gaps.

#### 1.3.3 Beach Restoration After 30-Day Stabilization Period

After completion of the breakwaters, the Contractor shall wait a minimum of 30 days for the beach fill to stabilize north of the pipeline corridor. After the 30-day beach stabilization period and upon the direction of the CO/COR, the Contractor shall survey the beach, from 1,000 feet north of Monument R-7 to Monument R-9. This information will be used by the CO/COR to determine if the original construction section requires more fill. The Contractor shall add fill as necessary at the direction of the CO/COR to restore this segment of the beach to the previously constructed section.

#### 1.3.4 Miami Beach

The Contractor may begin placing fill on the beach at any point as long as the operation is continuous without intervening gaps.

DRAWING CHANGES: D.O. File No. 24-37-823 dated April 1999.

DESCRIPTIVE CHANGES. The following are descriptive changes to the drawings. Drawings should be adequately marked to indicate that they have been changed. Drawings furnished to the Contractor in accordance with the Clause CONTRACT DRAWINGS, MAPS, AND SPECIFICATIONS of Section 00700 CONTRACT CLAUSES will be revised to reflect the revisions made descriptively herein.

On Dwg No. 5/2, Zone E-1, Add Note No. 3:

"3. ANY MATERIAL EXCAVATED TO CONSTRUCT THE BREAKWATERS SHALL BE SPREAD UNIFORMLY WITHIN THE CONTRACTOR'S WORK AREA LANDWARD OF THE BREAKWATERS."

Revision Block should read: "REVISED TO CONFORM TO AMENDMENT NO. 0003."

On Dwg. Nos. 2/2 thru 2/7, the Erosion Control Line (ECL) points of intersection were mislabeled. The ECL should be annotated from P.I. 1 to P.I. 24 from south to north. Therefore, make the following pen and ink changes:

Dwg. No.	Change	To
2/2	P.I. 1	P.I. 24
	P.I. 2	P.I. 23
	P.I. 3	P.I. 22
2/3	P.I. 4	P.I. 21
	P.I. 5	P.I. 20
	P.I. 6	P.I. 19
	P.I. 7	P.I. 18
	P.I. 8	P.I. 17
2/4	P.I. 9	P.I. 16
	P.I. 10	P.I. 15
	P.I. 11	P.I. 14
	P.I. 12	P.I. 13
	P.I. 13	P.I. 12
2/5	P.I. 14	P.I. 11
	P.I. 15	P.I. 10
	P.I. 16	P.I. 9
	P.I. 17	P.I. 8
2/6	P.I. 18	P.I. 7
	P.I. 19	P.I. 6
	P.I. 20	P.I. 5
	P.I. 21	P.I. 4
2/7	P.I. 22	P.I. 3
	P.I. 23	P.I. 2
	P.I. 24	P.I. 1

Revision Block on Dwg. 2/2 thru 2/7 should read: "REVISED TO CONFORM TO AMENDMENT NO. 0003."

**AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT**

1. CONTRACT ID CODE

PAGE OF PAGES

1 2

2. AMENDMENT/MODIFICATION NO.

0004

3. EFFECTIVE DATE

08/18/00

4. REQUISITION/PURCHASE REQ. NO.

5. PROJECT NO. (If applicable)

6. ISSUED BY

CODE

7. ADMINISTERED BY (If other than Item 6)

CODE

JACKSONVILLE DISTRICT OFFICE  
U.S. ARMY CORPS OF ENGINEERS  
P.O. BOX 4970  
JACKSONVILLE, FL 32232-0019  
KATHIE DUKE 904-232-3713

ATLANTIC COAST AREA OFFICE  
U.S. ARMY CORPS OF ENGINEERS  
ATTN: CESAJ-CO-P, BLDG 738  
PATRICK AFB, FL 32925-7478

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)

()

9A. AMENDMENT OF SOLICITATION NO.  
DACW17-00-R-0025

()

9B. DATED (SEE ITEM 11)  
07/06/00

10A. MODIFICATION OF CONTRACTS/ORDER NO.

10B. DATED (SEE ITEM 13)

CODE

FACILITY CODE

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers tended.  is extended,  is not ex-

Offers 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 1 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  is not,  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.)

**MODIFICATIONS TO SUNNY ISLES SEGMENT, SHORE PROTECTION PROJECT, DADE COUNTY, FLORIDA**

Make the following pen and ink changes:

Section 00600, Clause 52.219-1, SMALL BUSINESS PROGRAM REPRESENTATIONS (MAY 1999) ALTERNATE (OCT 1998) & ALTERNATE II (NOV 1998). Change paragraph (a)(2) to read \$17 Million instead of \$13.5 Million.

Section 00700, Clause 52.228-15 PERFORMANCE AND PAYMENT BONDS - CONSTRUCTION (SEP 1996). Delete original clause and replace with the attached revised clause dated July 2000.

Proposal Due Date remains 08/31/00 at 4:00 p.m.

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

15C. DATE SIGNED

16B. UNITED STATES OF AMERICA

16C. DATE SIGNED

(Signature of person authorized to sign)

BY

(Signature of Contracting Officer)

52.228-15 Performance and Payment Bonds--Construction (July 2000)

(a) *Definitions.* As used in this clause--

"Original contract price" means the award price of the contract; or, for requirements contracts, the price payable for the estimated total quantity; or, for indefinite-quantity contracts, the price payable for the specified minimum quantity. Original contract price does not include the price of any options, except those options exercised at the time of contract award.

(b) *Amount of required bonds.* Unless the resulting contract price is \$100,000 or less, the successful offeror shall furnish performance and payment bonds to the Contracting Officer as follows:

(1) *Performance bonds (Standard Form 25).* The penal amount of performance bonds at the time of contract award shall be 100 percent of the original contract price.

(2) *Payment Bonds (Standard Form 25-A).* The penal amount of payment bonds at the time of contract award shall be 100 percent of the original contract price.

(3) *Additional bond protection.* (i) The Government may require additional performance and payment bond protection if the contract price is increased. The increase in protection generally will equal 100 percent of the increase in contract price.

(ii) The Government may secure the additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(c) *Furnishing executed bonds.* The Contractor shall furnish all executed bonds, including any necessary reinsurance agreements, to the Contracting Officer, within the time period specified in the Bid Guarantee provision of the solicitation, or otherwise specified by the Contracting Officer, but in any event, before starting work.

(d) *Surety or other security for bonds.* The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, individual sureties, or by other acceptable security such as postal money order, certified check, cashier's check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the *Federal Register* or may be obtained from the:

U.S. Department of Treasury  
Financial Management Service  
Surety Bond Branch  
401 14th Street, NW, 2nd Floor, West Wing  
Washington, DC 20227.

(e) *Notice of subcontractor waiver of protection (40 U.S.C. 270b(c)).* Any waiver of the right to sue on the payment bond is void unless it is in writing, signed by the person whose right is waived, and executed after such person has first furnished labor or material for use in the performance of the contract.

(End of clause)

**AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT**

1. CONTRACT ID CODE

PAGE OF PAGES

1 3

2. AMENDMENT/MODIFICATION NO.

0005

3. EFFECTIVE DATE

08/23/00

4. REQUISITION/PURCHASE REQ. NO.

5. PROJECT NO. (If applicable)

6. ISSUED BY

CODE

7. ADMINISTERED BY (If other than Item 6)

CODE

JACKSONVILLE DISTRICT OFFICE  
U.S. ARMY CORPS OF ENGINEERS  
P.O. BOX 4970  
JACKSONVILLE, FL 32232-0019  
KATHIE DUKE 904-232-3713

ATLANTIC COAST AREA OFFICE  
U.S. ARMY CORPS OF ENGINEERS  
ATTN: CESAJ-CO-P, BLDG 738  
PATRICK AFB, FL 32925-7478

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)

()

9A. AMENDMENT OF SOLICITATION NO.

DACW17-00-R-0025

()

9B. DATED (SEE ITEM 11)

07/06/00

10A. MODIFICATION OF CONTRACTS/ORDER NO.

10B. DATED (SEE ITEM 13)

CODE

FACILITY CODE

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers tended.

is extended,

is not ex-

Offers 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 1 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  is not,  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.)

**MODIFICATIONS TO SUNNY ISLES SEGMENT, SHORE PROTECTION PROJECT, DADE COUNTY, FLORIDA**

Section 00010, Page 00010-4 and 00010-5, SUPPLIES AND SERVICES AND PRICES/COSTS. Delete original pages and replace with the attached revised pages.

Make the following pen and ink change: Section 00800, COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK, Delete "for a total of 325 days after receipt of the notice to proceed." and add in its place the following statement: "and (d) for a total of 325 days after receipt of the notice to proceed, which includes 30 days to be used for mobilization to the site."

Proposal Due Date remains 08/31/00 at 4:00 p.m.

This amendment is being issued via E-Mail and posted on the Jacksonville District's web site.

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

15C. DATE SIGNED

16B. UNITED STATES OF AMERICA

16C. DATE SIGNED

(Signature of person authorized to sign)

BY

(Signature of Contracting Officer)



SECTION 00010  
SUPPLIES OR SERVICES AND PRICES/COSTS

MODIFICATION TO SUNNY ISLES SEGMENT AND BEACH RENOURISHMENT AT MIAMI BEACH  
DADE COUNTY SHORE PROTECTION PROJECT

LINE ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
	<b>BASE OFFER:</b>				
	SUNNY ISLES AND GOLDEN BEACH DNR-6 TO DNR-19				
0001	MOBILIZATION AND DEMOBILIZATION:				
0001AA	BEACH FILL		LUMP SUM		\$ _____
0001AB	OFFSHORE BREAKWATER		LUMP SUM		\$ _____
0002	BEACH FILL (ESTIMATED QUANTITY)	650,000	CUBIC YARD	\$ _____	\$ _____
0003	BEACH TILLING (ESTIMATED QUANTITY)	52	ACRE	\$ _____	\$ _____
0004	CONSTRUCTION/VIBRATION CONTROL AND MONITORING		LUMP SUM		\$ _____
0005	LIGHTED AIDS TO NAVIGATION		LUMP SUM		\$ _____
0006	OFFSHORE BREAKWATER:				
0006AA	ARMOR STONE (ESTIMATED QUANTITY)	9,000	TON	\$ _____	\$ _____
0006AB	12-INCH MARINE MATTRESS (ESTIMATED QUANTITY)	4,065	SQUARE YARD	\$ _____	\$ _____
0006AC	GEOTEXTILE UNDERLAYER (ESTIMATED QUANTITY)	4,800	SQUARE YARD	\$ _____	\$ _____
0006AD	PERMANENT NAVIGATION AIDS (ESTIMATED QUANTITY)	4	EACH	\$ _____	\$ _____
0007	ENDANGERED SPECIES OBSERVERS		LUMP SUM		\$ _____
0008	POST-FILL BEACH RESTORATION (ESTIMATED QUANTITY)	30,000	CUBIC YARD	\$ _____	\$ _____
	TOTAL BASE OFFER (LINE ITEMS 0001 THROUGH 0008)				\$ _____
	<b>OPTIONAL ITEM A:</b>				
	63rd STREET AREA, MIAMI BEACH				
0009	MOBILIZATION AND DEMOBILIZATION		LUMP SUM		\$ _____
0010	BEACH FILL (ESTIMATED QUANTITY)	185,000	CUBIC YARD	\$ _____	\$ _____

SECTION 00010  
SUPPLIES OR SERVICES AND PRICES/COSTS

MODIFICATION TO SUNNY ISLES SEGMENT AND BEACH RENOURISHMENT AT MIAMI BEACH  
DADE COUNTY SHORE PROTECTION PROJECT

LINE ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
0011	BEACH TILLING (ESTIMATED QUANTITY)	13	ACRE	\$ _____	\$ _____
0012	CONSTRUCTION/VIBRATION CONTROL AND MONITORING		LUMP SUM		\$ _____
0013	ENDANGERED SPECIES OBSERVERS		LUMP SUM		\$ _____
<b>0014</b>	<b><u>LIGHTED AIDS TO NAVIGATION</u></b>		<b><u>LUMP SUM</u></b>		<b>\$ _____</b>
	TOTAL OPTIONAL ITEM A (LINE ITEMS 0009 THROUGH 0014)				\$ _____
	TOTAL BID (LINE ITEMS 0001 THRU 0014)				\$ _____

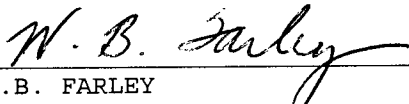
NOTES: OFFERORS MUST BID ON ALL LINE ITEMS. SEE PROVISION AT 52.215-1 (SECTION 00100).  
SEE SECTION 00100, "INSTRUCTIONS TO BIDDERS".

Mod. to Sunny Isles Segment and  
Beach Renourishment at Miami Beach  
Dade County SPP

RFP No. DACW17-00-R-0025

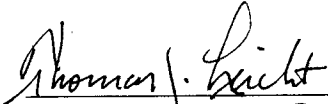
DESIGN AUTHENTICATION

This project was designed by the Jacksonville District, U. S. Army Corps of Engineers. The initials or signatures and registration designations of individuals appear on these project documents within the scope of their employment as required by ER 1110-1-8152.



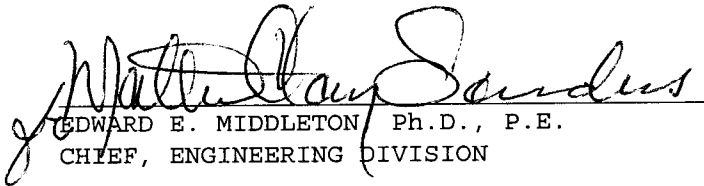
---

W.B. FARLEY  
CHIEF, LEVEES AND WATERWAYS SECTION  
DESIGN BRANCH, ENGINEERING DIVISION



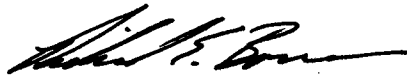
---

THOMAS J. LEICHT P.E.  
ASSISTANT CHIEF, DESIGN BRANCH  
ENGINEERING DIVISION



---

EDWARD E. MIDDLETON Ph.D., P.E.  
CHIEF, ENGINEERING DIVISION



---

JOE R. MILLER  
COLONEL, CORPS OF ENGINEERS  
DISTRICT ENGINEER

**RICHARD E. BONNER, P. E.**  
Deputy District Engineer  
for Project Management

PROJECT TABLE OF CONTENTS

DIVISION 00 - CONTRACT CLAUSES

00010 SF 1442, BIDDING SCHEDULE, AND WAGE RATES  
00100 INSTRUCTIONS TO BIDDERS  
00600 REPRESENTATIONS AND CERTIFICATIONS  
00700 CONTRACT CLAUSES  
00800 SPECIAL CONTRACT REQUIREMENTS

DIVISION 01 - GENERAL REQUIREMENTS

01000 GENERAL REQUIREMENTS  
01330 SUBMITTAL PROCEDURES  
01410 ENVIRONMENT PROTECTION  
01411 TURBIDITY MONITORING  
01451 CONTRACTOR QUALITY CONTROL

DIVISION 02 - SITE WORK

02278 STONE PROTECTION  
02370 POLYMERIC MARINE MATTRESS  
02391 BEACH FILL

-- End Project Table of Contents --

<b>SOLICITATION, OFFER, AND AWARD</b> <i>(Construction, Alteration, or Repair)</i>	1. SOLICITATION NO. <b>DACW17-00-R-0025</b>	2. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)	3. DATE ISSUED <b>07/06/00</b>	PAGE OF PAGES
	IMPORTANT - The "offer" section on the reverse must be fully completed by offeror.			

4. CONTRACT NO.	5. REQUISITION/PURCHASE REQUEST NO. <b>W32CSS-0062-3055</b>	6. PROJECT NO.
-----------------	--	----------------

7. ISSUED BY <b>US ARMY CORPS OF ENGINEERS JACKSONVILLE DISTRICT PO BOX 4970 ATTN: CESAJ-CT-C JACKSONVILLE, FL 32232-0012</b>	CODE	8. ADDRESS OFFER TO <b>US ARMY CORPS OF ENGINEERS JACKSONVILLE DISTRICT PO BOX 4970 (400 WEST BAY STREET, ROOM 867) ATTN: CESAJ-CT-C JACKSONVILLE, FL 32202-4412</b>
--	------	---

9. FOR INFORMATION CALL  A. NAME <b>KATHIE B. DUKE</b>	B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS) <b>904-232-3713</b>
---	--

**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 (Title, identifying no., date):

**MODIFICATIONS TO SUNNY ISLES SEGMENT, SHORE PROTECTION PROJECT, DADE COUNTY, FLORIDA**

**DRAWINGS: D.O. FILE NO. 24-37,823 DATED APRIL 1999**

**DESCRIPTION OF WORK: SEE PAGE 00010-3**

**MAGNITUDE OF CONSTRUCTION IS OVER \$10 MILLION.**

**THIS IS AN UNRESTRICTED ACQUISITION. ALL BUSINESSES ARE ENCOURAGED TO RESPOND.**

**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 INFORMATION.**

**ALL PROPOSALS, MAILED OR HANDCARRIED, MUST BE DEPOSITED IN THE BID DEPOSITORY LOCATED IN ROOM 867 PRIOR TO THE TIME SET FOR RECEIPT OF PROPOSALS.**

11. The Contractor shall begin performance within     \* calendar days and complete it within     \* calendar days after receiving **\*See Section 001000 Para 1.20**

award,  notice to proceed. This performance period is  mandatory,  negotiable. **(See \*See 52-211-10, Sect 00800**

12A. 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 <b>10</b>
---	---------------------------------

13. ADDITIONAL SOLICITATION REQUIREMENTS:

A. Sealed offers in original and     0     copies to perform the work required are due at the place specified in Item 8 by     4:00 PM     (hour) local time **08/15/00** (date). If this is a sealed bid solicitation, offers will 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  is,  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     60     calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.

**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)
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 requirement stated in Item 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.)

AMOUNTS

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 each)*

AMENDMENT NO.	DATE								

20A. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER <i>(Type or print)</i>	20B. SIGNATURE	20C. OFFER DATE
--	----------------	-----------------

**AWARD (To be completed by Government)**

21. ITEMS ACCEPTED:

22. AMOUNT	23. ACCOUNTING AND APPROPRIATION DATA
------------	---------------------------------------

24. SUBMIT INVOICES TO ADDRESS SHOWN IN <i>(4 Copies unless otherwise specified)</i>	ITEM	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) ( )
---	------	--

26. ADMINISTERED BY <b>ATLANTIC COAST AREA OFFICE U.S. ARMY CORPS OF ENGINEERS ATTN: CESAJ-CO-P PATRICK AFB, FL 32925-7478 407-783-8700</b>	CODE	27. PAYMENT WILL BE MADE BY <b>USACE FINANCE CENTER 7800 THIRD AVE., CEFC-AO-P MILLINGTON, TN 38054-5005</b>
--	------	---

**CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE**

<input type="checkbox"/> 28. NEGOTIATED AGREEMENT <i>Contractor is required to sign this document and return _____ copies to issuing office.)</i> Contractor agrees to furnish and deliver all items or perform all work requirements 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 incorporated by reference in or attached to this contract.	<input type="checkbox"/> 29. AWARD <i>(Contractor is not required to sign this document.)</i> Your offer on this solicitation is hereby accepted as to the items listed. This award summarizes the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.
---	---

30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN <i>(Type or print)</i>	31A. NAME OF CONTRACTING OFFICER <i>(Type or print)</i>
30B. SIGNATURE	31B. UNITED STATES OF AMERICA
30C. DATE	BY
	31C. AWARD DATE

CONTINUED FROM PAGE 00010-1

\* DESCRIPTION OF WORK: This segment of the Dade County Beach Erosion Control Project is being modified to have a widened beach berm and an offshore breakwater. The Base work area to be nourished is located at Sunny Isles and Golden Beach DNR-6 to DNR-19 (approximately 650,000 cubic yards) with a 120-foot berm width from the Erosion Control Line (ECL) at EL 9 MLW with a foreshore slope of 1 vertical on 10 horizontal. The Optional work area to be nourished is approximately 2,500 feet of the 63rd Street area of Miami Beach (approximately 185,000 cubic yards) with approximately a 200-foot berm width from the ECL at EL 9 MLW with a foreshore slope of 1 vertical on 15 horizontal. The borrow area for this project is located offshore some 15,000 feet southeast of Government Cut. Rocks are present in the borrow area and separation will be necessary. A rock disposal area is provided for disposing of rocks in excess of 1" in diameter. The rock disposal site is located directly offshore from Miami Beach about 8,500 feet. Rocks will not be separated from the sand on the beach. Work also includes the construction of two 375-foot offshore breakwaters, 250 feet apart, at the north end of Sunny Isles. The breakwater will lie approximately 500 feet from the seawall in 8 to 11 feet of water based on a mean low water datum. The breakwater will be a segmented rubble mound structure using 3.5- to 6.5-ton armor stone on 12-inch marine mattress and filter fabric. The beach at Sunny Isles will be used for deployment. Protection of the environment, especially the existing reef system, is of paramount importance. The Contractor's operations will have to be carried out in accordance with permit requirements. It is anticipated that this project may be constructed during the turtle-nesting season and precautions will have to be taken. Only Coast Guard certified vessels will be allowed to work on this project. \*

SECTION 00010  
SUPPLIES OR SERVICES AND PRICES/COSTS

MODIFICATION TO SUNNY ISLES SEGMENT AND BEACH RENOURISHMENT AT MIAMI BEACH  
DADE COUNTY SHORE PROTECTION PROJECT

LINE ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
<b>BASE OFFER:</b>					
SUNNY ISLES AND GOLDEN BEACH DNR-6 TO DNR-19					
0001	MOBILIZATION AND DEMOBILIZATION:				
0001AA	BEACH FILL		LUMP SUM		\$ _____
0001AB	OFFSHORE BREAKWATER		LUMP SUM		\$ _____
0002	BEACH FILL (ESTIMATED QUANTITY)	650,000	CUBIC YARD	\$ _____	\$ _____
0003	BEACH TILLING (ESTIMATED QUANTITY)	52	ACRE	\$ _____	\$ _____
0004	CONSTRUCTION/VIBRATION CONTROL AND MONITORING		LUMP SUM		\$ _____
0005	LIGHTED AIDS TO NAVIGATION		LUMP SUM		\$ _____
0006	OFFSHORE BREAKWATER:				
0006AA	ARMOR STONE (ESTIMATED QUANTITY)	9,000	TON	\$ _____	\$ _____
0006AB	12-INCH MARINE MATTRESS (ESTIMATED QUANTITY)	4,065	SQUARE YARD	\$ _____	\$ _____
0006AC	GEOTEXTILE UNDERLAYER (ESTIMATED QUANTITY)	4,800	SQUARE YARD	\$ _____	\$ _____
0006AD	PERMANENT NAVIGATION AIDS (ESTIMATED QUANTITY)	4	EACH	\$ _____	\$ _____
0007	ENDANGERED SPECIES OBSERVERS		LUMP SUM		\$ _____
0008	POST-FILL BEACH RESTORATION (ESTIMATED QUANTITY)	30,000	CUBIC YARD	\$ _____	\$ _____
	TOTAL BASE OFFER (LINE ITEMS 0001 THROUGH 0008)				\$ _____
<b>OPTIONAL ITEM A:</b>					
63rd STREET AREA, MIAMI BEACH					
0009	MOBILIZATION AND DEMOBILIZATION		LUMP SUM		\$ _____
0010	BEACH FILL (ESTIMATED QUANTITY)	185,000	CUBIC YARD	\$ _____	\$ _____
0011	BEACH TILLING (ESTIMATED QUANTITY)	13	ACRE	\$ _____	\$ _____



SECTION 00010  
SUPPLIES OR SERVICES AND PRICES/COSTS

MODIFICATION TO SUNNY ISLES SEGMENT AND BEACH RENOURISHMENT AT MIAMI BEACH  
DADE COUNTY SHORE PROTECTION PROJECT

LINE ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
0012	CONSTRUCTION/VIBRATION CONTROL AND MONITORING		LUMP SUM		\$ _____
0013	ENDANGERED SPECIES OBSERVERS		LUMP SUM		\$ _____
	TOTAL OPTIONAL ITEM A (LINE ITEMS 0009 THROUGH 0013)				\$ _____
	TOTAL BID (LINE ITEMS 0001 THRU 0013)				\$ _____

NOTES: OFFERORS MUST BID ON ALL LINE ITEMS. SEE PROVISION AT 52.215-1 (SECTION 00100).  
SEE SECTION 00100, "INSTRUCTIONS TO BIDDERS".

NOTE

NOTE

NOTE

NOTE

NOTE

NOTE

NOTE

THIS PROJECT INCORPORATES BOTH DREDGING AND HEAVY CONSTRUCTION WAGE DECISIONS.

THE HEAVY CONSTRUCTION WAGE DECISION MAY ONLY BE APPLIED TO OPERATIONS OCCURRING ON LAND. IT CANNOT BE APPLIED TO WORK OF ANY SORT CONDUCTED ABOARD VESSELS OR FLOATING PLANT OF ANY TYPE.

IF YOU HAVE ANY QUESTIONS CONCERNING THE APPLICATION OF THE WAGE DECISIONS FURNISHED FOR THIS PROJECT, PLEASE CONTACT PHYLLIS M. GARFIELD, LABOR RELATIONS SPECIALIST, OFFICE OF COUNSEL, 904-232-3761.

**General Decision Number FL000032**

---

General Decision Number **FL000032**

Superseded General Decision No. FL990032

State: **Florida**

Construction Type: HEAVY

County(ies):

BROWARD	LEE	ST LUCIE
COLLIER	MARTIN	
DADE	PALM BEACH	

HEAVY CONSTRUCTION PROJECTS (Excluding Sewer & Water Lines)

Modification Number	Publication Date
0	02/11/2000
1	02/25/2000
2	04/07/2000
3	07/21/2000

---

COUNTY(ies):

BROWARD	LEE	ST LUCIE
COLLIER	MARTIN	
DADE	PALM BEACH	

CARP1026D 02/01/1998

	Rates	Fringes
PILED RIVERMEN	17.75	3.85

---

ELEC0323C 09/05/1993

	Rates	Fringes
MARTIN, PALM BEACH, AND ST LUCIE COUNTIES		

ELECTRICIANS	15.88	21.5%
--------------	-------	-------

---

ELEC0349B 09/01/1999

	Rates	Fringes
DADE COUNTY		

ELECTRICIANS:

Electrical contracts including materials that are less than \$2,000,000

19.30	3.10+8%
-------	---------

Electrical contracts including materials that are \$2,000,000 and over

21.32	3.10+8%
-------	---------

---

ELEC0728A	09/01/1998		
		Rates	Fringes
BROWARD AND COLLIER COUNTIES			
ELECTRICIANS		21.96	3%+5.19
-----			
ELEC0915B	12/01/1999		
		Rates	Fringes
LEE COUNTY			
ELECTRICIANS		19.50	27%+.25
-----			
* ENGI0487B	04/01/2000		
		Rates	Fringes
DADE COUNTY			
POWER EQUIPMENT OPERATORS:			
Backhoes, Bulldozers		17.35	3.40
Cranes		20.78	3.40
Oilers		15.45	3.40
-----			
ENGI0675B	04/01/1995		
		Rates	Fringes
BROWARD, COLLIER, LEE, MARTIN, PALM BEACH, AND ST LUCIE COUNTIES			
POWER EQUIPMENT OPERATORS:			
All Tower Cranes and all Cranes with boom length 150 ft and over		18.64	6.20
Cranes with boom length less than 150 ft, Backhoes, and Bulldozers		17.92	6.20
Oilers		16.29	6.20
-----			
PLUM0630A	01/01/2000		
		Rates	Fringes
LEE, MARTIN, PALM BEACH, AND ST LUCIE COUNTIES			
PIPEFITTERS		24.81	4.70
-----			
PLUM0725B	<u>07/16/2000</u>		
		Rates	Fringes
BROWARD AND DADE COUNTIES			
PIPEFITTERS		<u>22.60</u>	5.90
-----			

SUFL2016A 01/26/1990

	Rates	Fringes
CARPENTERS	12.71	2.71
CEMENT MASONS	10.50	
LABORERS	5.72	
POWER EQUIPMENT OPERATORS:		
Loaders	11.25	2.55

-----  
WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.  
=====

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



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	3.61+a
Driller	16.38	3.61+a
Blaster	16.38	3.61+a

FOOTNOTE:

- a. New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day and Good Friday. Plus Vacation Contribution of 8% 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.

=====  
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

#### 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

General Decision Number FL000054

---

General Decision Number **FL000054**

Superseded General Decision No. FL990054

State: **Florida**

Construction Type: DREDGING

County(ies):

BREVARD	FLAGLER	ST JOHNS
BROWARD	INDIAN RIVER	ST LUCIE
DADE	MARTIN	VOLUSIA
DUVAL	PALM BEACH	

HOPPER DREDGE CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	02/11/2000

COUNTY(ies):

BREVARD	FLAGLER	ST JOHNS
BROWARD	INDIAN RIVER	ST LUCIE
DADE	MARTIN	VOLUSIA
DUVAL	PALM BEACH	

SUFL2021A 05/24/1993

Rates	Fringes
-------	---------

SELF-PROPELLED HOPPER DREDGES:

Drag Tenders	8.21
--------------	------

---

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

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

SECTION 00100  
INSTRUCTIONS TO BIDDERS

SOURCE SELECTION INFORMATION

1 PROPOSAL SUBMISSION REQUIREMENTS

1.1 The Government intends to make award without discussions and without giving offerors an opportunity to revise their offers; therefore, offerors are encouraged to include their best terms and conditions (both price and technical) in their initial offer. The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary. By submitting an offer in response to this solicitation, offerors are agreeing to comply with all terms and conditions contained in the solicitation. (See item 17, Standard Form 1442.) Including exceptions in the offer may be cause for the Government to reject the offer.

2. WRITTEN PROPOSAL. Each offeror's proposal will include an oral presentation. (See Paragraph 5 for evaluation procedures to be used.) The written proposal will consist of 2 packages with contents as shown below. Package No. 1 will consist of the offeror's contractual documentation. Package No. 2 will consist of a copy of the oral presentation.

2.1. No. 1 Package (Sealed envelope(s) which includes 2 copies of each of the following):

- Completed SF 1442 with price schedule.
- Completed Representations & Certifications (Section 00600 of this solicitation).
- Bid Bond.
- If the offeror is not a small business firm, a subcontracting plan. (See the Army's Subcontracting Plan Evaluation Guide (AFARS Appendix CC) at <http://acqnet.sarda.army.mil/library/afar/apcc.htm> for guidance for preparing an acceptable plan.)
- A list of all contracts begun or completed within the past 5 years (starting from January 1, 1995) and a list of all relevant projects begun or completed within the past 10 years (starting from January 1, 1990). (The lists may be combined with relevant projects identified.) For each listed contract, include: contract number, contract price, brief synopsis of work performed by the offeror, and customer's point of contact (name and telephone number).

2.2. No. 2 Package (10 binders, each of which includes the following):

- Resumes of the project manager, project superintendent, quality control manager, safety manager and environmental specialist diver (for any person not currently employed by the offeror, include a letter of intent from the person). Additionally, for each oral presenter not identified in the resume requirement stated above. (Note: If the Government accepts the offeror's proposal, the offeror is prohibited from changing the project manager, project superintendent, quality control manager, and/or safety manager without prior approval of the Contracting Officer's representative.)
- Paper copies of the slide presentation the offeror will use for the oral presentation.

3. ORAL PRESENTATIONS. In addition to the written proposal, each offeror shall make an oral presentation at a time to be specified at a later date. The purpose of the oral presentation is to give the offeror an opportunity to make the Government's evaluators aware of the offeror's qualifications. Oral presentations will be received approximately 5 working days after the date set for receipt of written proposals. Each oral presentation shall be supported by a Microsoft PowerPoint slide presentation. (There is no limitation on the number of slides; however, the number should be limited to what can be covered comfortably within a 2-hour time limit.) The offeror may include one page (8.5" x 11") of clarifying notes for each PowerPoint slide. If the offeror elects to include notes, each note page must be cross-referenced to the appropriate slide. Ten paper copies (8.5" x 11") of the PowerPoint slides and note pages shall be submitted with the written proposal. (If note pages are included, they must be collated with the slides.) The oral presentation shall follow this outline:

3.1. Presenters - Identify all presenters by name, position assignment for this project, and employer.

3.2. Management Plan.

3.2.1. Performance Schedule. The offeror must submit a completed construction progress chart demonstrating how the offeror plans to complete the work in accordance with the construction sequence as described in the Plans and Specifications. The offered construction schedule will be incorporated into the contract and will become the required performance period for all contract purposes including assessment of liquidated damages. The offeror's schedule will be used as part of the evaluation in all areas including the technical approach.

3.2.2. Safety Program and Plan. Describe the safety plan and dive plan and how it will be implemented by the prime contractor and all subcontractors in accordance with the Plans and Specifications. Discuss experience with the U.S. Army Corps of Engineers Safety and Health Requirements Manual (EM 385-1-1).

3.2.3. Quality Control Organization and Plan. Describe the quality control (QC) organization and plan in accordance with the Plans and Specifications. Include the system for record keeping and reporting and method for correcting deficiencies. Include the names, qualifications, duties, responsibilities and authority levels of each person assigned to the QC function. A QC plan that calls for the QC manager to report directly to management with no direct responsibility for project construction is required.

3.2.4. Organizational Chart for Performing the Work. Describe the offeror's proposed organization with major subcontractors integrated, and describe the planned approach and methodology for efficiently managing the work. Provide names of key on-site personnel and their qualifications, to include: US Army Corps of Engineers experience with similar projects, names of major subcontractors, planned staffing levels and resource commitments, availability of corporate resources, and identification of risks and plans for mitigating risks. The Government will make payments in accordance with the Payment and Prompt Payment Act clauses contained in this solicitation. With this in mind, specifically address plan for financing the project. As a minimum, key personnel shall include the Project Manager (overall manager of the project), Project Superintendent (overall field manager responsible for construction), Quality Control Manager (manager of field quality control personnel), Assistant Superintendent/Subcontractor Manager (manager and coordinator of subcontractors), Safety Manager (principal in charge of enforcing safety codes) and the Environmental Specialist Diver (marine habitat field verification).

3.2.5. Cost Controls for change Order Work. Describe procedures that will be used to segregate and control costs for change order work (or any work that is not included in the original contract price) and ensure that costs are fair and reasonable.

### 3.3. Technical Approach.

3.3.1. Ability to Complete all Work in Compliance with the Environmental Criteria. The offeror shall describe the proposed technical approach for executing the work in accordance with the Plans and Specifications. The proposal shall include a description of how the plant and equipment to be used will not impact the adjacent environmental resources throughout the entire project area. Potential impacts could include turbidity, sedimentation, and mechanical damages. If anchors are to be used, it must be proven that impacts to adjacent environmental resources will not occur. Chaffing of pipelines cannot be allowed if there is a possibility of damage to adjacent environmental resources. The offerors proposal must be in compliance with the Plans and Specifications. The objective should be to instill confidence that the offeror thoroughly understands the requirements and complexities of this project, and that the offeror has developed a well thought out plan that integrates all related activities. All examples describing similar type experience must come from the projects to be addressed later in the presentation under past performance.

3.3.1.1. Describe Method for Extraction of Material from Borrow Area Without Damaging the Environmental Resources. It is not unusual for waves that are 3 feet high and above to occur in the project area; therefore, a detailed description of how plant and equipment to be used and the method of accomplishing the work in rough weather is needed.

3.3.1.2. Describe Method for Transferring Material from Dredge to Placement Area Without Risking Damage to Environmental Resources due to Equipment Utilized Outside the Pipeline Access Corridor. It is not unusual for waves that are 3 feet high and above to occur in the project area, therefore a detailed description of how plant and equipment to be used and the method of accomplishing the work in rough weather is needed. Include details on mobilization, installation, operation and demobilization. Indicate the sea condition that will necessitate the removal of the equipment and the contingency plan for this.

3.3.1.3. Describe Method of Transferring Material from Dredge to Placement Area Without Risking Additional Environmental Impacts due to Equipment Utilized Inside the Pipeline Access Corridor. It is not unusual for waves that are 3 feet high and above to occur in the project area, therefore a detailed description of how plant and equipment to be used and the method of accomplishing the work in rough weather is needed. Include details for installing and removal of the pipeline, buoys and dredging equipment.

3.3.1.4. Describe Method of Placement and Quality Control for Construction of Breakwater in Open Shallow Water and Rough Wave Environment in Area Surrounded in Close Proximity to Important Environmental Resources. It is not unusual for waves that are 3 feet high and above to occur in the project area, therefore a detailed description of how plant and equipment to be used and the method of accomplishing the work in rough weather is needed. Include details for mobilizing, mooring and anchoring equipment and methodology to construct the breakwater.

3.4. Past Performance. From the list of contracts provided with the written proposal, select the 3 most recent and similar contracts and present a synopsis of each. The synopsis must cover the sub factors listed below. It is preferred that the 3 contracts selected represent all sub factors, but, if more contracts are required to show similar experience, up to 2 additional contracts per factor may be chosen. Similar projects are defined as projects that involved open ocean dredging of sand around environmental resources that were required to be protected and constructing breakwaters in shallow water in a rough wave environment. In selecting similar past performance, the offeror may include its performance, the performance of predecessor firms, the performance of subcontractors, and the performance of key employees of the offeror and proposed subcontractors.

3.4.1. Description of Project. Describe the project and explain how it is similar to this project. Similarity need not be established for all the sub factors; however, the less similarity the offeror is able to establish, the less points will be allowed by the Government's evaluators.

3.4.1.1. Compliance with Environmental Criteria. Describe the environmental resources that were required to be protected and any problems encountered and how those problems were solved.

3.4.1.2. Quality Control. Discuss the QC plan employed on the project. Describe any problems encountered and how those problems were solved.

3.4.1.3. Compliance with Safety Requirements. Discuss the safety program employed on the project. Describe any lost time accidents and equipment damage over \$2,500. Describe any problems encountered and how those problems were resolved and what counter measures were implemented.

3.4.1.4. Responsiveness to Customer's Needs. Discuss actions taken to respond to the customer's needs. Describe any problems encountered and how those problems were solved.

3.4.1.5. Timeliness. Show the original schedule and the actual date of construction completion. Discuss how actual progress compared with planned progress. Describe any problems encountered and how those problems were solved.

3.4.1.6. Subcontracting Goals and Subcontractor Coordination/Control. Discuss goals and actions taken to achieve them. Describe any problems encountered and how those problems were solved. Discuss challenges and resolutions the offeror has experienced with subcontractors.

3.4.1.7. Cost Control of Change Order Work. Show the original contract amount and the actual contract amount at contract completion. Discuss cost control procedures employed for change order work. Describe any problems encountered and how those problems were solved.

#### 4. RULES FOR THE ORAL PRESENTATION.

4.1. Status of the presentation. The presentation will be used by the Government in its proposal evaluation process. The PowerPoint presentation will be considered to be a component of the offeror's written proposal. The Government will videotape the presentation (including the Q&A session) and the videotape will become a part of the official file. (If requested, the Government will provide a copy of the videotape to the offeror.)

4.2. Presentation aids. The offeror will be limited to the PowerPoint slides (and notes) submitted with the written proposal. The Government will not accept additional materials, nor will the offeror be allowed to use additional materials, during or after the presentation.

4.3. Limitations on Government-offeror interaction during and after the presentation. The Government's representatives will not interrupt the presentation (except to ask for a repeat of a passage that may not have been heard the first time). During the Q&A sessions, the Government's representatives will ask questions to obtain clarification of any information presented by the offeror. Price will not be discussed at any time during the oral presentation process. The Government will not provide feedback regarding the quality of the offeror's presentation. (In accordance with FAR subpart 15.5, offerors may request a debriefing at the appropriate time.)

4.4. Order of presentation. The Government will determine the order of presentation. The offeror will not be allowed to change the date or time of the presentation. The Government may change the date or time of the presentation, if the Contracting Officer deems it necessary.



4.5. Time. The presentation will proceed as follows:

- Introduction of Presenters
- Management Plan Presentation
- Government Discussion (15 minutes)
- Questions/Answers Session (30 minutes)
- Break (15 minutes)
- Technical Approach and Past Performance Presentation
- Government Discussion (15 minutes)
- Questions/Answers Session (30 minutes)
- Contractor Wrap-Up Session (Up to 30 minutes)

The offeror will be allowed 2 hours for the presentation of the Management Plan, Technical Approach and Past Performance. The 2 hours may be used at the offeror's discretion between the 2 presentations. The 30 minute wrap-up session will not be included in the 2 hours. At the conclusion of the each presentation, the offeror's representatives will be asked to leave the room and the Government's evaluators will meet for no more than 15 minutes to discuss the presentation and develop any questions the Government may wish to ask. At the conclusion of the Government's meetings, the offeror's representatives will be asked to return to the room to answer questions. The Q&A sessions will last for no more than 30 minutes.

4.6 Presenters. The offeror may use no more than 4 presenters. The management plan and past performance portions of the presentation must be presented by the offeror's project manager. For major items of subcontracted work (e.g., the breakwater) and for subcontractor past performance, the offeror may use the subcontractor's project manager as the presenter. A resume for each presenter must be included with the offeror's written proposal.

4.7 Government participants. The Government will be represented by approximately 10 persons (including the contracting officer, design engineers, construction engineers, a representative of the local sponsor and other knowledgeable persons).

4.8 Location. The Government will receive oral presentations in or near the Charles E. Bennett Federal Building, 400 West Bay Street, Jacksonville, Florida. The Government will provide all equipment necessary for a PowerPoint presentation.

## 5. PROPOSAL EVALUATION PROCEDURES

5.1. Award Basis. Award will be made to the offeror whose proposal represents the best value to the Government. Best value will be determined by a trade-off process that combines non-price and price factors. The Government reserves the right to award to other than the offeror with the highest technical rating and reserves the right to award to other than the offeror with the lowest price. Non-price factors are slightly more important than price. Non-price factors will be evaluated on a point system. Award will be made on a 1000-point scale. 825 points are available from the oral presentation. 175 points are available from Government evaluation of the written proposal portion. Points available for each factor are as follows:

- Management Plan - 200 points
- Technical approach - 500 points
- Past performance -250 points (125 points/oral presentation; 125 points/Government review)
- Subcontracting plan - 50points

5.2. Evaluation Process. The evaluation process will proceed as follows:

5.2.1. Written Evaluation Process. The Government will review the offeror's written proposal as to adherence of the requirements of the plans and specifications. Evaluation of the subcontracting plan and past performance will be based on a 175-point scale.

Debarred List. Check each offeror against the suspended/debarred list. Eliminate any offeror who is listed.

Bid Bond. Verify acceptability of bid bond. If the bond is not acceptable, eliminate the offeror from further consideration. (Note: This step presumes there will be no negotiations as defined at FAR 15.306(d). Should the Contracting Officer determine that negotiations are necessary, offerors who have been eliminated by this step may be included in the competitive range and receive further consideration.)

Abstract of Prices. Prepare an abstract of prices offered and the independent Government estimate (IGE).

Government Estimate Comparison. If any offered price, exceeds the IGE by more than 25%, send the abstract (with names of offerors removed) to the Cost Estimating Branch and request verification of the IGE.

After the accuracy of the IGE is verified (and, if necessary, the IGE is revised), eliminate from further consideration any offer (including the award fee) that exceeds the IGE by more than 25%. (In accordance with EFARS 36.205, the Government cannot award a contract at a price that exceeds the IGE by more than 25%.) (Note: This step presumes there will be no negotiations as defined at FAR 15.306(d). Should the Contracting Officer determine that negotiations are necessary, offerors who have been eliminated by this step may be included in the competitive range and receive further consideration.)

The Government will compare the offerors' prices against each other and against the IGE to determine price reasonableness. If any price (either the total price or prices for individual line items) appears unreasonably low, the Government will ask the offeror to review and verify its prices. Any such communication shall be deemed to fall under FAR 15.306(b).

Subcontracting Plan. Using the Army's Subcontracting Plan Evaluation Guide (AFARS Appendix CC), the Deputy for Small Business will evaluate each offeror's subcontracting plan. Generally, to be acceptable, a plan must score at least 70 points on the evaluation guide's 100-point scoring system. Regardless of the score received from this evaluation, the successful offeror, if other than a small business, will be required to submit an acceptable subcontracting plan prior to award. If discussions are required to make the subcontracting plan acceptable, these discussions will not constitute negotiations as defined at FAR 15.306(d). This factor is worth 50 of the 1000 technical points available, therefore, in order to convert the score derived from the evaluation guide to technical points, a factor of .50 will be applied to the score. For example: a score of 80 from the evaluation guide will be converted to 40 technical points. (Note: Offerors not required to submit a subcontracting plan (i.e., small business concerns) will be assigned a score equal to the highest score of any subcontracting plan submitted in response to this solicitation.)

Past Performance. Using the list provided by the offeror and information gathered from other sources, the Government will select 3 projects for a past performance review. The Government will contact project owners and ask questions regarding: (i) compliance with environmental criteria, (ii) quality control, (iii) compliance with safety standards, (iv) responsiveness to customer's needs, (v) timeliness, (vi) subcontracting goals and subcontractor coordination/control, and (vii) cost control of change order work. The evaluation will be based on a 125-point scale. The Government may

select for past performance review all, some, or none of the same 3 projects the offeror presents in its oral presentation. (Offerors with no relevant past performance - See Note 1 at the end of this section.)

5.2.2. Oral Evaluation Process. The Government will evaluate the offeror's oral presentation for clarity, completeness, thoroughness and reasonableness. The evaluation will be based on a 825-point scale with points assigned to each sub factor as follows:

5.2.2.1. Management plan - 200 points further broken down as follows:

- Performance Schedule - 50 points
- Safety Program and Plan - 50 points
- Quality Control Organization and Plan - 50 points
- Organizational Chart and Plan for Performing the Work - 25 points
- Cost Controls for Change Order Work – 25 points

5.2.2.2. Technical Approach - Ability to Complete all Work in Compliance with the Environmental Criteria - 500 points further broken down as follows:

- Method for Extraction of Material from Borrow Area Without Damaging Environmental Resources - 85 points
  - Detailed Description of Method of Accomplishing the Above in Seas 3 Feet High and Above - 40 Points
- Method for Transferring Material from Dredge to Placement Area Without Risking Damage to Environmental Resources due to Equipment Utilized Outside the Pipeline Access Corridor - 85 points
  - Detailed Description of Method of Accomplishing the Above in Seas 3 Feet High and Above - 40 Points
- Method of Transferring material from dredge to placement area without risking additional environmental impacts due to equipment utilized inside the pipeline access corridor - 85 points
  - Detailed Description of Method of Accomplishing the Above in Seas 3 Feet High and Above - 40 Points
- Method of Placement and Quality Control for Construction of Breakwater in Open Shallow Water and Rough Wave Environment in Area Surrounded by Close Proximity to Important Environmental Resources - 85 points
  - Detailed Description of Method of Accomplishing the Above in Seas 3 Feet High and Above - 40 Points

5.2.2.3. Past performance (See note 1 at the end of this section.) - 125 points further broken down as follows:

- Compliance with Environmental Criteria - 25 points
- Compliance with Safety Requirements - 20 points
- Timeliness - 20 points
- Responsiveness to Customer's Needs - 20 points
- Quality Control - 20 points
- Subcontracting Goals - 10 points
- Cost Control of Change Order Work - 10 points

Note 1. If an offeror has no relevant past performance, the offeror will be evaluated without the past performance factor, and, for comparison purposes, the past performance score for all offerors will be removed from the total score. Past performance scores will be removed from the equation only when comparing offerors with no relevant past performance with offerors who do have relevant past performance. Past performance scores will always be included when comparing offerors all of whom have relevant past performance.

#### 52.204-6 DATA UNIVERSAL NUMBERING SYSTEM (DUNS) NUMBER (JUN 99)

(a) Contractor identification is essential for complying with statutory contract reporting requirements. Therefore, the offeror is requested to enter, in the block with its name and address on the Standard Form 33 or similar document, the annotation "DUNS" followed by the DUNS number which identifies the offeror's name and address exactly as stated in the offer.

(b) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one. A DUNS number will be provided immediately by telephone at no charge to the offeror. For information on obtaining a DUNS number, the offeror, if located within the United States, should call Dun and Bradstreet at 1-800-333-0505. The offeror should be prepared to provide the following information:

- (1) Company name.
- (2) Company address.
- (3) Company telephone number.
- (4) Line of business.
- (5) Chief executive officer/key manager.
- (6) Date the company was started.
- (7) Number of people employed by the company.
- (8) Company affiliation.

(c) Offerors located outside the United States may obtain the location and phone number of the local Dun and Bradstreet Information Services office from the Internet Home Page at <http://www.customerservice@dnb.com/>. If an offeror is unable to locate a local service center, it may send an e-mail to Dun and Bradstreet at [globalinfo@dnb.com](mailto:globalinfo@dnb.com).

(End of provision)

#### HAND-DELIVERING OFFERS TO THE FEDERAL OFFICE BUILDING IN JACKSONVILLE

Access to the Federal Office Building (FOB) in Jacksonville is controlled by security personnel. Visitors are required to enter the FOB at the Bay Street entrance. All packages, briefcases, envelopes, etc., must be passed through a metal detector. All briefcases must be opened for examination by security personnel. Any package or envelop that sets off the metal detector must either be opened at the Bay Street entrance for examination by security personnel or taken, by the visitor, to the loading dock located on the Water Street side of the FOB to be x-rayed. Persons hand-delivering offers should take care to arrive at the FOB in sufficient time to permit completion of security requirements and delivery of the offer to the designated office prior to the time set for receipt of offers.

(End of paragraph 52.204-4000)

#### SEAGOING BARGE ACT – SPECIAL STANDARD OF RESPONSIBILITY

The Seagoing Barge Act (46 USC 2101 et seq.) applies to this project. Since the contractor will be using plant that requires U.S. Coast Guard certification to comply with this act, the apparently successful offeror shall, within 15 calendar days (or such other period as directed by the Contracting Officer) after bid opening/close of negotiations, submit a copy of said certificate to the Contracting Officer. Failure to produce the certificate within the required time shall be cause for determining the offeror nonresponsible.

(End of paragraph number 52.209-4005)

#### 52.211-2 AVAILABILITY OF SPECIFICATIONS LISTED IN THE DOD INDEX OF SPECIFICATIONS AND STANDARDS (DODISS) AND DESCRIPTIONS LISTED IN THE ACQUISITION MANAGEMENT SYSTEMS AND DATA REQUIREMENTS CONTROL LIST, DOD 5010.12-L (DEC 1999)

Copies of specifications, standards, and data item descriptions cited in this solicitation may be obtained--

(a) From the ASSIST database via the Internet at <http://assist.daps.mil>; or

(b) By submitting a request to the--Department of Defense Single Stock Point (DoDSSP), Building 4, Section D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Telephone (215) 697-2667/2179, Facsimile (215) 697-1462.

(End of provision)

#### 52.214-5000 APPARENT CLERICAL MISTAKES (MAR 1995) -- EFARS

(a) For the purpose of initial evaluations of bids, the following will be utilized in the resolving arithmetic discrepancies found on the face of bidding schedule as submitted by the bidder:

- (1) Obviously misplaced decimal points will be corrected;
  - (2) Discrepancy between unit price and extended price, the unit price will govern;
  - (3) Apparent errors in extension of unit prices will be corrected; and
  - (4) Apparent errors in addition of lump-sum and extended prices will be corrected.
- (b) For the purpose of bid evaluation, the Government will proceed on the assumption that the bidder intends the bid to be evaluated on the basis of the unit prices, the totals arrived at by resolution of arithmetic discrepancies as provided above and the bid will be so reflected on the abstract of bids.
- (c) These correction procedures shall not be used to resolve any ambiguity concerning which bid is low.
- (End of statement)

## 52.215-1 INSTRUCTIONS TO OFFERORS--COMPETITIVE ACQUISITION (NOV 1999)

(a) *Definitions.* As used in this provision--

"Discussions" are negotiations that occur after establishment of the competitive range that may, at the Contracting Officer's discretion, result in the offeror being allowed to revise its proposal.

"In writing" or "written" means any worded or numbered expression which can be read, reproduced, and later communicated, and includes electronically transmitted and stored information.

"Proposal modification" is a change made to a proposal before the solicitation's closing date and time, or made in response to an amendment, or made to correct a mistake at any time before award.

"Proposal revision" is a change to a proposal made after the solicitation closing date, at the request of or as allowed by a Contracting Officer as the result of negotiations.

"Time," if stated as a number of days, is calculated using calendar days, unless otherwise specified, and will include Saturdays, Sundays, and legal holidays. However, if the last day falls on a Saturday, Sunday, or legal holiday, then the period shall include the next working day.

(b) *Amendments to solicitations.* If this solicitation is amended, all terms and conditions that are not amended remain unchanged. Offerors shall acknowledge receipt of any amendment to this solicitation by the date and time specified in the amendment(s).

(c) *Submission, modification, revision, and withdrawal of proposals.* (1) Unless other methods (e.g., electronic commerce or facsimile) are permitted in the solicitation, proposals and modifications to proposals shall be submitted in paper media in sealed envelopes or packages (i) addressed to the office specified in the solicitation, and (ii) showing the time and date specified for receipt, the solicitation number, and the name and address of the offeror. Offerors using commercial carriers should ensure that the proposal is marked on the outermost wrapper with the information in paragraphs (c)(1)(i) and (c)(1)(ii) of this provision.

(2) The first page of the proposal must show--

(i) The solicitation number;

(ii) The name, address, and telephone and facsimile numbers of the offeror (and electronic address if available);

(iii) A statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation and agreement to furnish any or all items upon which prices are offered at the price set opposite each item;

(iv) Names, titles, and telephone and facsimile numbers (and electronic addresses if available) of persons authorized to negotiate on the offeror's behalf with the Government in connection with this solicitation; and

(v) Name, title, and signature of person authorized to sign the proposal. Proposals signed by an agent shall be accompanied by evidence of that agent's authority, unless that evidence has been previously furnished to the issuing office.

(3) *Submission, modification, revision, and withdrawal of proposals.* (i) Offerors are responsible for submitting proposals, and any modifications, revisions, or withdrawals, so as to reach the Government office designated in the solicitation by the time specified in the solicitation. If no time is

specified in the solicitation, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that proposal or revision is due.

(ii)(A) Any proposal, modification, revision, or withdrawal received at the Government office designated in the solicitation after the exact time specified for receipt of offers is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would not unduly delay the acquisition; and--

(1) If it was transmitted through an electronic commerce method authorized by the solicitation, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of proposals; or

(2) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of offers and was under the Government's control prior to the time set for receipt of offers; or

(3) It is the only proposal received.

(B) However, a late modification of an otherwise successful proposal that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.

(iii) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the proposal wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

(iv) If an emergency or unanticipated event interrupts normal Government processes so that proposals cannot be received at the office designated for receipt of proposals by the exact time specified in the solicitation, and urgent Government requirements preclude amendment of the solicitation, the time specified for receipt of proposals will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.

(v) Proposals may be withdrawn by written notice received at any time before award. Oral proposals in response to oral solicitations may be withdrawn orally. If the solicitation authorizes facsimile proposals, proposals may be withdrawn via facsimile received at any time before award, subject to the conditions specified in the provision at 52.215-5, Facsimile Proposals. Proposals may be withdrawn in person by an offeror or an authorized representative, if the identity of the person requesting withdrawal is established and the person signs a receipt for the proposal before award.

(4) Unless otherwise specified in the solicitation, the offeror may propose to provide any item or combination of items.

(5) Proposals submitted in response to this solicitation shall be in English and in U.S. dollars, unless otherwise permitted by the solicitation.

(6) Offerors may submit modifications to their proposals at any time before the solicitation closing date and time, and may submit modifications in response to an amendment, or to correct a mistake at any time before award.

(7) Offerors may submit revised proposals only if requested or allowed by the Contracting Officer.

(8) Proposals may be withdrawn at any time before award. Withdrawals are effective upon receipt of notice by the Contracting Officer.

(d) *Offer expiration date.* Proposals in response to this solicitation will be valid for the number of days specified on the solicitation cover sheet (unless a different period is proposed by the offeror).

(e) *Restriction on disclosure and use of data.* Offerors that include in their proposals data that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, shall--

(1) Mark the title page with the following legend:

This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed--in whole or in part--for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of--or in connection with--the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets [*insert numbers or other identification of sheets*]; and

(2) Mark each sheet of data it wishes to restrict with the following legend:  
Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

- (f) *Contract award.* (1) The Government intends to award a contract or contracts resulting from this solicitation to the responsible offeror(s) whose proposal(s) represents the best value after evaluation in accordance with the factors and subfactors in the solicitation.
- (2) The Government may reject any or all proposals if such action is in the Government's interest.
- (3) The Government may waive informalities and minor irregularities in proposals received.
- (4) The Government intends to evaluate proposals and award a contract without discussions with offerors (except clarifications as described in FAR 15.306(a)). Therefore, the offeror's initial proposal should contain the offeror's best terms from a cost or price and technical standpoint. The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly rated proposals.
- (5) The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit cost or prices offered, unless the offeror specifies otherwise in the proposal.
- (6) The Government reserves the right to make multiple awards if, after considering the additional administrative costs, it is in the Government's best interest to do so.
- (7) Exchanges with offerors after receipt of a proposal do not constitute a rejection or counteroffer by the Government.
- (8) The Government may determine that a proposal is unacceptable if the prices proposed are materially unbalanced between line items or subline items. Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable risk to the Government.
- (9) If a cost realism analysis is performed, cost realism may be considered by the source selection authority in evaluating performance or schedule risk.
- (10) A written award or acceptance of proposal mailed or otherwise furnished to the successful offeror within the time specified in the proposal shall result in a binding contract without further action by either party.
- (11) The Government may disclose the following information in postaward debriefings to other offerors:
- (i) The overall evaluated cost or price and technical rating of the successful offeror;
  - (ii) The overall ranking of all offerors, when any ranking was developed by the agency during source selection;
  - (iii) A summary of the rationale for award; and
  - (iv) For acquisitions of commercial items, the make and model of the item to be delivered by the successful offeror.

(End of provision)

## 52.215-4000 OBTAINING INFORMATION REGARDING THIS SOLICITATION

Verbal requests for information must be directed to the person whose name appears in item 9 of the SF 1442. Collect calls cannot be accepted. Written requests for explanations must be sent to the person identified in item 9 of the SF 1442 and may be sent via facsimile to (904) 232-2748. Inquiries and requests which are directed to any other person may not be relayed to the proper person and, therefore, may not be answered.

(End of paragraph number 52.215-4000)



## 52.215-4011 OFFEROR'S CHECKLIST

The following list should be used by offerors to avoid irregularities which have been noted in previous offers.

(CAUTION: PROPOSALS WHICH ARE QUALIFIED MAY BE CONSIDERED UNACCEPTABLE. BE CAREFUL!)

1. This list is not exhaustive. You must ensure that your proposal complies with all of the terms and conditions of the solicitation.
2. Have amendments to the solicitation been acknowledged in the space provided on the offer form, and on the envelope containing the offer? If not, acknowledgement must be made prior to the time set for receipt of proposals.
3. Have prices been inserted for all items?
4. Have all prices and computations been checked carefully?
5. Have all changes been made to the pricing schedule if required by an amendment?
6. Is the offer submitted on the latest pricing schedule?
7. Are decimal points in prices in proper places?
8. Have you checked for transposition of figures in prices inserted on the pricing schedule?
9. Is the offer signed by a person who is LEGALLY AUTHORIZED to bind the offeror? Is the offeror's address and phone number included?
10. If the offer is signed by an agent, is legal evidence of his authority included with the proposal?
11. Have the appropriate boxes been checked in all paragraphs of the Representations and Certifications? Have they been submitted with the proposal?
12. Have the requirements of the LATE SUBMISSIONS, MODIFICATIONS, AND WITHDRAWAL OF PROPOSALS provision of this solicitation been met?
13. If an offer guarantee is required, has it been submitted with the proposal and does it satisfy the requirements of the BID GUARANTEE and, if an individual surety is used, PLEDGES OF ASSETS clauses of this solicitation?

(End of paragraph number 52.215-4011)

## 52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a firm-fixed price contract resulting from this solicitation.

(End of provision)

## 52.217-5 EVALUATION OF OPTIONS (JUL 1990)

(a) Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

(b) The Government may reject an offer as nonresponsive if it is materially unbalanced as to prices for the basic requirement and the option quantities. An offer is unbalanced when it is based on

prices significantly less than cost for some work and prices which are significantly overstated for other work.

(End of provision)

## SUBCONTRACTING PLAN GOALS

The offeror's attention is directed to the Small, Small Disadvantaged And Women Owned Small Business Subcontracting Plan clause of this solicitation. The clause and this paragraph do not apply to small business concerns.

(a) Where applicable, the offeror shall submit a subcontracting plan to the Contracting Officer for review and approval prior to contract award. The subcontracting plan may be submitted with the offer or after the date set for receipt of offers. If the plan is not submitted with the offer, the Contracting Officer will request the plan and specify the due date. The plan must contain all required elements set forth in the above referenced contract clause; must address basic contract requirements and options separately; and must demonstrate how the Contractor will accomplish the subcontracting requirements consistent with the obligations described in the clause. The plan will be evaluated in accordance with AFARS Appendix CC, Subcontracting Plan Evaluation Guide. (The guide is available on the worldwide web at <http://acqnet.sarda.army.mil/library/afar/apcc.htm>.) Acceptability of the plan will be one of the elements considered by the Contracting Officer when determining contractor responsibility prior to award of a contract.

(b) The following subcontracting goals have been assigned to the Jacksonville District and are the minimum acceptable goals for subcontracting plans incorporated into the district's contracts:

	Dredging	Other Than Dredging
(1) Small Business Concerns	61.4%	61.4%
(2) Emerging Small Business Concerns	5.0%	---
(3) Small Disadvantaged Business Concerns	9.1%	9.1%
(4) Women Owned Small Business Concerns	5.0%	5.0%
(5) HUBZone Small Business Concerns	1.0%	1.0%

(Stated percentages are based on the total amount of planned subcontracting; not the price of the contract. These goals do not apply to contracts for commercial items. See FAR Part 12. For definitions of small business concern, small disadvantaged business concern, and woman owned small business concern, see the Small Business Program Representations (FAR 52.219-1) provision in this section of this solicitation. For HUBZone small business concern qualifications, see FAR subpart 19.13. If this solicitation is for dredging, the definition of emerging small business concern can be found in the Small Business Concern Representation for the Small Business Competitiveness Demonstration Program (FAR 52.219-19) provision in this section of this solicitation.)

(c) After award of the contract and prior to commencement of work, the Deputy for Small Business will instruct the Contractor in the preparation and timely submission of required subcontracting reports (SF-294 and SF-295). Where practicable, the above briefing will take place during the pre-work conference.

(d) Additional information concerning subcontracting plan requirements may be obtained from Ms. Debra Nix, Deputy for Small Business, Phone: 904-232-1150.

(End of paragraph number 52.219-4002)

## SOURCES FOR ASSISTANCE IN LOCATING SMALL BUSINESS SUBCONTRACTORS

(a) The Offeror's attention is directed to the Utilization of Small Business Concerns clause of this solicitation. Assistance in identifying small, small disadvantaged and women-owned small business concerns may be obtained as follows:

(1) Internet Web Site Sources for searches throughout the U.S., Puerto Rico and the USVI:

- (a) Small Business Administration PRO-Net Database  
<http://www.sba.gov>
- (b) Procurement Technical Assistance Center (PTAC)  
<http://www.dla.mil/ddas>

- (2) Sources of information within Florida:
  - (a) Florida Atlantic University PTAC, Ft. Lauderdale 954-771-6520
  - (b) University of South Florida PTAC, Tampa 813-974-4371
  - (c) Chamber of Commerce PTAC, Jacksonville 904-928-1100
  - (d) University of West Florida PTAC, Pensacola 850-474-2919
  - (e) Florida A&M University PTAC, Tallahassee 850-599-3407
  - (f) Latin Builders Association, Miami-Dade Area 954-704-0345
  - (g) Broward County Minority Bldrs Coalition 305-792-1121
- (3) Sources of information within the U.S. Virgin Islands:
  - (a) Dept of Public Works, DBE Coordinator, St. Thomas 340-773-1290
- (4) Sources of information within Puerto Rico:
  - (a) Puerto Rico General Contractors Association, San Juan 787-781-2200
  - (b) San Juan PTAC 787-753-6861

(b) Further information may be obtained from the Jacksonville District's Small Business internet site, located under Business Opportunities at <http://www.saj.usace.army.mil>. The above information is continually updated on the internet site.

(c) Failure to comply with the requirements of the Utilization of Small Business Concerns clause can be grounds for imposition of sanctions.

(End of paragraph number 52.219-4003)

**52.222-23 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (FEB 1999)**

(a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.

(b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for minority participation for each trade	Goals for female participation for each trade
39.5%	6.9%

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs office.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on (1) its implementation of the Equal Opportunity clause, (2) specific affirmative action obligations required by the clause entitled "Affirmative Action Compliance Requirements for Construction," and (3) its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees

from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

(d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the --

- (1) Name, address, and telephone number of the subcontractor;
- (2) Employer's identification number of the subcontractor;
- (3) Estimated dollar amount of the subcontract;
- (4) Estimated starting and completion dates of the subcontract; and
- (5) Geographical area in which the subcontract is to be performed.

(e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is Dade County, Florida.

#### 52.225-12 NOTICE OF BUY AMERICAN ACT REQUIREMENT-- CONSTRUCTION MATERIALS (FEB 2000) - ALTERNATE I (FEB 2000)

(a) Definitions. Construction material, designated country construction material, domestic construction material, foreign construction material, and NAFTA country construction material, as used in this provision, are defined in the clause of this solicitation entitled "Buy American Act-- Balance of Payments Program--Construction Materials under Trade Agreements" (Federal Acquisition Regulation (FAR) clause 52.225-11).

(b) Requests for determination of inapplicability. An offeror requesting a determination regarding the inapplicability of the Buy American Act or Balance of Payments Program shall submit the request with its offer, including the information and applicable supporting data required by paragraphs (c) and (d) of FAR clause 52.225-11.

(c) Evaluation of offers. (1) The Government will evaluate an offer requesting exception to the requirements of the Buy American Act or Balance of Payments Program, based on claimed unreasonable cost of domestic construction materials, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(4)(i) of FAR clause 52.225-11.

(2) If evaluation results in a tie between an offeror that requested the substitution of foreign construction material based on unreasonable cost and an offeror that did not request an exception, the Contracting Officer will award to the offeror that did not request an exception based on unreasonable cost.

(d) Alternate offers. (1) When an offer includes foreign construction material, other than designated country or NAFTA country construction material, that is not listed by the Government in this solicitation in paragraph (b)(3) of FAR clause 52.225-11, the offeror also may submit an alternate offer based on use of equivalent domestic, designated country, or NAFTA country construction material.

(2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of FAR clause 52.225-11 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.

(3) If the Government determines that a particular exception requested in accordance with paragraph (c) of FAR clause 52.225-11 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic, designated country, or NAFTA country construction material, and the offeror shall be required to furnish such domestic, designated country, or NAFTA country construction material. An offer based on use of the foreign construction material for which an exception was requested--

(i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or

(ii) May be accepted if revised during negotiations.

(End of provision)

#### ACCEPTABILITY OF POWER OF ATTORNEY ACCOMPANYING BID BOND

Bid bonds on their face must unequivocally bind the bonding company or the bid will be nonresponsive. The Contracting Officer has authority to decide whether there is adequate evidence of authority to unequivocally bind the bonding company. Evidence of intent to be bound may not be submitted after bid opening. Therefore, in order for a power of attorney accompanying a bid bond to be acceptable, it must be (i) an original (not facsimile) power of attorney, or (ii) a copy of a power of attorney (or power of attorney with facsimile signatures) accompanied by an original (not facsimile) signature by the secretary of the company certifying that the power of attorney remains in full force and effect and has not been revoked. Bids not meeting this requirement after December 1, 2000 will be considered nonresponsive and will be rejected.

(End of paragraph)

#### 52.233-2 SERVICE OF PROTEST (AUG 1996) (CESAJ ADAPTATION)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from the person identified in item 10 of the Standard Form 33 (if this solicitation is for non-commercial supplies or services), in item 9A of the Standard Form 1442 (if this solicitation is for construction or dredging), in item 7 of the Standard Form 1449 (if this solicitation is for commercial items), or in item 7 of the DA Form 4069-R (if this solicitation is for work funded by a non-appropriated funds instrumentality) at the address shown in item 7 of the SF 33, item 7 of the SF 1442, item 9 of the SF 1449, or item 5 of the DA Form 4069-R.

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of provision)

#### 52.236-27 SITE VISIT (CONSTRUCTION) (FEB 1995) (ALTERNATE I) (FEB 1995) (CESAJ ADAPTATION)

(a) The clauses at 52.236-2, Differing Site Conditions, and 52.236-3, Site Investigations and Conditions Affecting the Work, will be included in any contract awarded as a result of this

solicitation. Accordingly, offerors or quoters are urged and expected to inspect the site where the work will be performed.

(b) An organized site visit has been scheduled for – July 17, 2000.

(c) Participants will meet at -- (Location will be provided by the contract administration office via telephone. See (d) below.)

(d) Participants should call Mr. George Cooper, Atlantic Coast Area Office at 321-783-8700 on or before July 14, 2000 to make arrangements.

(e) Core borings are available. If available, written requests to inspect the core borings must be submitted at least two days prior to the anticipated inspection date and may be sent via e-mail to kathleen.b.duke@usace.army.mil or by facsimile to 904-232-2748. Core borings may be inspected from 8:00 a.m. to 3:00 p.m. Core borings are located at the Jacksonville District Warehouse, U.S. Army Corps of Engineers, 3077 Talleyrand Avenue, Jacksonville, Florida 32206-3474. Offerors will be required to record their core examination visit in a record book that is maintained at the inspection site.

(End of provision)

#### 52.236-28 PREPARATION OF PROPOSALS--CONSTRUCTION (OCT 1997)

(a) Proposals must be (1) submitted on the forms furnished by the Government or on copies of those forms, and (2) manually signed. The person signing a proposal must initial each erasure or change appearing on any proposal form.

(b) The proposal form may require offerors to submit proposed prices for one or more items on various bases, including--

- (1) Lump sum price;
- (2) Alternate prices;
- (3) Units of construction; or
- (4) Any combination of paragraphs (b)(1) through (b)(3) of this provision.

(c) If the solicitation requires submission of a proposal on all items, failure to do so may result in the proposal being rejected without further consideration. If a proposal on all items is not required, offerors should insert the words "no proposal" in the space provided for any item on which no price is submitted.

(d) Alternate proposals will not be considered unless this solicitation authorizes their submission.

(End of provision)

#### 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998) (CESAJ ADAPTATION)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the

appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):  
For FAR: <http://www.arnet.gov/far/>

(End of provision)

#### 52.252-5 AUTHORIZED DEVIATIONS IN PROVISIONS (APR 1984)

(a) The use in this solicitation of any Federal Acquisition Regulation (48 CFR Chapter 1) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the provision.

(b) The use in this solicitation of any Defense FAR Supplement (48 CFR Chapter 2) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

SECTION 00600

REPRESENTATIONS AND CERTIFICATIONS

52.203-2 CERTIFICATE OF INDEPENDENT PRICE DETERMINATION (APR 1985)

(a) The offeror certifies that --

(1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to (i) those prices, (ii) the intention to submit an offer, or (iii) the methods of factors used to calculate the prices offered:

(2) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and

(3) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.

(b) Each signature on the offer is considered to be a certification by the signatory that the signatory --

(1) Is the person in the offeror's organization responsible for determining the prices offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contradictory to subparagraphs (a)(1) through (a)(3) above; or

(2) (i) Has been authorized, in writing, to act as an agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) above \_\_\_\_\_  
(insert full name of person(s) in the offeror's organization responsible for determining the prices offered in this bid or proposal, and the title of his or her position in the offeror's organization);

(ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) above have not participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) above; and

(iii) As an agent, has not personally participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) above.

(c) If the offeror deletes or modifies subparagraph (a)(2) above, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

(End of clause)

52.203-11 CERTIFICATION AND DISCLOSURE REGARDING PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (APR 1991)

(a) The definitions and prohibitions contained in the clause, at FAR 52.203-12, Limitation on Payments to Influence Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in paragraph (b) of this Certification.

(b) The offeror, by signing its offer, hereby certifies to the best of his or her knowledge and belief that on or after December 23, 1989,--



(1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress on his or her behalf in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement;

(2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the offeror shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Contracting Officer; and

(3) He or she will include the language of this certification in all subcontract awards at any tier and require that all recipients of subcontract awards in excess of \$100,000 shall certify and disclose accordingly.

Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.

(End of provision)

#### 52.204-5 WOMEN-OWNED BUSINESS (OTHER THAN SMALL BUSINESS) (MAY 1999)

(a) Definition. Women-owned business concern, as used in this provision, means a concern that is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

(b) Representation. [Complete only if the offeror is a women-owned business concern and has not represented itself as a small business concern in paragraph (b)(1) of FAR 52.219-1, Small Business Program Representations, of this solicitation.] The offeror represents that it ( ) is, ( ) is not a women-owned business concern.

(End of provision)

#### 52.209-5 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS (MAR 1996)

(a)(1) The Offeror certifies, to the best of its knowledge and belief, that--

(i) The Offeror and/or any of its Principals--

(A) Are [ ] are not [ ] presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

(B) Have [ ] have not [ ], within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of

embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

(C) Are [ ] are not [ ] presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in subdivision (a)(1)(i)(B) of this provision.

(ii) The Offeror has [ ] has not [ ], within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.

(2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

THIS CERTIFICATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT CERTIFICATION MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER SECTION 1001, TITLE 18, UNITED STATES CODE.

(b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

(c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.

(d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

(End of provision)

#### CERTIFICATE OF AUTHORITY TO BIND CORPORATION

The Offeror, if a corporation, shall cause the following certificate to be executed under its corporate seal. The same officer shall not sign both the offer and this certificate.

CERTIFICATE

I, \_\_\_\_\_,

(Name)

\_\_\_\_\_ of the corporation named as Offeror

(Title)

herein, certify that \_\_\_\_\_, who

(Name of person who signed offer)

signed this offer on behalf of the corporation (Offeror), was then

\_\_\_\_\_ of said corporation, and that said offer was duly signed for and on behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

\_\_\_\_\_  
(Signature)

(CORPORATE SEAL)

\_\_\_\_\_  
(Typed Name)

(End of paragraph number 52.209-4002)

CERTIFICATE OF AUTHORITY TO BIND PARTNERSHIP

The Offeror, if a partnership, shall cause the following certificate to be executed. Offeror shall provide a listing of all partners and a copy of the documentation from the partnership agreement authorizing the partner who has signed this offer to act on behalf of the partnership.

CERTIFICATE

We, the undersigned, comprising the total membership of \_\_\_\_\_, as partnership doing business at \_\_\_\_\_, do hereby certify that \_\_\_\_\_ is \_\_\_\_\_ of said partnership and is empowered to represent, bind, and execute contracts on behalf of said partnership. Witness our signatures, this \_\_\_\_\_ day of \_\_\_\_\_ 19\_\_\_\_.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WITNESSES:

\_\_\_\_\_

(Address)

\_\_\_\_\_

(Address)

(End of paragraph number 52.209-4003)

52.219-1 SMALL BUSINESS PROGRAM REPRESENTATIONS (MAY 1999) ALTERNATE I (OCT 1998) & ALTERNATE II (NOV 1999)

(a)(1) The standard industrial classification (SIC) code for this acquisition is 1629.

(2) The small business size standard is \$13.5 Million .

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b) Representations. (1) The offeror represents as part of its offer that it ( ) is, ( ) is not a small business concern.

(2) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents, for general statistical purposes, that it ( ) is, ( ) is not a small disadvantaged business concern as defined in 13 CFR 124-1002.

(3) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents as part of its offer that it ( ) is, ( ) is not a women-owned small business concern.

(4) ([Complete only if offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents, as part of its offer, that--

(i) It \_\_\_\_ is, \_\_\_\_ is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material change in ownership and control, principal office, or HUBZone employee percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR Part 126; and

(ii) It \_\_\_\_ is, \_\_\_\_ is not a joint venture that complies with the requirements of 13 CFR Part 126, and the representation in paragraph (b)(4)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating in the joint venture. [The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture: \_\_\_\_\_.] Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.

(5) (Complete only if offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents, as part of its offer, that--

(i) It ( ) is, ( ) is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material change in ownership and control, principal place of ownership, or HUBZone employee percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR part 126; and

(ii) It ( ) is, ( ) is not a joint venture that complies with the requirements of 13 CFR part 126, and the representation in paragraph (b)(5)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating in the joint venture. [The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture: \_\_\_\_\_.] Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.

(c) Definitions. "Joint venture," for purposes of a small disadvantaged business (SDB) set-aside or price evaluation preference (as prescribed at 13 CFR 124.321), is a concern that is owned and controlled by one or more socially and economically disadvantaged individuals entering into a joint venture agreement with one or more business concerns and is considered to be affiliated for size purposes with such other concern(s). The combined annual receipts or employees of the concerns entering into the joint venture must meet the applicable size standard corresponding to the SIC code designated for the contract. The majority of the venture's earnings must accrue directly to the socially and economically disadvantaged individuals in the SDB concern(s) in the joint venture. The

percentage of the ownership involvement in a joint venture by disadvantaged individuals must be at least 51 percent.

"Small business concern," as used in this provision, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and the size standard in paragraph (a) of this provision.

"Small disadvantaged business concern," as used in this provision, means a small business concern that (1) is at least 51 percent unconditionally owned by one or more individuals who are both socially and economically disadvantaged, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more socially and economically disadvantaged individuals, and (2) has its management and daily business controlled by one or more such individuals. This term also means a small business concern that is at least 51 percent unconditionally owned by an economically disadvantaged Indian tribe or Native Hawaiian Organization, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more of these entities, which has its management and daily business controlled by members of an economically disadvantaged Indian tribe or Native Hawaiian Organization, and which meets the requirements of 13 CFR Part 124.

"Women-owned small business concern," as used in this provision, means a small business concern--

(1) Which is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(d) Notice. (1) If this solicitation is for supplies and has been set aside, in whole or in part, for small business concerns, then the clause in this solicitation providing notice of the set-aside contains restrictions on the source of the end items to be furnished.

(2) Under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a small, small disadvantaged, or women-owned small business concern in order to obtain a contract to be awarded under the preference programs established pursuant to section 8(a), 8(d), 9, or 15 of the Small Business Act or any other provision of Federal law that specifically references section 8(d) for a definition of program eligibility, shall--

(i) Be punished by imposition of fine, imprisonment, or both;

(ii) Be subject to administrative remedies, including suspension and debarment; and

(iii) Be ineligible for participation in programs conducted under the authority of the Act.

(End of provision)

## 52.222-22 PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (FEB 1999)

The offeror represents that --

(a)  It has,  has not participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation;

(b)  It has,  has not, filed all required compliance reports; and

(c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

(End of provision)

52.223-13 CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (OCT 1996)

(a) Submission of this certification is a prerequisite for making or entering into this contract imposed by Executive Order 12969, August 8, 1995.

(b) By signing this offer, the offeror certifies that--

(1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or

(2) None of its owned or operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: (Check each block that is applicable.)

(i) The facility does not manufacture, process or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

(ii) The facility does not have 10 or more full-time employees as specified in section 313.(b)(1)(A) of EPCRA 42 U.S.C. 11023(b)(1)(A);

(iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(iv) The facility does not fall within Standard Industrial Classification Code (SIC) designations 20 through 39 as set forth in FAR section 19.102 of the Federal Acquisition Regulation; or

(v) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

252.209-7001 DISCLOSURE OF OWNERSHIP OR CONTROL BY THE GOVERNMENT OF A TERRORIST COUNTRY (MAR 1998)

(a) "Definitions."

As used in this provision --

(a) "Government of a terrorist country" includes the state and the government of a terrorist country, as well as any political subdivision, agency, or instrumentality thereof.

(2) "Terrorist country" means a country determined by the Secretary of State, under section 6(j)(1)(A) of the Export Administration Act of 1979 (50 U.S.C. App. 2405(j)(i)(A)), to be a country the government of which has repeatedly provided support for such acts of international terrorism. As of the date of this provision, terrorist countries include: Cuba, Iran, Iraq, Libya, North Korea, Sudan, and Syria.

(3) "Significant interest" means --

(i) Ownership of or beneficial interest in 5 percent or more of the firm's or subsidiary's securities. Beneficial interest includes holding 5 percent or more of any class of the firm's securities in "nominee shares," "street names," or some other method of holding securities that does not disclose the beneficial owner;

(ii) Holding a management position in the firm, such as a director or officer;

(iii) Ability to control or influence the election, appointment, or tenure of directors or officers in the firm;

(iv) Ownership of 10 percent or more of the assets of a firm such as equipment, buildings, real estate, or other tangible assets of the firm; or

(v) Holding 50 percent or more of the indebtedness of a firm.

(b) "Prohibition on award."

In accordance with 10 U.S.C. 2327, no contract may be awarded to a firm or a subsidiary of a firm if the government of a terrorist country has a significant interest in the firm or subsidiary or, in the case of a subsidiary, the firm that owns the subsidiary, unless a waiver is granted by the Secretary of Defense.

(c) "Disclosure."

If the government of a terrorist country has a significant interest in the Offeror or a subsidiary of the Offeror, the Offeror shall disclose such interest in an attachment to its offer. If the Offeror is a subsidiary, it shall also disclose any significant interest the government of a terrorist country has in any firm that owns or controls the subsidiary. The disclosure shall include --

(1) Identification of each government holding a significant interest; and

(2) A description of the significant interest held by each government.

(End of provision)

#### 252.209-7003 COMPLIANCE WITH VETERANS' EMPLOYMENT REPORTING REQUIREMENTS (MAR 1998)

By submission of its offer, the offeror represents that, if it is subject to the reporting requirements of 37 U.S.C. 4212(d) (i.e., the VETS-100 report required by Federal Acquisition Regulation clause 52.222-37, Employment Reports on Disabled Veterans and Veterans of the Vietnam Era), it has submitted the most recent report required by 38 U.S.C. 4212(d).

SECTION 00700  
CONTRACT CLAUSES

52.202-1 DEFINITIONS (OCT 1995) --ALTERNATE I (APR 1984)

(a) "Head of the agency" (also called "agency head") or "Secretary" means the Secretary (or Attorney General, Administrator, Governor, Chairperson, or other chief official, as appropriate) of the agency, including any deputy or assistant chief official of the agency; and the term "authorized representative" means any person, persons, or board (other than the Contracting Officer) authorized to act for the head of the agency or Secretary.

(b) "Commercial component" means any component that is a commercial item.

(c) "Component" means any item supplied to the Federal Government as part of an end item or of another component.

(d) "Nondevelopmental item" means--

(1) Any previously developed item of supply used exclusively for governmental purposes by a Federal agency, a State or local government, or a foreign government with which the United States has a mutual defense cooperation agreement;

(2) Any item described in paragraph (e)(1) of this definition that requires only minor modification or modifications of a type customarily available in the commercial marketplace in order to meet the requirements of the procuring department or agency; or

(3) Any item of supply being produced that does not meet the requirements of paragraph (e)(1) or (e)(2) solely because the item is not yet in use.

(e) "Contracting Officer" means a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer.

(f) Except as otherwise provided in this contract, the term "subcontracts" includes, but is not limited to, purchase orders and changes and modifications to purchase orders under this contract.

52.203-3 GRATUITIES (APR 1984)

(a) The right of the Contractor to proceed may be terminated by written notice if, after notice and hearing, the agency head or a designee determines that the Contractor, its agent, or another representative--

(1) Offered or gave a gratuity (e.g., an entertainment or gift) to an officer, official, or employee of the Government; and

(2) Intended, by the gratuity, to obtain a contract or favorable treatment under a contract.

(b) The facts supporting this determination may be reviewed by any court having lawful jurisdiction.

(c) If this contract is terminated under paragraph (a) of this clause, the Government is entitled--

(1) To pursue the same remedies as in a breach of the contract; and



(2) In addition to any other damages provided by law, to exemplary damages of not less than 3 nor more than 10 times the cost incurred by the Contractor in giving gratuities to the person concerned, as determined by the agency head or a designee. (This subparagraph (c)(2) is applicable only if this contract uses money appropriated to the Department of Defense.)

(d) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

#### 52.203-5 COVENANT AGAINST CONTINGENT FEES (APR 1984)

(a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of the contingent fee.

(b) "Bona fide agency," as used in this clause, means an established commercial or selling agency, maintained by a contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

"Bona fide employee," as used in this clause, means a person, employed by a contractor and subject to the contractor's supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

"Contingent fee," as used in this clause, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

"Improper influence," as used in this clause, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

(End of clause)

#### 52.203-7 ANTI-KICKBACK PROCEDURES. (JUL 1995)

(a) Definitions.

"Kickback," as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided, directly or indirectly, to any prime Contractor, prime Contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontract relating to a prime contract.

"Person," as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

"Prime contract," as used in this clause, means a contract or contractual action entered into by the United States for the purpose of obtaining supplies, materials, equipment, or services of any kind.

"Prime Contractor," as used in this clause, means a person who has entered into a prime contract with the United States.

"Prime Contractor employee," as used in this clause, means any officer, partner, employee, or agent of a prime Contractor.

"Subcontract," as used in this clause, means a contract or contractual action entered into by a prime Contractor or subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a prime contract.

"Subcontractor," as used in this clause, (1) means any person, other than the prime Contractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a prime contract or a subcontract entered into in connection with such prime contract, and (2) includes any person who offers to furnish or furnishes general supplies to the prime Contractor or a higher tier subcontractor.

"Subcontractor employee," as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

(b) The Anti-Kickback Act of 1986 (41 U.S.C. 51-58) (the Act), prohibits any person from -

(1) Providing or attempting to provide or offering to provide any kickback;

(2) Soliciting, accepting, or attempting to accept any kickback; or

(3) Including, directly or indirectly, the amount of any kickback in the contract price charged by a prime Contractor to the United States or in the contract price charged by a subcontractor to a prime Contractor or higher tier subcontractor.

(c)(1) The Contractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.

(2) When the Contractor has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the Contractor shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Department of Justice.

(3) The Contractor shall cooperate fully with any Federal agency investigating a possible violation described in paragraph (b) of this clause.

(4) The Contracting Officer may (i) offset the amount of the kickback against any monies owed by the United States under the prime contract and/or (ii) direct that the Prime Contractor withhold, from sums owed a subcontractor under the prime contract, the amount of any kickback. The Contracting Officer may order the monies withheld under subdivision (c)(4)(ii) of this clause be paid over to the Government unless the Government has already offset those monies under subdivision (c)(4)(i) of this clause. In either case, the Prime Contractor shall notify the Contracting Officer when the monies are withheld.

(5) The Contractor agrees to incorporate the substance of this clause, including this subparagraph (c)(5) but excepting subparagraph (c)(1), in all subcontracts under this contract which exceed \$100,000.

#### 52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

(a) If the Government receives information that a contractor or a person has engaged in conduct constituting a violation of subsection (a), (b), (c), or (d) of Section 27 of the Office of Federal Procurement

Policy Act (41 U.S.C. 423) (the Act), as amended by section 4304 of the 1996 National Defense Authorization Act for Fiscal Year 1996 (Pub. L. 104-106), the Government may--

- (1) Cancel the solicitation, if the contract has not yet been awarded or issued; or
- (2) Rescind the contract with respect to which--
  - (i) The Contractor or someone acting for the Contractor has been convicted for an offense where the conduct constitutes a violation of subsection 27 (a) or (b) of the Act for the purpose of either--
    - (A) Exchanging the information covered by such subsections for anything of value; or
    - (B) Obtaining or giving anyone a competitive advantage in the award of a Federal agency procurement contract; or
  - (ii) The head of the contracting activity has determined, based upon a preponderance of the evidence, that the Contractor or someone acting for the Contractor has engaged in conduct constituting an offense punishable under subsections 27(e)(1) of the Act.
- (b) If the Government rescinds the contract under paragraph (a) of this clause, the Government is entitled to recover, in addition to any penalty prescribed by law, the amount expended under the contract.
- (c) The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law, regulation, or under this contract.

#### 52.203-10 PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

- (a) The Government, at its election, may reduce the price of a fixed-price type contract and the total cost and fee under a cost-type contract by the amount of profit or fee determined as set forth in paragraph (b) of this clause if the head of the contracting activity or designee determines that there was a violation of subsection 27 (a), (b), or (c) of the Office of Federal Procurement Policy Act, as amended (41 U.S.C. 423), as implemented in section 3.104 of the Federal Acquisition Regulation.
- (b) The price or fee reduction referred to in paragraph (a) of this clause shall be--
  - (1) For cost-plus-fixed-fee contracts, the amount of the fee specified in the contract at the time of award;
  - (2) For cost-plus-incentive-fee contracts, the target fee specified in the contract at the time of award, notwithstanding any minimum fee or "fee floor" specified in the contract;
  - (3) For cost-plus-award-fee contracts--
    - (i) The base fee established in the contract at the time of contract award;
    - (ii) If no base fee is specified in the contract, 30 percent of the amount of each award fee otherwise payable to the Contractor for each award fee evaluation period or at each award fee determination point.
  - (4) For fixed-price-incentive contracts, the Government may--
    - (i) Reduce the contract target price and contract target profit both by an amount equal to the initial target profit specified in the contract at the time of contract award; or
    - (ii) If an immediate adjustment to the contract target price and contract target profit would have a significant adverse impact on the incentive price revision relationship under the contract, or adversely affect the contract financing provisions, the Contracting Officer may defer such adjustment until

establishment of the total final price of the contract. The total final price established in accordance with the incentive price revision provisions of the contract shall be reduced by an amount equal to the initial target profit specified in the contract at the time of contract award and such reduced price shall be the total final contract price.

(5) For firm-fixed-price contracts, by 10 percent of the initial contract price or a profit amount determined by the Contracting Officer from records or documents in existence prior to the date of the contract award.

(c) The Government may, at its election, reduce a prime contractor's price or fee in accordance with the procedures of paragraph (b) of this clause for violations of the Act by its subcontractors by an amount not to exceed the amount of profit or fee reflected in the subcontract at the time the subcontract was first definitively priced.

(d) In addition to the remedies in paragraphs (a) and (c) of this clause, the Government may terminate this contract for default. The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

#### 52.203-12 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (JUN 1997)

(a) Definitions.

"Agency," as used in this clause, means executive agency as defined in 2.101.

"Covered Federal action," as used in this clause, means any of the following Federal actions:

- (1) The awarding of any Federal contract.
- (2) The making of any Federal grant.
- (3) The making of any Federal loan.
- (4) The entering into of any cooperative agreement.
- (5) The extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

"Indian tribe" and "tribal organization," as used in this clause, have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450B) and include Alaskan Natives.

"Influencing or attempting to influence," as used in this clause, means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

"Local government," as used in this clause, means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

"Officer or employee of an agency," as used in this clause, includes the following individuals who are employed by an agency:

(1) An individual who is appointed to a position in the Government under title 5, United States Code, including a position under a temporary appointment.

(2) A member of the uniformed services, as defined in subsection 101(3), title 37, United States Code.

(3) A special Government employee, as defined in section 202, title 18, United States Code.

(4) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, title 5, United States Code, appendix 2.

"Person," as used in this clause, means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Reasonable compensation," as used in this clause, means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

"Reasonable payment," as used in this clause, means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

"Recipient," as used in this clause, includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Regularly employed," as used in this clause, means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

"State," as used in this clause, means a State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, a territory or possession of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

(b) Prohibitions.

(1) Section 1352 of title 31, United States Code, among other things, prohibits a recipient of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; or the modification of any Federal contract, grant, loan, or cooperative agreement.

(2) The Act also requires Contractors to furnish a disclosure if any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a

Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a Federal contract, grant, loan, or cooperative agreement.

(3) The prohibitions of the Act do not apply under the following conditions:

(i) Agency and legislative liaison by own employees.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of a payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action if the payment is for agency and legislative liaison activities not directly related to a covered Federal action.

(B) For purposes of subdivision (b)(3)(i)(A) of this clause, providing any information specifically requested by an agency or Congress is permitted at any time.

(C) The following agency and legislative liaison activities are permitted at any time where they are not related to a specific solicitation for any covered Federal action:

(1) Discussing with an agency the qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities.

(2) Technical discussions and other activities regarding the application or adaptation of the person's products or services for an agency's use.

(D) The following agency and legislative liaison activities are permitted where they are prior to formal solicitation of any covered Federal action--

(1) Providing any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action;

(2) Technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and

(3) Capability presentations by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Pub. L. 95-507, and subsequent amendments.

(E) Only those services expressly authorized by subdivision (b)(3)(i)(A) of this clause are permitted under this clause.

(ii) Professional and technical services.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of--

(1) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.

(2) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.

Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.

(B) For purposes of subdivision (b)(3)(ii)(A) of this clause, "professional and technical services" shall be limited to advice and analysis directly applying any professional or technical discipline. For example, drafting of a legal document accompanying a bid or proposal by a lawyer is allowable. Similarly, technical advice provided by an engineer on the performance or operational capability of a piece of equipment rendered directly in the negotiation of a contract is allowable. However, communications with the intent to influence made by a professional (such as a licensed lawyer) or a technical person (such as a licensed accountant) are not allowable under this section unless they provide advice and analysis directly applying their professional or technical expertise and unless the advice or analysis is rendered directly and solely in the preparation, submission or negotiation of a covered Federal action. Thus, for example, communications with the intent to influence made by a lawyer that do not provide legal advice or analysis directly and solely related to the legal aspects of his or her client's proposal, but generally advocate one proposal over another are not allowable under this section because the lawyer is not providing professional legal services. Similarly, communications with the intent to influence made by an engineer providing an engineering analysis prior to the preparation or submission of a bid or proposal are not allowable under this section since the engineer is providing technical services but not directly in the preparation, submission or negotiation of a covered Federal action.

(C) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.

(D) Only those services expressly authorized by subdivisions (b)(3)(ii)(A)(1) and (2) of this clause are permitted under this clause.

(E) The reporting requirements of FAR 3.803(a) shall not apply with respect to payments of reasonable compensation made to regularly employed officers or employees of a person.

(c) Disclosure.

(1) The Contractor who requests or receives from an agency a Federal contract shall file with that agency a disclosure form, OMB standard form LLL, Disclosure of Lobbying Activities, if such person has made or has agreed to make any payment using nonappropriated funds (to include profits from any covered Federal action), which would be prohibited under subparagraph (b)(1) of this clause, if paid for with appropriated funds.

(2) The Contractor shall file a disclosure form at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any disclosure form previously filed by such person under subparagraph (c)(1) of this clause. An event that materially affects the accuracy of the information reported includes--

(i) A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or

(ii) A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or

(iii) A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.

(3) The Contractor shall require the submittal of a certification, and if required, a disclosure form by any person who requests or receives any subcontract exceeding \$100,000 under the Federal contract.

(4) All subcontractor disclosure forms (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall submit all disclosures to the Contracting

Officer at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.

(d) Agreement. The Contractor agrees not to make any payment prohibited by this clause.

(e) Penalties.

(1) Any person who makes an expenditure prohibited under paragraph (a) of this clause or who fails to file or amend the disclosure form to be filed or amended by paragraph (b) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.

(2) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.

(f) Cost allowability. Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

(End of clause)

#### 52.204-4 PRINTING/COPYING DOUBLE-SIDED ON RECYCLED PAPER (JUN 1996)

(a) In accordance with Executive Order 12873, dated October 20, 1993, as amended by Executive Order 12995, dated March 25, 1996, the Offeror/Contractor is encouraged to submit paper documents, such as offers, letters, or reports, that are printed/copied double-sided on recycled paper that has at least 20 percent postconsumer material.

(b) The 20 percent standard applies to high-speed copier paper, offset paper, forms bond, computer printout paper, carbonless paper, file folders, white woven envelopes, and other uncoated printed and writing paper, such as writing and office paper, book paper, cotton fiber paper, and cover stock. An alternative to meeting the 20 percent postconsumer material standard is 50 percent recovered material content of certain industrial by-products.

#### 52.209-6 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT. (JUL 1995)

(a) The Government suspends or debar Contractors to protect the Government's interests. The Contractor shall not enter into any subcontract in excess of the \$25,000 with a Contractor that is debarred, suspended, or proposed for debarment unless there is a compelling reason to do so.

(b) The Contractor shall require each proposed first-tier subcontractor, whose subcontract will exceed \$25,000, to disclose to the Contractor, in writing, whether as of the time of award of the subcontract, the subcontractor, or its principles, is or is not debarred, suspended, or proposed for debarment by the Federal Government.

(c) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is debarred, suspended, or proposed for debarment (see FAR 9.404 for information on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs). The notice must include the following:

(1) The name of the subcontractor.



(2) The Contractor's knowledge of the reasons for the subcontractor being on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs.

(3) The compelling reason(s) for doing business with the subcontractor notwithstanding its inclusion on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs.

(4) The systems and procedures the Contractor has established to ensure that it is fully protecting the Government's interests when dealing with such subcontractor in view of the specific basis for the party's debarment, suspension, or proposed debarment.

#### 52.211-18 VARIATION IN ESTIMATED QUANTITY (APR 1984)

If the quantity of a unit-priced item in this contract is an estimated quantity and the actual quantity of the unit-priced item varies more than 15 percent above or below the estimated quantity, an equitable adjustment in the contract price shall be made upon demand of either party. The equitable adjustment shall be based upon any increase or decrease in costs due solely to the variation above 115 percent or below 85 percent of the estimated quantity. If the quantity variation is such as to cause an increase in the time necessary for completion, the Contractor may request, in writing, an extension of time, to be received by the Contracting Officer within 10 days from the beginning of the delay, or within such further period as may be granted by the Contracting Officer before the date of final settlement of the contract. Upon the receipt of a written request for an extension, the Contracting Officer shall ascertain the facts and make an adjustment for extending the completion date as, in the judgement of the Contracting Officer, is justified.

#### 52.215-11 PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA--MODIFICATIONS (OCT 1997)

(a) This clause shall become operative only for any modification to this contract involving a pricing adjustment expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4, except that this clause does not apply to any modification if an exception under FAR 15.403-1 applies.

(b) If any price, including profit or fee, negotiated in connection with any modification under this clause, or any cost reimbursable under this contract, was increased by any significant amount because (1) the Contractor or a subcontractor furnished cost or pricing data that were not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data, (2) a subcontractor or prospective subcontractor furnished the Contractor cost or pricing data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data, or (3) any of these parties furnished data of any description that were not accurate, the price or cost shall be reduced accordingly and the contract shall be modified to reflect the reduction. This right to a price reduction is limited to that resulting from defects in data relating to modifications for which this clause becomes operative under paragraph (a) of this clause.

(c) Any reduction in the contract price under paragraph (b) of this clause due to defective data from a prospective subcontractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which--

(1) The actual subcontract; or

(2) The actual cost to the Contractor, if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; provided, that the actual subcontract price was not itself affected by defective cost or pricing data.

(d)(1) If the Contracting Officer determines under paragraph (b) of this

clause that a price or cost reduction should be made, the Contractor agrees not to raise the following matters as a defense:

(i) The Contractor or subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the contract would not have been modified even if accurate, complete, and current cost or pricing data had been submitted.

(ii) The Contracting Officer should have known that the cost or pricing data in issue were defective even though the Contractor or subcontractor took no affirmative action to bring the character of the data to the attention of the Contracting Officer.

(iii) The contract was based on an agreement about the total cost of the contract and there was no agreement about the cost of each item procured under the contract.

(iv) The Contractor or subcontractor did not submit a Certificate of Current Cost or Pricing Data.

(2)(i) Except as prohibited by subdivision (d)(2)(ii) of this clause, an offset in an amount determined appropriate by the Contracting Officer based upon the facts shall be allowed against the amount of a contract price reduction if--

(A) The Contractor certifies to the Contracting Officer that, to the best of the Contractor's knowledge and belief, the Contractor is entitled to the offset in the amount requested; and

(B) The Contractor proves that the cost or pricing data were available before the "as of" date specified on its Certificate of Current Cost or Pricing Data, and that the data were not submitted before such date.

(ii) An offset shall not be allowed if--

(A) The understated data were known by the Contractor to be understated before the "as of" date specified on its Certificate of Current Cost or Pricing Data; or

(B) The Government proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the "as of" date specified on its Certificate of Current Cost or Pricing Data.

(e) If any reduction in the contract price under this clause reduces the price of items for which payment was made prior to the date of the modification reflecting the price reduction, the Contractor shall be liable to and shall pay the United States at the time such overpayment is repaid--

(1) Simple interest on the amount of such overpayment to be computed from the date(s) of overpayment to the Contractor to the date the Government is repaid by the Contractor at the applicable underpayment rate effective for each quarter prescribed by the Secretary of the Treasury under 26 U.S.C. 6621(a)(2); and

(2) A penalty equal to the amount of the overpayment, if the Contractor or subcontractor knowingly submitted cost or pricing data that were incomplete, inaccurate, or noncurrent.

(End of clause)

#### 52.215-13 SUBCONTRACTOR COST OR PRICING DATA--MODIFICATIONS (OCT 1997)

(a) The requirements of paragraphs (b) and (c) of this clause shall--

(1) Become operative only for any modification to this contract

involving a pricing adjustment expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4; and

(2) Be limited to such modifications.

(b) Before awarding any subcontract expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4, on the date of agreement on price or the date of award, whichever is later; or before pricing any subcontract modification involving a pricing adjustment expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4, the Contractor shall require the subcontractor to submit cost or pricing data (actually or by specific identification in writing), unless an exception under FAR 15.403-1 applies.

(c) The Contractor shall require the subcontractor to certify in substantially the form prescribed in FAR 15.406-2 that, to the best of its knowledge and belief, the data submitted under paragraph (b) of this clause were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.

(d) The Contractor shall insert the substance of this clause, including this paragraph (d), in each subcontract that exceeds the threshold for submission of cost or pricing data at FAR 15.403-4 on the date of agreement on price or the date of award, whichever is later.

(End of clause)

#### 52.215-21 REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA--MODIFICATIONS (OCT 1997)

(a) Exceptions from cost or pricing data.

(1) In lieu of submitting cost or pricing data for modifications under this contract, for price adjustments expected to exceed the threshold set forth at FAR 15.403-4 on the date of the agreement on price or the date of the award, whichever is later, the Contractor may submit a written request for exception by submitting the information described in the following subparagraphs. The Contracting Officer may require additional supporting information, but only to the extent necessary to determine whether an exception should be granted, and whether the price is fair and reasonable--

(i) Identification of the law or regulation establishing the price offered. If the price is controlled under law by periodic rulings, reviews, or similar actions of a governmental body, attach a copy of the controlling document, unless it was previously submitted to the contracting office.

(ii) Information on modifications of contracts or subcontracts for commercial items.

(A) If--

(1) The original contract or subcontract was granted an exception from cost or pricing data requirements because the price agreed upon was based on adequate price competition or prices set by law or regulation, or was a contract or subcontract for the acquisition of a commercial item; and

(2) The modification (to the contract or subcontract) is not exempted based on one of these exceptions, then the Contractor may provide information to establish that the modification would not change the contract or subcontract from a contract or subcontract for the acquisition of a commercial item to a contract or subcontract for the acquisition of an item other than a commercial

item.

(B) For a commercial item exception, the Contractor shall provide, at a minimum, information on prices at which the same item or similar items have previously been sold that is adequate for evaluating the reasonableness of the price of the modification. Such information may include--

(1) For catalog items, a copy of or identification of the catalog and its date, or the appropriate pages for the offered items, or a statement that the catalog is on file in the buying office to which the proposal is being submitted. Provide a copy or describe current discount policies and price lists (published or unpublished), e.g., wholesale, original equipment manufacturer, or reseller. Also explain the basis of each offered price and its relationship to the established catalog price, including how the proposed price relates to the price of recent sales in quantities similar to the proposed quantities.

(2) For market-priced items, the source and date or period of the market quotation or other basis for market price, the base amount, and applicable discounts. In addition, describe the nature of the market.

(3) For items included on an active Federal Supply Service Multiple Award Schedule contract, proof that an exception has been granted for the schedule item.

(2) The Contractor grants the Contracting Officer or an authorized representative the right to examine, at any time before award, books, records, documents, or other directly pertinent records to verify any request for an exception under this clause, and the reasonableness of price. For items priced using catalog or market prices, or law or regulation, access does not extend to cost or profit information or other data relevant solely to the Contractor's determination of the prices to be offered in the catalog or marketplace.

(b) Requirements for cost or pricing data. If the Contractor is not granted an exception from the requirement to submit cost or pricing data, the following applies:

(1) The Contractor shall submit cost or pricing data and supporting attachments in accordance with Table 15-2 of FAR 15.408.

(2) As soon as practicable after agreement on price, but before award (except for unpriced actions), the Contractor shall submit a Certificate of Current Cost or Pricing Data, as prescribed by FAR 15.406-2.

(End of clause)

#### 52.219-4 NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS (JAN 1999)

(a) Definition. HUBZone small business concern, as used in this clause, means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

(b) Evaluation preference. (1) Offers will be evaluated by adding a factor of 10 percent to the price of all offers, except--

(i) Offers from HUBZone small business concerns that have not waived the evaluation preference;

(ii) Otherwise successful offers from small business concerns;

(iii) Otherwise successful offers of eligible products under the Trade Agreements Act when the dollar threshold for application of the Act is exceeded (see 25.402 of the Federal Acquisition Regulation (FAR)); and

(iv) Otherwise successful offers where application of the factor would be inconsistent with a Memorandum of Understanding or other international agreement with a foreign government.

(2) The factor of 10 percent shall be applied on a line item basis or to any group of items on which award may be made. Other evaluation factors described in the solicitation shall be applied before application of the factor.

(3) A concern that is both a HUBZone small business concern and a small disadvantaged business concern will receive the benefit of both the HUBZone small business price evaluation preference and the small disadvantaged business price evaluation adjustment (see FAR clause 52.219-23). Each applicable price evaluation preference or adjustment shall be calculated independently against an offeror's base offer.

These individual preference amounts shall be added together to arrive at the total evaluated price for that offer.

(c) Waiver of evaluation preference. A HUBZone small business concern may elect to waive the evaluation preference, in which case the factor will be added to its offer for evaluation purposes. The agreements in paragraph (d) of this clause do not apply if the offeror has waived the evaluation preference.

{time} Offeror elects to waive the evaluation preference.

(d) Agreement. A HUBZone small business concern agrees that in the performance of the contract, in the case of a contract for

(1) Services (except construction), at least 50 percent of the cost of personnel for contract performance will be spent for employees of the concern or employees of other HUBZone small business concerns;

(2) Supplies (other than procurement from a nonmanufacturer of such supplies), at least 50 percent of the cost of manufacturing, excluding the cost of materials, will be performed by the concern or other HUBZone small business concerns;

(3) General construction, at least 15 percent of the cost of the contract performance incurred for personnel will be spent on the concern's employees or the employees of other HUBZone small business concerns; or

(4) Construction by special trade contractors, at least 25 percent of the cost of the contract performance incurred for personnel will be spent on the concern's employees or the employees of other HUBZone small business concerns.

(e) A HUBZone joint venture agrees that in the performance of the contract, the applicable percentage specified in paragraph (d) of this clause will be performed by the HUBZone small business participant or participants.

(f) A HUBZone small business concern nonmanufacturer agrees to furnish in performing this contract only end items manufactured or produced by HUBZone small business manufacturer concerns. This paragraph does not apply in connection with construction or service contracts.

(End of clause)

52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS (OCT 1999)

(a) It is the policy of the United States that small business concerns, HUBZone small business concerns, small business concerns owned and controlled by socially and economically disadvantaged individuals, and small business concerns owned and controlled by women shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems. It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, HUBZone small business concerns, small business concerns owned and controlled by socially and economically disadvantaged individuals, and small business concerns owned and controlled by women.

(b) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the Contractor's compliance with this clause.

(c) Definitions. As used in this contract (1) Small business concern means a small business as defined pursuant to section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto.

(2) HUBZone small business concern means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

(3) Small business concern owned and controlled by socially and economically disadvantaged individuals and small disadvantaged business concern mean a small business concern that represents, as part of its offer that--

(i) It has received certification as a small disadvantaged business concern consistent with 13 CFR 124, Subpart B;

(ii) No material change in disadvantaged ownership and control has occurred since its certification;

(iii) Where the concern is owned by one or more individuals, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(iv) It is identified, on the date of its representation, as a certified small disadvantaged business in the database maintained by the Small Business Administration (PRO-Net).

(4) Small business concern owned and controlled by women means a small business concern--

(i) Which is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(ii) Whose management and daily business operations are controlled by one or more women.

(d) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as a small business concern, a HUBZone small business concern, a small business concern owned and controlled by socially and economically disadvantaged individuals, or a small business concern owned and controlled by women.

(End of clause)

52.219-9 SMALL, SMALL DISADVANTAGED AND WOMEN-OWNED SMALL BUSINESS  
SUBCONTRACTING PLAN (OCT 1999)--ALTERNATE I (JAN 1999).

(a) This clause does not apply to small business concerns.

(b) "Commercial product," as used in this clause, means a product in regular production that is sold in substantial quantities to the general public and/or industry at established catalog or market prices. It also means a product which, in the opinion of the Contracting Officer, differs only insignificantly from the Contractor's commercial product.

"Subcontract," as used in this clause, means any agreement (other than one involving an employer-employee relationship) entered into by a Federal Government prime Contractor or subcontractor calling for supplies or services required for performance of the contract or subcontract.

(c) The apparent low bidder, upon request by the Contracting Officer, shall submit a subcontracting plan, where applicable, that separately addresses subcontracting with small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns. If the bidder is submitting an individual contract plan, the plan must separately address subcontracting with small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns, with a separate part for the basic contract and separate parts for each option (if any). The plan shall be included in and made a part of the resultant contract. The subcontracting plan shall be submitted within the time specified by the Contracting Officer. Failure to submit the subcontracting plan shall make the bidder ineligible for the award of a contract.

(d) The offeror's subcontracting plan shall include the following:

(1) Goals, expressed in terms of percentages of total planned subcontracting dollars, for the use of small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns as subcontractors. The offeror shall include all subcontracts that contribute to contract performance, and may include a proportionate share of products and services that are normally allocated as indirect costs.

(2) A statement of--

(i) Total dollars planned to be subcontracted;

(ii) Total dollars planned to be subcontracted to small business concerns;

(iii) Total dollars planned to be subcontracted to HUBZone small business concerns;

(iv) Total dollars planned to be subcontracted to small disadvantaged business concerns; and

(v) Total dollars planned to be subcontracted to women-owned small business concerns.

(3) A description of the principal types of supplies and services to be subcontracted, and an identification of the types planned for subcontracting to--

(i) Small business concerns;

(ii) HUBZone small business concerns;

(iii) Small disadvantaged business concerns; and

(iv) Women-owned small business concerns.

(4) A description of the method used to develop the subcontracting goals in paragraph (d)(1) of this clause.

(5) A description of the method used to identify potential sources for solicitation purposes (e.g., existing company source lists, the Procurement Marketing and Access Network (PRO-Net) of the Small Business Administration (SBA), the National Minority Purchasing Council Vendor Information Service, the Research and Information Division of the Minority Business Development Agency in the Department of Commerce, or small, HUBZone, small disadvantaged, and women-owned small business trade associations). A firm may rely on the information contained in PRO-Net as an accurate representation of a concern's size and ownership characteristics for the purposes of maintaining a small, HUBZone, small disadvantaged and women-owned small business source list. Use of PRO-Net as its source list does not relieve a firm of its responsibilities (e.g., outreach, assistance, counseling, or publicizing subcontracting opportunities) in this clause.

(6) A statement as to whether or not the offeror included indirect costs in establishing subcontracting goals, and a description of the method used to determine the proportionate share of indirect costs to be incurred with—

- (i) Small business concerns;
- (ii) HUBZone small business concerns;
- (iii) Small disadvantaged business concerns; and
- (iv) Women-owned small business concerns.

(7) The name of the individual employed by the offeror who will administer the offeror's subcontracting program, and a description of the duties of the individual.

(8) A description of the efforts the offeror will make to assure that small business, HUBZone small business, small disadvantaged and women-owned small business concerns have an equitable opportunity to compete for subcontracts.

(9) Assurances that the offeror will include the clause of this contract entitled "Utilization of Business Concerns" in all subcontracts that offer further subcontracting opportunities, and that the offeror will require all subcontractors (except small business concerns) who receive subcontracts in excess of \$500,000 (\$1,000,000 for construction of any public facility) to adopt a plan similar to the plan agreed to by the offeror.

(10) Assurances that the offeror will (i) cooperate in any studies or surveys as may be required, (ii) submit periodic reports in order to allow the Government to determine the extent of compliance by the offeror with the subcontracting plan, (iii) submit Standard Form (SF) 294, Subcontracting Report for Individual Contracts, and/or SF 295, Summary Subcontract Report, in accordance with the instructions on the forms or as provided in agency regulations and in paragraph (j) of this clause; and (iv) ensure that its subcontractors agree to submit Standard Forms 294 and 295.

(11) A description of the types of records that will be maintained concerning procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists; and a description of the offeror's efforts to locate small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns and award subcontracts to them. The records shall include at least the following (on a plant-wide or company-wide basis, unless otherwise indicated)

- (i) Source lists (e.g., PRO-Net), guides, and other data that identify small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns.



- (ii) Organizations contacted in an attempt to locate sources that are small business, HUBZone small business, small disadvantaged business, or women-owned small business concerns.
- (iii) Records on each subcontract solicitation resulting in an award of more than \$100,000, indicating--
  - (A) Whether small business concerns were solicited and, if not, why not;
  - (B) Whether HUBZone small business concerns were solicited and, if not, why not;
  - (C) Whether small disadvantaged business concerns were solicited and, if not, why not;
  - (D) Whether women-owned small business concerns were solicited and, if not, why not; and
  - (E) If applicable, the reason award was not made to a small business concern.
- (iv) Records of any outreach efforts to contact--
  - (A) Trade associations;
  - (B) Business development organizations; and
  - (C) Conferences and trade fairs to locate small, HUBZone small, small disadvantaged, and women-owned small business sources.
- (v) Records of internal guidance and encouragement provided to buyers through--
  - (A) Workshops, seminars, training, etc.; and
  - (B) Monitoring performance to evaluate compliance with the program's requirements.
- (vi) On a contract-by-contract basis, records to support award data submitted by the offeror to the Government, including the name, address, and business size of each subcontractor. Contractors having commercial plans need not comply with this requirement.
- (e) In order to effectively implement this plan to the extent consistent with efficient contract performance, the Contractor shall perform the following functions:
  - (1) Assist small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business, HUBZone small business, small disadvantaged business, and women-owned small business subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time.
  - (2) Provide adequate and timely consideration of the potentialities of small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns in all "make-or-buy" decisions.
  - (3) Counsel and discuss subcontracting opportunities with representatives of small business, HUBZone small business, small disadvantaged business, and women-owned small business firms.
  - (4) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small, HUBZone small, small disadvantaged, or women-owned small business for the purpose of obtaining a subcontract that is to be included as part or all of a goal contained in the Contractor's subcontracting plan.

(f) A master subcontracting plan on a plant or division-wide basis which contains all the elements required by paragraph (d) of this clause, except goals, may be incorporated by reference as a part of the subcontracting plan required of the offeror by this clause; provided, (1) the master plan has been approved, (2) the offeror ensures that the master plan is updated as necessary and provides copies of the approved master plan, including evidence of its approval, to the Contracting Officer, and (3) goals and any deviations from the master plan deemed necessary by the Contracting Officer to satisfy the requirements of this contract are set forth in the individual subcontracting plan.

(g)(1) If a commercial product is offered, the subcontracting plan required by this clause may relate to the offeror's production generally, for both commercial and noncommercial products, rather than solely to the Government contract. In these cases, the offeror shall, with the concurrence of the Contracting Officer, submit one company-wide or division-wide annual plan.

(2) The annual plan shall be reviewed for approval by the agency awarding the offeror its first prime contract requiring a subcontracting plan during the fiscal year, or by an agency satisfactory to the Contracting Officer.

(3) The approved plan shall remain in effect during the offeror's fiscal year for all of the offeror's commercial products.

(h) Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.

(i) The failure of the Contractor or subcontractor to comply in good faith with (1) the clause of this contract entitled "Utilization Of Business Concerns," or (2) an approved plan required by this clause, shall be a material breach of the contract.

(j) The Contractor shall submit the following reports:

(1) Standard Form 294, Subcontracting Report for Individual Contracts. This report shall be submitted to the Contracting Officer semiannually and at contract completion. The report covers subcontract award data related to this contract. This report is not required for commercial plans.

(2) Standard Form 295, Summary Subcontract Report. This report encompasses all the contracts with the awarding agency. It must be submitted semi-annually for contracts with the Department of Defense and annually for contracts with civilian agencies. If the reporting activity is covered by a commercial plan, the reporting activity must report annually all subcontract awards under that plan. All reports submitted at the close of each fiscal year (both individual and commercial plans) shall include a breakout, in the Contractor's format, of subcontract awards, in whole dollars, to small disadvantaged business concerns by Standard Industrial Classification (SIC) Major Group. For a commercial plan, the Contractor may obtain from each of its subcontractors a predominant SIC Major Group and report all awards to that subcontractor under its predominant SIC Major Group.

(End of clause)

#### 52.219-16 LIQUIDATED DAMAGES-SUBCONTRACTING PLAN (JAN 1999)

(a) Failure to make a good faith effort to comply with the subcontracting plan, as used in this clause, means a willful or intentional failure to perform in accordance with the requirements of the subcontracting plan approved under the clause in this contract entitled "Small Business Subcontracting Plan," or willful or intentional action to frustrate the plan.

(b) Performance shall be measured by applying the percentage goals to the total actual subcontracting dollars or, if a commercial plan is involved, to the pro rata share of actual subcontracting dollars

attributable to Government contracts covered by the commercial plan. If, at contract completion or, in the case of a commercial plan, at the close of the fiscal year for which the plan is applicable, the Contractor has failed to meet its subcontracting goals and the Contracting Officer decides in accordance with paragraph (c) of this clause that the Contractor failed to make a good faith effort to comply with its subcontracting plan, established in accordance with the clause in this contract entitled "Small Business Subcontracting Plan," the Contractor shall pay the Government liquidated damages in an amount stated. The amount of probable damages attributable to the Contractor's failure to comply shall be an amount equal to the actual dollar amount by which the Contractor failed to achieve each subcontract goal.

(c) Before the Contracting Officer makes a final decision that the Contractor has failed to make such good faith effort, the Contracting Officer shall give the Contractor written notice specifying the failure and permitting the Contractor to demonstrate what good faith efforts have been made and to discuss the matter. Failure to respond to the notice may be taken as an admission that no valid explanation exists. If, after consideration of all the pertinent data, the Contracting Officer finds that the Contractor failed to make a good faith effort to comply with the subcontracting plan, the Contracting Officer shall issue a final decision to that effect and require that the Contractor pay the Government liquidated damages as provided in paragraph (b) of this clause.

(d) With respect to commercial plans, the Contracting Officer who approved the plan will perform the functions of the Contracting Officer under this clause on behalf of all agencies with contracts covered by the commercial plan.

(e) The Contractor shall have the right of appeal, under the clause in this contract entitled Disputes, from any final decision of the Contracting Officer.

(f) Liquidated damages shall be in addition to any other remedies that the Government may have.

(End of clause)

#### 52.222-3 CONVICT LABOR (AUG 1996)

The Contractor agrees not to employ in the performance of this contract any person undergoing a sentence of imprisonment which has been imposed by any court of a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands. This limitation, however, shall not prohibit the employment by the Contractor in the performance of this contract of persons on parole or probation to work at paid employment during the term of their sentence or persons who have been pardoned or who have served their terms. Nor shall it prohibit the employment by the Contractor in the performance of this contract of persons confined for violation of the laws of any of the States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands who are authorized to work at paid employment in the community under the laws of such jurisdiction, if--

(a)(1) The worker is paid or is in an approved work training program on a voluntary basis;

(2) Representatives of local union central bodies or similar labor union organizations have been consulted;

(3) Such paid employment will not result in the displacement of employed workers, or be applied in skills, crafts, or trades in which there is a surplus of available gainful labor in the locality, or impair existing contracts for services; and

(4) The rates of pay and other conditions of employment will not be less than those paid or provided for work of a similar nature in the locality in which the work is being performed; and

(b) The Attorney General of the United States has certified that the work-release laws or regulations of the jurisdiction involved are in conformity with the requirements of Executive Order 11755, as amended by Executive Orders 12608 and 12943.

(End of clause)

52.222-4 CONTRACT WORK HOURS AND SAFETY STANDARDS ACT - OVERTIME  
COMPENSATION. (JUL 1995)

(a) Overtime requirements. No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics (see Federal Acquisition Regulation (FAR) 22.300) shall require or permit any such laborers or mechanics in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than 1 1/2 times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(b) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the provisions set forth in paragraph (a) of this clause, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanics employed in violation of the provisions set forth in paragraph (a) of this clause in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by provisions set forth in paragraph (a) of this clause.

(c) Withholding for unpaid wages and liquidated damages. The Contracting Officer shall upon his or her own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any other Federal contract with the same Prime Contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same Prime Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the provisions set forth in paragraph (b) of this clause.

(d) Payrolls and basic records. (1) The Contractor or subcontractor shall maintain payrolls and basic payroll records during the course of contract work and shall preserve them for a period of 3 years from the completion of the contract for all laborers and mechanics working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Nothing in this paragraph shall require the duplication of records required to be maintained for construction work by Department of Labor regulations at 29 CFR 5.5(a)(3) implementing the Davis-Bacon Act.

(2) The records to be maintained under paragraph (d)(1) of this clause shall be made available by the Contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the Contracting Officer or the Department of Labor. The Contractor or subcontractor shall permit such representatives to interview employees during working hours on the job.

(e) Subcontracts. The Contractor or subcontractor shall insert in any subcontracts exceeding \$100,000 the provisions set forth in paragraphs (a) through (e) of this clause and also a clause requiring the subcontractors to include these provisions in any lower tier subcontracts. The Prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the provisions set forth in paragraphs (a) through (e) of this clause.

52.222-6 DAVIS-BACON ACT (FEB 1995)

(a) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (d) of this clause; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such period. Such laborers and mechanics shall be paid not less than the appropriate wage rate and fringe benefits in the wage determination for the classification of work actually performed, without regard to skill, except as provided in the clause entitled Apprentices and Trainees. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph (b) of this clause) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(b)(1) The Contracting Officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The Contracting Officer shall approve an additional classification and wage rate and fringe benefits therefor only when all the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination.

(ii) The classification is utilized in the area by the construction industry.

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Contracting Officer agree on the classification and wage rate (including the amount designated for fringe benefits, where appropriate), a report of the action taken shall be sent by the Contracting Officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator or an authorized representative will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(3) In the event the Contractor, the laborers or mechanics to be employed in the classification, or their representatives, and the Contracting Officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting Officer shall refer the questions, including the views of all interested parties and the recommendation of the Contracting Officer, to the Administrator of the Wage and Hour Division for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so

advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits, where appropriate) determined pursuant to subparagraphs (b)(2) and (b)(3) of this clause shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(c) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program; provided, That the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

#### 52.222-7 WITHHOLDING OF FUNDS (FEB 1988)

The Contracting Officer shall, upon his or her own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same Prime Contractor, or any other Federally assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same Prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

#### 52.222-8 PAYROLLS AND BASIC RECORDS (FEB 1988)

(a) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of 3 years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found, under paragraph (d) of the clause entitled Davis-Bacon Act, that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(b)(1) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Contracting Officer. The payrolls submitted shall set out accurately and completely

all of the information required to be maintained under paragraph (a) of this clause. This information may be submitted in any form desired. Optional Form WH-347 (Federal Stock Number 029-005-00014-1) is available for this purpose and may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. The Prime Contractor is responsible for the submission of copies of payrolls by all subcontractors.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify--

(i) That the payroll for the payroll period contains the information required to be maintained under paragraph (a) of this clause and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR Part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph (b)(2) of this clause.

(4) The falsification of any of the certifications in this clause may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 3729 of Title 31 of the United States Code.

(c) The Contractor or subcontractor shall make the records required under paragraph (a) of this clause available for inspection, copying, or transcription by the Contracting Officer or authorized representatives of the Contracting Officer or the Department of Labor. The Contractor or subcontractor shall permit the Contracting Officer or representatives of the Contracting Officer or the Department of Labor to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit required records or to make them available, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 52.222-9 APPRENTICES AND TRAINEES (FEB 1988)

(a) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in this paragraph, shall be paid not less than the applicable wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio

permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(b) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed in the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate in the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate in the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate in the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(c) Equal employment opportunity. The utilization of apprentices, trainees, and journeymen under this clause shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

#### 52.222-10 COMPLIANCE WITH COPELAND ACT REQUIREMENTS (FEB 1988)

The Contractor shall comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this contract.

#### 52.222-11 SUBCONTRACTS (LABOR STANDARDS (FEB 1988)

(a) The Contractor or subcontractor shall insert in any subcontracts the clauses entitled Davis-Bacon Act, Contract Work Hours and Safety Standards Act-Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Withholding of Funds, Subcontracts (Labor Standards), Contract Termination-Debarment, Disputes Concerning Labor Standards, Compliance with Davis-Bacon and Related Act Regulations, and Certification of Eligibility, and such other clauses as the Contracting Officer may, by appropriate instructions, require, and also a clause



requiring subcontractors to include these clauses in any lower tier subcontracts. The Prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with all the contract clauses cited in this paragraph.

(b)(1) Within 14 days after award of the contract, the Contractor shall deliver to the Contracting Officer a completed Statement and Acknowledgment Form (SF 1413) for each subcontract, including the subcontractor's signed and dated acknowledgment that the clauses set forth in paragraph (a) of this clause have been included in the subcontract.

(2) Within 14 days after the award of any subsequently awarded subcontract the Contractor shall deliver to the Contracting Officer an updated completed SF 1413 for such additional subcontract.

#### 52.222-12 CONTRACT TERMINATION--DEBARMENT (FEB 1988)

A breach of the contract clauses entitled Davis-Bacon Act, Contract Work Hours and Safety Standards Act--Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Subcontracts (Labor Standards), Compliance with Davis-Bacon and Related Act Regulations, or Certification of Eligibility may be grounds for termination of the contract, and for debarment as a Contractor and subcontractor as provided in 29 CFR 5.12.

#### 52.222-13 COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS (FEB 1988)

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are hereby incorporated by reference in this contract.

#### 52.222-14 DISPUTES CONCERNING LABOR STANDARDS (FEB 1988)

The United States Department of Labor has set forth in 29 CFR Parts 5, 6, and 7 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

#### 52.222-15 CERTIFICATION OF ELIGIBILITY (FEB 1988)

(a) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(b) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(c) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

#### 52.222-21 PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)

(a) Segregated facilities, as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee

custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

(b) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in this contract.

(c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Opportunity clause of this contract.

(End of clause)

#### 52.222-26 EQUAL OPPORTUNITY (FEB 1999)

(a) If, during any 12-month period (including the 12 months preceding the award of this contract), the Contractor has been or is awarded nonexempt Federal contracts and/or subcontracts that have an aggregate value in excess of \$10,000, the Contractor shall comply with subparagraphs (b)(1) through (11) of this clause. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause.

(b) During performing this contract, the Contractor agrees as follows:

(1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. However, it shall not be a violation of this clause for the Contractor to extend a publicly announced preference in employment to Indians living on or near an Indian reservation, in connection with employment opportunities on or near an Indian reservation, as permitted by 41 CFR 60-1.5.

(2) The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. This shall include, but not be limited to, (i) employment, (ii) upgrading, (iii) demotion, (iv) transfer, (v) recruitment or recruitment advertising, (vi) layoff or termination, (vii) rates of pay or other forms of compensation, and (viii) selection for training, including apprenticeship.

(3) The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer that explain this clause.

(4) The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(5) The Contractor shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be provided by the Contracting Officer advising the labor union or workers' representative of the Contractor's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.

(6) The Contractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.

(7) The Contractor shall furnish to the contracting agency all information required by Executive Order 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor. The Contractor shall also file Standard Form 100 (EEO-1), or any successor form, as prescribed in 41 CFR part 60-1.

Unless the Contractor has filed within the 12 months preceding the date of contract award, the Contractor shall, within 30 days after contract award, apply to either the regional Office of Federal Contract Compliance Programs (OFCCP) or the local office of the Equal Employment Opportunity Commission for the necessary forms.

(8) The Contractor shall permit access to its premises, during normal business hours, by the contracting agency or the OFCCP for the purpose of conducting on-site compliance evaluations and complaint investigations. The Contractor shall permit the Government to inspect and copy any books, accounts, records (including computerized records), and other material that may be relevant to the matter under investigation and pertinent to compliance with Executive Order 11246, as amended, and rules and regulations that implement the Executive Order.

(9) If the OFCCP determines that the Contractor is not in compliance with this clause or any rule, regulation, or order of the Secretary of Labor, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts, under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the Contractor as provided in Executive Order 11246, as amended; in the rules, regulations, and orders of the Secretary of Labor; or as otherwise provided by law.

(10) The Contractor shall include the terms and conditions of subparagraphs (b)(1) through (11) of this clause in every subcontract or purchase order that is not exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each subcontractor or vendor.

(11) The Contractor shall take such action with respect to any subcontract or purchase order as the contracting officer may direct as a means of enforcing these terms and conditions, including sanctions for noncompliance; provided, that if the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of any direction, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

(c) Notwithstanding any other clause in this contract, disputes relative to this clause will be governed by the procedures in 41 CFR 60-1.1.

#### 52.222-27 AFFIRMATIVE ACTION COMPLIANCE REQUIREMENTS FOR CONSTRUCTION (FEB 1999)

(a) Definitions. "Covered area," as used in this clause, means the geographical area described in the solicitation for this contract.

"Deputy Assistant Secretary," as used in this clause, means Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, or a designee.

"Employer's identification number," as used in this clause, means the Federal Social Security number used on the employer's quarterly federal tax return, U.S. Treasury Department Form 941.

"Minority," as used in this clause, means--

(1) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

(2) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands);

(3) Black (all persons having origins in any of the black African racial groups not of Hispanic origin); and

(4) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race).

(b) If the Contractor, or a subcontractor at any tier, subcontracts a portion of the work involving any construction trade, each such subcontract in excess of \$10,000 shall include this clause and the Notice containing the goals for minority and female participation stated in the solicitation for this contract.

(c) If the Contractor is participating in a Hometown Plan (41 CFR 60-4) approved by the U.S. Department of Labor in a covered area, either individually or through an association, its affirmative action obligations on all work in the plan area (including goals) shall comply with the plan for those trades that have unions participating in the plan. Contractors must be able to demonstrate participation in, and compliance with, the provisions of the plan. Each Contractor or subcontractor participating in an approved plan is also required to comply with its obligations under the Equal Opportunity clause, and to make a good faith effort to achieve each goal under the plan in each trade in which it has employees. The overall good-faith performance by other Contractors or subcontractors toward a goal in an approved plan does not excuse any Contractor's or subcontractor's failure to make good-faith efforts to achieve the plan's goals.

(d) The Contractor shall implement the affirmative action procedures in subparagraphs (g)(1) through (16) of this clause. The goals stated in the solicitation for this contract are expressed as percentages of the total hours of employment and training of minority and female utilization that the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for the geographical area where that work is actually performed. The Contractor is expected to make substantially uniform progress toward its goals in each craft.

(e) Neither the terms and conditions of any collective bargaining agreement, nor the failure by a union with which the Contractor has a collective bargaining agreement, to refer minorities or women shall excuse the Contractor's obligations under this clause, Executive Order 11246, as amended, or the regulations thereunder.

(f) In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

(g) The Contractor shall take affirmative action to ensure equal employment opportunity. The evaluation of the Contractor's compliance with this clause shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and implement affirmative action steps at least as extensive as the following:

(1) Ensure a working environment free of harassment, intimidation, and coercion at all sites and in all facilities where the Contractor's employees are assigned to work. The Contractor, if possible, will assign two or more women to each construction project. The Contractor shall ensure that foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at these sites or facilities.

(2) Establish and maintain a current list of sources for minority and female recruitment. Provide written notification to minority and female recruitment sources and community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

(3) Establish and maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant, referrals of minorities or females from unions, recruitment

sources, or community organizations, and the action taken with respect to each individual. If an individual was sent to the union hiring hall for referral and not referred back to the Contractor by the union or, if referred back, not employed by the Contractor, this shall be documented in the file, along with whatever additional actions the Contractor may have taken.

(4) Immediately notify the Deputy Assistant Secretary when the union or unions with which the Contractor has a collective bargaining agreement has not referred back to the Contractor a minority or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

(5) Develop on-the-job training opportunities and/or participate in training programs for the area that expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under subparagraph (g)(2) of this clause.

(6) Disseminate the Contractor's equal employment policy by--

(i) Providing notice of the policy to unions and to training, recruitment, and outreach programs, and requesting their cooperation in assisting the Contractor in meeting its contract obligations;

(ii) Including the policy in any policy manual and in collective bargaining agreements;

(iii) Publicizing the policy in the company newspaper, annual report, etc.;

(iv) Reviewing the policy with all management personnel and with all minority and female employees at least once a year; and

(v) Posting the policy on bulletin boards accessible to employees at each location where construction work is performed.

(7) Review, at least annually, the Contractor's equal employment policy and affirmative action obligations with all employees having responsibility for hiring, assignment, layoff, termination, or other employment decisions. Conduct review of this policy with all on-site supervisory personnel before initiating construction work at a job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

(8) Disseminate the Contractor's equal employment policy externally by including it in any advertising in the news media, specifically including minority and female news media. Provide written notification to, and discuss this policy with, other Contractors and subcontractors with which the Contractor does or anticipates doing business.

(9) Direct recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students, and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than 1 month before the date for acceptance of applications for apprenticeship or training by any recruitment source, send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

(10) Encourage present minority and female employees to recruit minority persons and women. Where reasonable, provide after-school, summer, and vacation employment to minority and female youth both on the site and in other areas of the Contractor's workforce.

(11) Validate all tests and other selection requirements where required under 41 CFR 60-3.

(12) Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities. Encourage these employees to seek or to prepare for, through appropriate training, etc., opportunities for promotion.

(13) Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment-related activities to ensure that the Contractor's obligations under this contract are being carried out.

(14) Ensure that all facilities and company activities are nonsegregated except that separate or single-user rest rooms and necessary dressing or sleeping areas shall be provided to assure privacy between the sexes.

(15) Maintain a record of solicitations for subcontracts for minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

(16) Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's equal employment policy and affirmative action obligations.

(h) The Contractor is encouraged to participate in voluntary associations that may assist in fulfilling one or more of the affirmative action obligations contained in subparagraphs (g)(1) through (16) of this clause. The efforts of a contractor association, joint contractor-union, contractor-community, or similar group of which the contractor is a member and participant may be asserted as fulfilling one or more of its obligations under subparagraphs (g)(1) through (16) of this clause, provided the Contractor--

(1) Actively participates in the group;

(2) Makes every effort to ensure that the group has a positive impact on the employment of minorities and women in the industry;

(3) Ensures that concrete benefits of the program are reflected in the Contractor's minority and female workforce participation;

(4) Makes a good-faith effort to meet its individual goals and timetables; and

(5) Can provide access to documentation that demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply is the Contractor's, and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

(i) A single goal for minorities and a separate single goal for women shall be established. The Contractor is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and nonminority. Consequently, the Contractor may be in violation of Executive Order 11246, as amended, if a particular group is employed in a substantially disparate manner.

(j) The Contractor shall not use goals or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

(k) The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts under Executive Order 11246, as amended.

(l) The Contractor shall carry out such sanctions and penalties for violation of this clause and of the Equal Opportunity clause, including suspension, termination, and cancellation of existing subcontracts, as may be imposed or ordered under Executive Order 11246, as amended, and its implementing regulations, by the OFCCP. Any failure to carry out these sanctions and penalties as ordered shall be a violation of this clause and Executive Order 11246, as amended.

(m) The Contractor in fulfilling its obligations under this clause shall implement affirmative action procedures at least as extensive as those prescribed in paragraph (g) of this clause, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of Executive Order 11246, as amended, the implementing regulations, or this clause, the Deputy Assistant Secretary shall take action as prescribed in 41 CFR 60-4.8.

(n) The Contractor shall designate a responsible official to--

(1) Monitor all employment-related activity to ensure that the Contractor's equal employment policy is being carried out;

(2) Submit reports as may be required by the Government; and

(3) Keep records that shall at least include for each employee the name, address, telephone number, construction trade, union affiliation (if any), employee identification number, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, separate records are not required to be maintained.

Nothing contained herein shall be construed as a limitation upon the application of other laws that establish different standards of compliance or upon the requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

#### 52.222-35 AFFIRMATIVE ACTION FOR DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA (APR 1998)

(a) Definitions. As used in this clause--

All employment openings includes all positions except executive and top management, those positions that will be filled from within the contractor's organization, and positions lasting 3 days or less. This term includes full-time employment, temporary employment of more than 3 days' duration, and part-time employment.

Appropriate office of the State employment service system means the local office of the Federal-State national system of public employment offices with assigned responsibility to serve the area where the employment opening is to be filled, including the District of Columbia, Guam, the Commonwealth of Puerto Rico, and the Virgin Islands.

Positions that will be filled from within the Contractor's organization means employment openings for which no consideration will be given to persons outside the Contractor's organization (including any affiliates, subsidiaries, and parent companies) and includes any openings that the Contractor proposes to fill from regularly established "recall" lists. The exception does not apply to a particular opening once an employer decides to consider applicants outside of its organization.

Veteran of the Vietnam era means a person who--

(1) Served on active duty for a period of more than 180 days, any part of which occurred between August 5, 1964, and May 7, 1975, and was discharged or released therefrom with other than a dishonorable discharge; or

(2) Was discharged or released from active duty for a service-connected disability if any part of such active duty was performed between August 5, 1964, and May 7, 1975.

(b) General. (1) Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against the individual because the individual is a disabled veteran or a veteran of the Vietnam era. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified disabled veterans and veterans of the Vietnam era without discrimination based upon their disability or veterans' status in all employment practices such as--

- (i) Employment;
- (ii) Upgrading;
- (iii) Demotion or transfer;
- (iv) Recruitment;
- (v) Advertising;
- (vi) Layoff or termination;
- (vii) Rates of pay or other forms of compensation; and
- (viii) Selection for training, including apprenticeship.

(2) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Vietnam Era Veterans' Readjustment Assistance Act of 1972 (the Act), as amended.

(c) Listing openings. (1) The Contractor agrees to list all employment openings existing at contract award or occurring during contract performance, at an appropriate office of the State employment service system in the locality where the opening occurs. These openings include those occurring at any Contractor facility, including one not connected with performing this contract. An independent corporate affiliate is exempt from this requirement.

(2) State and local government agencies holding Federal contracts of \$10,000 or more shall also list all their employment openings with the appropriate office of the State employment service.

(3) The listing of employment openings with the State employment service system is required at least concurrently with using any other recruitment source or effort and involves the obligations of placing a bona fide job order, including accepting referrals of veterans and nonveterans. This listing does not require hiring any particular job applicant or hiring from any particular group of job applicants and is not intended to relieve the Contractor from any requirements of Executive orders or regulations concerning nondiscrimination in employment.

(4) Whenever the Contractor becomes contractually bound to the listing terms of this clause, it shall advise the State employment service system, in each State where it has establishments, of the name and location of each hiring location in the State. As long as the Contractor is contractually bound to these terms and has so advised the State system, it need not advise the State system of subsequent contracts. The Contractor may advise the State system when it is no longer bound by this contract clause.

(d) Applicability. This clause does not apply to the listing of employment openings that occur and are filled outside the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, and the Virgin Islands.

(e) Postings. (1) The Contractor agrees to post employment notices stating (i) the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified disabled veterans and veterans of the Vietnam era, and (ii) the rights of applicants and employees.



(2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. They shall be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance Programs, Department of Labor (Deputy Assistant Secretary), and provided by or through the Contracting Officer.

(3) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of the Act, and is committed to take affirmative action to employ, and advance in employment, qualified disabled veterans and veterans of the Vietnam Era.

(f) Noncompliance. If the Contractor does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary issued pursuant to the Act.

(g) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order of \$10,000 or more unless exempted by rules, regulations, or orders of the Secretary. The Contractor shall act as specified by the Deputy Assistant Secretary to enforce the terms, including action for noncompliance.

(End of clause)

#### 52.222-36 AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES (JUN 1998)

(a) General. (1) Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against any employee or applicant because of physical or mental disability. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified individuals with disabilities without discrimination based upon their physical or mental disability in all employment practices such as--

(i) Recruitment, advertising, and job application procedures;

(ii) Hiring, upgrading, promotion, award of tenure, demotion, transfer, layoff, termination, right of return from layoff, and rehiring;

(iii) Rates of pay or any other form of compensation and changes in compensation;

(iv) Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists;

(v) Leaves of absence, sick leave, or any other leave;

(vi) Fringe benefits available by virtue of employment, whether or not administered by the Contractor;

(vii) Selection and financial support for training, including apprenticeships, professional meetings, conferences, and other related activities, and selection for leaves of absence to pursue training;

(viii) Activities sponsored by the Contractor, including social or recreational programs; and

(ix) Any other term, condition, or privilege of employment.

(2) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Rehabilitation Act of 1973 (29 U.S.C. 793) (the Act), as amended.

(b) Postings. (1) The Contractor agrees to post employment notices stating--

(i) The Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified individuals with disabilities; and

(ii) The rights of applicants and employees.

(2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. The Contractor shall ensure that applicants and employees with disabilities are informed of the contents of the notice (e.g., the Contractor may have the notice read to a visually disabled individual, or may lower the posted notice so that it might be read by a person in a wheelchair). The notices shall be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance of the U.S. Department of Labor (Deputy Assistant Secretary) and shall be provided by or through the Contracting Officer.

(3) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of Section 503 of the Act and is committed to take affirmative action to employ, and advance in employment, qualified individuals with physical or mental disabilities.

(c) Noncompliance. If the Contractor does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary issued pursuant to the Act.

(d) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of \$10,000 unless exempted by rules, regulations, or orders of the Secretary. The Contractor shall act as specified by the Deputy Assistant Secretary to enforce the terms, including action for noncompliance.

(End of clause)

#### 52.222-37 EMPLOYMENT REPORTS ON DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA (JAN 1999)

(a) Unless the Contractor is a State or local government agency, the Contractor shall report at least annually, as required by the Secretary of Labor, on--

(1) The number of disabled veterans and the number of veterans of the Vietnam era in the workforce of the contractor by job category and hiring location; and

(2) The total number of new employees hired during the period covered by the report, and of that total, the number of disabled veterans, and the number of veterans of the Vietnam era.

(b) The above items shall be reported by completing the form entitled "Federal Contractor Veterans' Employment Report VETS-100."

(c) Reports shall be submitted no later than September 30 of each year beginning September 30, 1988.

(d) The employment activity report required by paragraph (a)(2) of this clause shall reflect total hires during the most recent 12-month period as of the ending date selected for the employment profile report required by paragraph (a)(1) of this clause. Contractors may select an ending date: (1) As of the end of any pay period during the period January through March 1st of the year the report is due, or (2) as of December 31, if the contractor has previous written approval from the Equal Employment Opportunity Commission to do so for purposes of submitting the Employer Information Report EEO-1 (Standard Form 100).

(e) The count of veterans reported according to paragraph (a) of this clause shall be based on voluntary disclosure. Each Contractor subject to the reporting requirements at 38 U.S.C. 4212 shall invite all disabled veterans and veterans of the Vietnam era who wish to benefit under the affirmative action program at 38 U.S.C. 4212 to identify themselves to the Contractor. The invitation shall state that the information is voluntarily provided; that the information will be kept confidential; that disclosure or refusal to provide the information will not subject the applicant or employee to any adverse treatment; and that the information will be used only in accordance with the regulations promulgated under 38 U.S.C. 4212.

(f) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order of \$10,000 or more unless exempted by rules, regulations, or orders of the Secretary.

(End of clause)

#### 52.223-6 DRUG-FREE WORKPLACE (JAN 1997)

(a) Definitions. As used in this clause --

"Controlled substance" means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11 - 1308.15.

"Conviction" means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes.

"Criminal drug statute" means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession, or use of any controlled substance.

"Drug-free workplace" means the site(s) for the performance of work done by the Contractor in connection with a specific contract at which employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

"Employee" means an employee of a Contractor directly engaged in the performance of work under a Government contract. "Directly engaged" is defined to include all direct cost employees and any other Contractor employee who has other than a minimal impact or involvement in contract performance.

"Individual" means an offeror/contractor that has no more than one employee including the offeror/contractor.

(b) The Contractor, if other than an individual, shall-- within 30 days after award (unless a longer period is agreed to in writing for contracts of 30 days or more performance duration), or as soon as possible for contracts of less than 30 days performance duration--

(1) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition;

(2) Establish an ongoing drug-free awareness program to inform such employees about--

(i) The dangers of drug abuse in the workplace;

(ii) The Contractor's policy of maintaining a drug-free workplace;

(iii) Any available drug counseling, rehabilitation, and employee assistance programs; and

(iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(3) Provide all employees engaged in performance of the contract with a copy of the statement required by subparagraph (b)(1) of this clause;

(4) Notify such employees in writing in the statement required by subparagraph (b)(1) of this clause that, as a condition of continued employment on this contract, the employee will--

(i) Abide by the terms of the statement; and

(ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction.

(5) Notify the Contracting Officer in writing within 10 days after receiving notice under subdivision (b)(4)(ii) of this clause, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;

(6) Within 30 days after receiving notice under subdivision (b)(4)(ii) of this clause of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:

(i) Taking appropriate personnel action against such employee, up to and including termination; or

(ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency; and

(7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1) through (b)(6) of this clause.

(c) The Contractor, if an individual, agrees by award of the contract or acceptance of a purchase order, not to engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance while performing this contract.

(d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraph (b) or (c) of this clause may, pursuant to FAR 23.506, render the Contractor subject to suspension of contract payments, termination of the contract for default, and suspension or debarment.

(End of clause)

#### 52.223-14 TOXIC CHEMICAL RELEASE REPORTING (OCT 1996)

(a) Unless otherwise exempt, the Contractor, as owner or operator of a facility used in the performance of this contract, shall file by July 1 for the prior calendar year an annual Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023(a) and (g)), and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106). The Contractor shall file, for each facility subject to the Form R filing and reporting requirements, the annual Form R throughout the life of the contract.

(b) A Contractor owned or operated facility used in the performance of this contract is exempt from the requirement to file an annual Form R if--

(1) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

(2) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

(3) The facility does not meet the reporting thresholds of toxic chemicals established under of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(4) The facility does not fall within Standard Industrial Classification Code (SIC) designations 20 through 39 as set forth in section 19.102 of the Federal Acquisition Regulation (FAR); or

(5) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

(c) If the Contractor has certified to an exemption in accordance with one or more of the criteria in paragraph (b) of this clause, and after award of the contract circumstances change so that any of its owned or operated facilities used in the performance of this contract is no longer exempt--

(1) The Contractor shall notify the Contracting Officer; and

(2) The Contractor, as owner or operator of a facility used in the performance of this contract that is no longer exempt, shall (i) submit a Toxic Chemical Release Inventory Form (Form R) on or before July 1 for the prior calendar year during which the facility becomes eligible; and (ii) continue to file the annual Form R for the life of the contract for such facility.

(d) The Contracting Officer may terminate this contract or take other action as appropriate, if the Contractor fails to comply accurately and fully with the EPCRA and PPA toxic chemical release filing and reporting requirements.

(e) Except for acquisitions of commercial items, as defined in FAR Part 2, the Contractor shall--

(1) For competitive subcontracts expected to exceed \$100,000 (including all options), include a solicitation provision substantially the same as the provision at FAR 52.223-13, Certification of Toxic Chemical Release Reporting; and

(2) Include in any resultant subcontract exceeding \$100,000 (including all options), the substance of this clause, except this paragraph (e).

#### 52.225-11 BUY AMERICAN ACT--BALANCE OF PAYMENTS PROGRAM--CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS (FEB 2000)

(a) Definitions. As used in this clause--

Component means any article, material, or supply incorporated directly into construction materials.

Construction material means an article, material, or supply brought to the construction site by the Contractor or subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components

of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

Cost of components means--

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the end product (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the end product.

Designated country means any of the following countries: Aruba, Austria, Bangladesh, Belgium, Benin, Bhutan, Botswana, Burkina Faso, Burundi, Canada, Cape Verde, Central African Republic, Chad, Comoros, Denmark.

Djibouti, Equatorial Guinea, Finland, France, Gambia, Germany, Greece, Guinea, Guinea-Bissau, Haiti, Hong Kong, Ireland, Israel, Italy, Japan.

Kiribati, Korea, Republic of, Lesotho, Liechtenstein, Luxembourg, Malawi, Maldives, Mali, Mozambique, Nepal, Netherlands, Niger, Norway, Portugal, Rwanda.

Sao Tome and Principe, Sierra Leone, Singapore, Somalia, Spain, Sweden, Switzerland, Tanzania U.R., Togo, Tuvalu, Uganda, United Kingdom, Vanuatu, Western Samoa, Yemen.

Designated country construction material means a construction material that--

(1) Is wholly the growth, product, or manufacture of a designated country; or

(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a designated country into a new and different construction material distinct from the materials from which it was transformed.

Domestic construction material means--

(1) An unmanufactured construction material mined or produced in the United States; or

(2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic.

Foreign construction material means a construction material other than a domestic construction material.

North American Free Trade Agreement country means Canada or Mexico.

North American Free Trade Agreement country construction material means a construction material that--

(1) Is wholly the growth, product, or manufacture of a North American Free Trade Agreement (NAFTA) country; or

(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a NAFTA country into a new and different construction material distinct from the materials from which it was transformed.

United States means the 50 States and the District of Columbia, U.S. territories and possessions, Puerto Rico, the Northern Mariana Islands, and any other place subject to U.S. jurisdiction, but does not include leased bases.

(b) Construction materials. (1) This clause implements the Buy American Act (41 U.S.C. 10a-10d) and the Balance of Payments Program by providing a preference for domestic construction material. In addition, the Contracting Officer has determined that the Trade Agreements Act and the North American Free Trade Agreement (NAFTA) apply to this acquisition. Therefore, the Buy American Act and Balance of Payments Program restrictions are waived for designated country and NAFTA country construction materials.

(2) The Contractor shall use only domestic, designated country, or NAFTA country construction material in performing this contract, except as provided in paragraphs (b)(3) and (b)(4) of this clause.

(3) The requirement in paragraph (b)(2) of this clause does not apply to the construction materials or components listed by the Government as follows: None

(4) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(3) of this clause if the Government determines that--

(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the restrictions of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent. For determination of unreasonable cost under the Balance of Payments Program, the Contracting Officer will use a factor of 50 percent;

(ii) The application of the restriction of the Buy American Act or Balance of Payments Program to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American Act or Balance of Payments Program. (1)(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(4) of this clause shall include adequate information for Government evaluation of the request, including--

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American Act or Balance of Payments Program applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(4)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American Act or Balance of Payments Program applies, use of foreign construction material is noncompliant with the Buy American Act or Balance of Payments Program.

(d) Data. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison

Construction material description	Unit of measure	Quantity	Price (dollars) \1\
Item 1:			
Foreign construction material....	.....	.....	.....
Domestic construction material...	.....	.....	.....
Item 2:			
Foreign construction material....	.....	.....	.....
Domestic construction material...	.....	.....	.....

\1\ Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).

List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.

Include other applicable supporting information.

(End of clause)

52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (FEB 2000)

(a) The Contractor shall not acquire, for use in the performance of this contract, any supplies or services originating from sources within, or that were located in or transported from or through, countries whose products are banned from importation into the United States under regulations of the Office of Foreign Assets Control, Department of the Treasury. Those countries are Cuba, Iran, Iraq, Libya, North Korea, and Sudan.

(b) The Contractor shall not acquire for use in the performance of this contract any supplies or services from entities controlled by the government of Iraq.



(c) The Contractor shall insert this clause, including this paragraph (c), in all subcontracts.

(End of clause)

#### 52.226-1 UTILIZATION OF INDIAN ORGANIZATIONS AND INDIAN-OWNED ECONOMIC ENTERPRISES (FEB 2000)

(a) For Department of Defense contracts, this clause applies only if the contract includes a subcontracting plan incorporated under the terms of the clause at 52.219-9, Small Business Subcontracting Plan. It does not apply to contracts awarded based on a subcontracting plan submitted and approved under paragraph (g) of the clause at 52.219-9.

(b) Definitions . As used in this clause:

"Indian" means any person who is a member of any Indian tribe, band, group, pueblo or community which is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs (BIA) in accordance with 25 U.S.C. 1452(c) and any "Native" as defined in the Alaska Native Claims Settlement Act (43 U.S.C. 1601).

"Indian organization" means the governing body of any Indian tribe or entity established or recognized by the governing body of an Indian tribe for the purposes of 25 U.S.C., chapter 17.

"Indian-owned economic enterprise" means any Indian-owned (as determined by the Secretary of the Interior) commercial, industrial, or business activity established or organized for the purpose of profit, provided that Indian ownership shall constitute not less than 51 percent of the enterprise.

"Indian tribe" means any Indian tribe, band, group, pueblo or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act, which is recognized by the Federal Government as eligible for services from BIA in accordance with 25 U.S.C. 1542(c).

"Interested party" means a prime contractor or an actual or prospective offeror whose direct economic interest would be affected by the award of a subcontract or by the failure to award a subcontract.

(c) The Contractor agrees to use its best efforts to give Indian organizations and Indian-owned economic enterprises (25 U.S.C. 1544) the maximum practicable opportunity to participate in the subcontracts it awards to the fullest extent consistent with efficient performance of its contract.

(1) The Contracting Officer and the Contractor, acting in good faith, may rely on the representation of an Indian organization or Indian-owned economic enterprise as to its eligibility, unless an interested party challenges its status or the Contracting Officer has independent reason to question that status. In the event of a challenge to the representation of a subcontractor, the Contracting Officer shall refer the matter to the U.S. Department of the Interior, Bureau of Indian Affairs (BIA), Attn: Chief, Division of Contracting and Grants Administration, 1849 C Street, NW, MS-334A-SIB, Washington, DC 20245. The BIA will determine the eligibility and notify the Contracting Officer. The 5 percent incentive payment will not be made within 50 working days of subcontract award or while a challenge is pending. If a subcontractor is determined to be an ineligible participant, no incentive payment will be made under the Indian Incentive Program.

(2) The Contractor may request an adjustment under the Indian Incentive Program to the following:

(i) The estimated cost of a cost-type contract.

(ii) The target cost of a cost-plus-incentive-fee prime contract.

(iii) The target cost and ceiling price of a fixed-price incentive prime contract.

(iv) The price of a firm-fixed-price prime contract.

(3) The amount of the equitable adjustment to the prime contract shall be 5 percent of the estimated cost, target cost or firm-fixed-price included in the subcontract initially awarded to the Indian organization or Indian-owned economic enterprise.

(4) The Contractor has the burden of proving the amount claimed and must assert its request for an adjustment prior to completion of contract performance.

(d) The Contracting Officer, subject to the terms and conditions of the contract and the availability of funds, will authorize an incentive payment of 5 percent of the amount paid to the subcontractor. The Contracting Officer will seek funding in accordance with agency procedures.

(End of clause)

#### 52.227-1 AUTHORIZATION AND CONSENT (JUL 1995)

(a) The Government authorizes and consents to all use and manufacture, in performing this contract or any subcontract at any tier, of any invention described in and covered by a United States patent (1) embodied in the structure or composition of any article the delivery of which is accepted by the Government under this contract or (2) used in machinery, tools, or methods whose use necessarily results from compliance by the Contractor or a subcontractor with (i) specifications or written provisions forming a part of this contract or (ii) specific written instructions given by the Contracting Officer directing the manner of performance. The entire liability to the Government for infringement of a patent of the United States shall be determined solely by the provisions of the indemnity clause, if any, included in this contract or any subcontract hereunder (including any lower-tier subcontract), and the Government assumes liability for all other infringement to the extent of the authorization and consent hereinabove granted.

(b) The Contractor agrees to include, and require inclusion of, this clause, suitably modified to identify the parties, in all subcontracts at any tier for supplies or services (including construction, architect-engineer services, and materials, supplies, models, samples, and design or testing services expected to exceed the simplified acquisition threshold (however, omission of this clause from any subcontract, including those at or below the simplified acquisition threshold, does not affect this authorization and consent.)

#### 52.227-2 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (AUG 1996)

(a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

(b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed under this contract, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.

The Contractor agrees to include, and require inclusion of, this clause in all subcontracts at any tier for supplies or services (including construction and architect-engineer subcontracts and those for material,

supplies, models, samples, or design or testing services) expected to exceed the simplified acquisition threshold at (FAR) 2.101.to exceed the dollar amount set forth in 13.000 of the Federal Acquisition Regulation (FAR).

#### 52.227-4 PATENT INDEMNITY--CONSTRUCTION CONTRACTS (APR 1984)

Except as otherwise provided, the Contractor agrees to indemnify the Government and its officers, agents, and employees against liability, including costs and expenses, for infringement upon any United States patent (except a patent issued upon an application that is now or may hereafter be withheld from issue pursuant to a Secrecy Order under 35 U.S.C. 181) arising out of performing this contract or out of the use or disposal by or for the account of the Government of supplies furnished or work performed under this contract.

#### 52.228-1 BID GUARANTEE (SEP 1996)

(a) Failure to furnish a bid guarantee in the proper form and amount, by the time set for opening of bids, may be cause for rejection of the bid.

(b) The bidder shall furnish a bid guarantee in the form of a firm commitment, e.g., bid bond supported by good and sufficient surety or sureties acceptable to the Government, postal money order, certified check, cashier's check, irrevocable letter of credit, or, under Treasury Department regulations, certain bonds or notes of the United States. The Contracting Officer will return bid guarantees, other than bid bonds, (1) to unsuccessful bidders as soon as practicable after the opening of bids, and (2) to the successful bidder upon execution of contractual documents and bonds (including any necessary coinsurance or reinsurance agreements), as required by the bid as accepted-

(c) The amount of the bid guarantee shall be 20 percent of the bid price or \$3,000,000.00, whichever is less.-

(d) If the successful bidder, upon acceptance of its bid by the Government within the period specified for acceptance, fails to execute all contractual documents or furnish executed bond(s) within 10 days after receipt of the forms by the bidder, the Contracting Officer may terminate the contract for default.-

(e) In the event the contract is terminated for default, the bidder is liable for any cost of acquiring the work that exceeds the amount of its bid, and the bid guarantee is available to offset the difference.

#### 52.228-2 ADDITIONAL BOND SECURITY (OCT 1997)

The Contractor shall promptly furnish additional security required to protect the Government and persons supplying labor or materials under this contract if--

(a) Any surety upon any bond, or issuing financial institution for other security, furnished with this contract becomes unacceptable to the Government.

(b) Any surety fails to furnish reports on its financial condition as required by the Government;

(c) The contract price is increased so that the penal sum of any bond becomes inadequate in the opinion of the Contracting Officer; or

(d) An irrevocable letter of credit (ILC) used as security will expire before the end of the period of required security. If the Contractor does not furnish an acceptable extension or replacement ILC, or other acceptable substitute, at least 30 days before an ILC's scheduled expiration, the Contracting officer has the right to immediately draw on the ILC.

52.228-11 PLEDGES OF ASSETS (FEB 1992)

(a) Offerors shall obtain from each person acting as an individual surety on a bid guarantee, a performance bond, or a payment bond--

(1) Pledge of assets; and

(2) Standard Form 28, Affidavit of Individual Surety.

(b) Pledges of assets from each person acting as an individual surety shall be in the form of--

(1) Evidence of an escrow account containing cash, certificates of deposit, commercial or Government securities, or other assets described in FAR 28.203-2 (except see 28.203-2(b)(2) with respect to Government securities held in book entry form) and/or;

(2) A recorded lien on real estate. The offeror will be required to provide--

(i) Evidence of title in the form of a certificate of title prepared by a title insurance company approved by the United States Department of Justice. This title evidence must show fee simple title vested in the surety along with any concurrent owners; whether any real estate taxes are due and payable; and any recorded encumbrances against the property, including the lien filed in favor of the Government as required by FAR 28.203-3(d);

(ii) Evidence of the amount due under any encumbrance shown in the evidence of title;

(iii) A copy of the current real estate tax assessment of the property or a current appraisal dated no earlier than 6 months prior to the date of the bond, prepared by a professional appraiser who certifies that the appraisal has been conducted in accordance with the generally accepted appraisal standards as reflected in the Uniform Standards of Professional Appraisal Practice, as promulgated by the Appraisal Foundation.

(End of clause)

52.228-12 PROSPECTIVE SUBCONTRACTOR REQUESTS FOR BONDS. (OCT 1995)

In accordance with Section 806(a)(3) of Pub. L. 102-190, as amended by Sections 2091 and 8105 of Pub. L. 103-355, upon the request of a prospective subcontractor or supplier offering to furnish labor or material for the performance of this contract for which a payment bond has been furnished to the Government pursuant to the Miller Act, the Contractor shall promptly provide a copy of such payment bond to the requester.

52.228-14 IRREVOCABLE LETTER OF CREDIT (DEC 1999)

(a) "Irrevocable letter of credit" (ILC), as used in this clause, means a written commitment by a federally insured financial institution to pay all or part of a stated amount of money, until the expiration date of the letter, upon presentation by the Government (the beneficiary) of a written demand therefor. Neither the financial institution nor the offeror/Contractor can revoke or condition the letter of credit.

(b) If the offeror intends to use an ILC in lieu of a bid bond, or to secure other types of bonds such as performance and payment bonds, the letter of credit and letter of confirmation formats in paragraphs (e) and (f) of this clause shall be used.

(c) The letter of credit shall be irrevocable, shall require presentation of no document other than a written demand and the ILC (including confirming letter, if any), shall be issued/confirmed by an acceptable federally insured financial institution as provided in paragraph (d) of this clause, and--

(1) If used as a bid guarantee, the ILC shall expire no earlier than 60 days after the close of the bid acceptance period;

(2) If used as an alternative to corporate or individual sureties as security for a performance or payment bond, the offeror/Contractor may submit an ILC with an initial expiration date estimated to cover the entire period for which financial security is required or may submit an ILC with an initial expiration date that is a minimum period of one year from the date of issuance. The ILC shall provide that, unless the issuer provides the beneficiary written notice of non-renewal at least 60 days in advance of the current expiration date, the ILC is automatically extended without amendment for one year from the expiration date, or any future expiration date, until the period of required coverage is completed and the Contracting Officer provides the financial institution with a written statement waiving the right to payment. The period of required coverage shall be:

(i) For contracts subject to the Miller Act, the later of--

(A) One year following the expected date of final payment;

(B) For performance bonds only, until completion of any warranty period; or

(C) For payment bonds only, until resolution of all claims filed against the payment bond during the one-year period following final payment.

(ii) For contracts not subject to the Miller Act, the later of--

(A) 90 days following final payment; or

(B) For performance bonds only, until completion of any warranty period.

(d) Only federally insured financial institutions rated investment grade or higher shall issue or confirm the ILC. The offeror/Contractor shall provide the Contracting Officer a credit rating that indicates the financial institution has the required rating(s) as of the date of issuance of the ILC. Unless the financial institution issuing the ILC had letter of credit business of less than \$25 million in the past year, ILCs over \$5 million must be confirmed by another acceptable financial institution that had letter of credit business of less than \$25 million in the past year.

(e) The following format shall be used by the issuing financial institution to create an ILC:

\_\_\_\_\_  
[Issuing Financial Institution's Letterhead or Name and Address]

Issue Date \_\_\_\_\_

IRREVOCABLE LETTER OF CREDIT NO. \_\_\_\_\_

Account party's name \_\_\_\_\_

Account party's address \_\_\_\_\_

For Solicitation No. \_\_\_\_\_(for reference only)

TO: [U.S. Government agency]

[U.S. Government agency's address]

1. We hereby establish this irrevocable and transferable Letter of Credit in your favor for one or more drawings up to United States \$\_\_\_\_\_. This Letter of Credit is payable at [issuing financial institution's and, if any, confirming financial institution's] office at [issuing financial institution's address and, if any, confirming financial institution's address] and expires with our close of business on \_\_\_\_\_, or any automatically extended expiration date.

2. We hereby undertake to honor your or the transferee's sight draft(s) drawn on the issuing or, if any, the confirming financial institution, for all or any part of this credit if presented with this Letter of Credit and confirmation, if any, at the office specified in paragraph 1 of this Letter of Credit on or before the expiration date or any automatically extended expiration date.

3. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this Letter of Credit that it is deemed to be automatically extended without amendment for one year from the expiration date hereof, or any future expiration date, unless at least 60 days prior to any expiration date, we notify you or the transferee by registered mail, or other receipted means of delivery, that we elect not to consider this Letter of Credit renewed for any such additional period. At the time we notify you, we also agree to notify the account party (and confirming financial institution, if any) by the same means of delivery.

4. This Letter of Credit is transferable. Transfers and assignments of proceeds are to be effected without charge to either the beneficiary or the transferee/assignee of proceeds. Such transfer or assignment shall be only at the written direction of the Government (the beneficiary) in a form satisfactory to the issuing financial institution and the confirming financial institution, if any.

5. This Letter of Credit is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, to the laws of \_\_\_\_\_ [state of confirming financial institution, if any, otherwise state of issuing financial institution].

6. If this credit expires during an interruption of business of this financial institution as described in Article 17 of the UCP, the financial institution specifically agrees to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

\_\_\_\_\_

[Issuing financial institution]

(f) The following format shall be used by the financial institution to confirm an ILC:

\_\_\_\_\_  
[Confirming Financial Institution's Letterhead or Name and Address]

(Date) \_\_\_\_\_

Our Letter of Credit Advice Number \_\_\_\_\_

Beneficiary: \_\_\_\_\_ [U.S. Government agency]

Issuing Financial Institution: \_\_\_\_\_

Issuing Financial Institution's LC No.: \_\_\_\_\_

Gentlemen:

1. We hereby confirm the above indicated Letter of Credit, the original of which is attached, issued by \_\_\_\_\_ [name of issuing financial institution] for drawings of up to United States dollars \_\_\_\_\_/U.S. \$\_\_\_\_\_ and expiring with our close of business on \_\_\_\_\_ [the expiration date], or any automatically extended expiration date.

2. Draft(s) drawn under the Letter of Credit and this Confirmation are payable at our office located at \_\_\_\_\_.

3. We hereby undertake to honor sight draft(s) drawn under and presented with the Letter of Credit and this Confirmation at our offices as specified herein.

4. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this confirmation that it be deemed automatically extended without amendment for one year from the expiration date hereof, or any automatically extended expiration date, unless:

(a) At least 60 days prior to any such expiration date, we shall notify the Contracting Officer, or the transferee and the issuing financial institution, by registered mail or other receipted means of delivery, that we elect not to consider this confirmation extended for any such additional period; or

(b) The issuing financial institution shall have exercised its right to notify you or the transferee, the account party, and ourselves, of its election not to extend the expiration date of the Letter of Credit.

5. This confirmation is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, to the laws of \_\_\_\_\_ [state of confirming financial institution].

6. If this confirmation expires during an interruption of business of this financial institution as described in Article 17 of the UCP, we specifically agree to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

\_\_\_\_\_

[Confirming financial institution]

(g) The following format shall be used by the Contracting Officer for a sight draft to draw on the Letter of Credit:

SIGHT DRAFT

\_\_\_\_\_

[City, State]

(Date) \_\_\_\_\_

[Name and address of financial institution]

Pay to the order of \_\_\_\_\_ [Beneficiary Agency] \_\_\_\_\_ the sum of United States  
\$ \_\_\_\_\_. This draft is drawn under Irrevocable Letter of Credit No.

\_\_\_\_\_.

\_\_\_\_\_

[Beneficiary Agency]

By: \_\_\_\_\_

(End of clause)

#### 52.228-15 PERFORMANCE AND PAYMENT BONDS--CONSTRUCTION (SEP 1996)-

(a) Definitions. As used in this clause--

Contract price means the award price of the contract or, for requirements contracts, the price payable for the estimated quantity; or for indefinite-delivery type contracts, the price payable for the specified minimum quantity.

(b) Unless the resulting contract price is \$100,000 or less, the successful offeror shall be required to furnish performance and payment bonds to the Contracting Officer as follows:

(1) Performance Bonds (Standard Form 25): (i) The penal amount of performance bonds shall be 100 percent of the original contract price.

(ii) The Government may require additional performance bond protection when the contract price is increased. The increase in protection shall generally equal 100 percent of the increase in contract price.

(iii) The Government may secure additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(2) Payment Bonds (Standard Form 25-A):

(i) The penal amount of payment bonds shall equal--

(A) 50 percent of the contract price if the contract price is not more than \$1 million;

(B) 40 percent of the contract price if the contract price is more than \$1 million but not more than \$5 million; or

(C) \$2.5 million if the contract price is more than \$5 million.

(ii) If the original contract price is \$5 million or less, the Government may require additional protection if the contract price is increased. The penal amount of the total protection shall meet the requirement of subparagraph (b)(2)(i) of this clause.

(iii) The Government may secure additional protection by directing the Contractor to increase the penal sum of the existing bond or to obtain an additional bond.

(c) The Contractor shall furnish all executed bonds, including any necessary reinsurance agreements, to the Contracting Officer, within the time period specified in the Bid Guarantee provision of the solicitation, or otherwise specified by the Contracting Officer, but in any event, before starting work.



(d) The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, individual sureties, or by other acceptable security such as postal money order, certified check, cashier's check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the Federal Register, or may be obtained from the U.S. Department of Treasury, Financial Management Service, Surety Bond Branch, 401 14th Street, NW., 2nd Floor, West Wing, Washington, DC 20227.

### 52.229-3 FEDERAL, STATE, AND LOCAL TAXES (JAN 1991)

(a) "Contract date," as used in this clause, means the date set for bid opening or, if this is a negotiated contract or a modification, the effective date of this contract or modification.

"All applicable Federal, State, and local taxes and duties," as used in this clause, means all taxes and duties, in effect on the contract date, that the taxing authority is imposing and collecting on the transactions or property covered by this contract.

"After-imposed Federal tax," as used in this clause, means any new or increased Federal excise tax or duty, or tax that was exempted or excluded on the contract date but whose exemption was later revoked or reduced during the contract period, on the transactions or property covered by this contract that the Contractor is required to pay or bear as the result of legislative, judicial, or administrative action taking effect after the contract date. It does not include social security tax or other employment taxes.

"After-relieved Federal tax," as used in this clause, means any amount of Federal excise tax or duty, except social security or other employment taxes, that would otherwise have been payable on the transactions or property covered by this contract, but which the Contractor is not required to pay or bear, or for which the Contractor obtains a refund or drawback, as the result of legislative, judicial, or administrative action taking effect after the contract date.

(b) The contract price includes all applicable Federal, State, and local taxes and duties.

(c) The contract price shall be increased by the amount of any after-imposed Federal tax, provided the Contractor warrants in writing that no amount for such newly imposed Federal excise tax or duty or rate increase was included in the contract price, as a contingency reserve or otherwise.

(d) The contract price shall be decreased by the amount of any after-relieved Federal tax.

(e) The contract price shall be decreased by the amount of any Federal excise tax or duty, except social security or other employment taxes, that the Contractor is required to pay or bear, or does not obtain a refund of, through the Contractor's fault, negligence, or failure to follow instructions of the Contracting Officer.

(f) No adjustment shall be made in the contract price under this clause unless the amount of the adjustment exceeds \$250.

(g) The Contractor shall promptly notify the Contracting Officer of all matters relating to any Federal excise tax or duty that reasonably may be expected to result in either an increase or decrease in the contract price and shall take appropriate action as the Contracting Officer directs.

(h) The Government shall, without liability, furnish evidence appropriate to establish exemption from any Federal, State, or local tax when the Contractor requests such evidence and a reasonable basis exists to sustain the exemption.

(End of clause)

52.229-5 TAXES--CONTRACTS PERFORMED IN U.S. POSSESSIONS OR PUERTO RICO (APR 1984)

The term "local taxes," as used in the Federal, State, and local taxes clause of this contract, includes taxes imposed by a possession of the United States or by Puerto Rico.

(End of clause)

52.232-5 PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS (MAY 1997)

(a) Payment of price. The Government shall pay the Contractor the contract price as provided in this contract.

(b) Progress payments. The Government shall make progress payments monthly as the work proceeds, or at more frequent intervals as determined by the Contracting Officer, on estimates of work accomplished which meets the standards of quality established under the contract, as approved by the Contracting Officer.

(1) The Contractor's request for progress payments shall include the following substantiation:

(i) An itemization of the amounts requested, related to the various elements of work required by the contract covered by the payment requested.

(ii) A listing of the amount included for work performed by each subcontractor under the contract.

(iii) A listing of the total amount of each subcontract under the contract.

(iv) A listing of the amounts previously paid to each such subcontractor under the contract.

(v) Additional supporting data in a form and detail required by the Contracting Officer.

(2) In the preparation of estimates, the Contracting Officer may authorize material delivered on the site and preparatory work done to be taken into consideration. Material delivered to the Contractor at locations other than the site also may be taken into consideration if--

(i) Consideration is specifically authorized by this contract; and

(ii) The Contractor furnishes satisfactory evidence that it has acquired title to such material and that the material will be used to perform this contract.

(c) Contractor certification. Along with each request for progress payments, the Contractor shall furnish the following certification, or payment shall not be made: (However, if the Contractor elects to delete paragraph (c)(4) from the certification, the certification is still acceptable.)

I hereby certify, to the best of my knowledge and belief, that--

(1) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;

(2) Payments to subcontractors and suppliers have been made from previous payments received under the contract, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract agreements and the requirements of chapter 39 of Title 31, United States Code;

(3) This request for progress payments does not include any amounts which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract; and

(4) This certification is not to be construed as final acceptance of a subcontractor's performance.

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Date)

(d) Refund of unearned amounts. If the Contractor, after making a certified request for progress payments, discovers that a portion or all of such request constitutes a payment for performance by the Contractor that fails to conform to the specifications, terms, and conditions of this contract (hereinafter referred to as the "unearned amount"), the Contractor shall--

(1) Notify the Contracting Officer of such performance deficiency; and

(2) Be obligated to pay the Government an amount (computed by the Contracting Officer in the manner provided in paragraph (j) of this clause) equal to interest on the unearned amount from the 8th day after the date of receipt of the unearned amount until--

(i) The date the Contractor notifies the Contracting Officer that the performance deficiency has been corrected; or

(ii) The date the Contractor reduces the amount of any subsequent certified request for progress payments by an amount equal to the unearned amount.

(e) Retainage. If the Contracting Officer finds that satisfactory progress was achieved during any period for which a progress payment is to be made, the Contracting Officer shall authorize payment to be made in full. However, if satisfactory progress has not been made, the Contracting Officer may retain a maximum of 10 percent of the amount of the payment until satisfactory progress is achieved. When the work is substantially complete, the Contracting Officer may retain from previously withheld funds and future progress payments that amount the Contracting Officer considers adequate for protection of the Government and shall release to the Contractor all the remaining withheld funds. Also, on completion and acceptance of each separate building, public work, or other division of the contract, for which the price is stated separately in the contract, payment shall be made for the completed work without retention of a percentage.

(f) Title, liability, and reservation of rights. All material and work covered by progress payments made shall, at the time of payment, become the sole property of the Government, but this shall not be construed as--

(1) Relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or

(2) Waiving the right of the Government to require the fulfillment of all of the terms of the contract.

(g) Reimbursement for bond premiums. In making these progress payments, the Government shall, upon request, reimburse the Contractor for the amount of premiums paid for performance and payment bonds (including coinsurance and reinsurance agreements, when applicable) after the Contractor has furnished evidence of full payment to the surety. The retainage provisions in paragraph (e) of this clause shall not apply to that portion of progress payments attributable to bond premiums.

(h) Final payment. The Government shall pay the amount due the Contractor under this contract after--

(1) Completion and acceptance of all work;

(2) Presentation of a properly executed voucher; and

(3) Presentation of release of all claims against the Government arising by virtue of this contract, other than claims, in stated amounts, that the Contractor has specifically excepted from the operation of the release. A release may also be required of the assignee if the Contractor's claim to amounts payable under this contract has been assigned under the Assignment of Claims Act of 1940 (31 U.S.C. 3727 and 41 U.S.C. 15).

(i) Limitation because of undefinitized work. Notwithstanding any provision of this contract, progress payments shall not exceed 80 percent on work accomplished on undefinitized contract actions. A "contract action" is any action resulting in a contract, as defined in FAR Subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes clause, or funding and other administrative changes.

(j) Interest computation on unearned amounts. In accordance with 31 U.S.C. 3903(c)(1), the amount payable under subparagraph (d)(2) of this clause shall be--

(1) Computed at the rate of average bond equivalent rates of 91-day Treasury bills auctioned at the most recent auction of such bills prior to the date the Contractor receives the unearned amount; and

(2) Deducted from the next available payment to the Contractor.

#### 52.232-17 INTEREST (JUNE 1996)

(a) Except as otherwise provided in this contract under a Price Reduction for Defective Cost or Pricing Data clause or a Cost Accounting Standards clause, all amounts that become payable by the Contractor to the Government under this contract (net of any applicable tax credit under the Internal Revenue Code (26 U.S.C. 1481)) shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in Section 12 of the Contract Disputes Act of 1978 (Public Law 95-563), which is applicable to the period in which the amount becomes due, as provided in paragraph (b) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid. reproduce, prepare derivative works, distribute copies to the public, and (b) Amounts shall be due at the earliest of the following dates:

(1) The date fixed under this contract.

(2) The date of the first written demand for payment consistent with this contract, including any demand resulting from a default termination.

(3) The date the Government transmits to the Contractor a proposed supplemental agreement to confirm completed negotiations establishing the amount of debt.

(4) If this contract provides for revision of prices, the date of written notice to the Contractor stating the amount of refund payable in connection with a pricing proposal or a negotiated pricing agreement not confirmed by contract modification.

(c) The interest charge made under this clause may be reduced under the procedures prescribed in 32.614-2 of the Federal Acquisition Regulation in effect on the date of this contract.

#### 52.232-23 ASSIGNMENT OF CLAIMS (JAN 1986) - ALTERNATE I (APR 1984)

(a) The Contractor, under the Assignment of Claims Act, as amended, 31 U.S.C. 3727, 41 U.S.C. 15 (hereafter referred to as "the Act"), may assign its rights to be paid amounts due or to become due as a result of the performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency. The assignee under such an assignment may thereafter further assign or reassign its right under the original assignment to any type of financing institution described in the preceding sentence. Unless otherwise stated in this contract, payments to an assignee of any amounts due or to become due under this contract shall not, to the extent specified in the Act, be subject to reduction or setoff.

(b) Any assignment or reassignment authorized under the Act and this clause shall cover all unpaid amounts payable under this contract, and shall not be made to more than one party, except that an assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in the financing of this contract.

(c) The Contractor shall not furnish or disclose to any assignee under this contract any classified document (including this contract) or information related to work under this contract until the Contracting Officer authorizes such action in writing.

#### 52.232-27 PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS (JUN 1997)

Notwithstanding any other payment terms in this contract, the Government will make invoice payments and contract financing payments under the terms and conditions specified in this clause. Payment shall be considered as being made on the day a check is dated or the date of an electronic funds transfer. Definitions of pertinent terms are set forth in section 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see subparagraph (a)(3) concerning payments due on Saturdays, Sundays, and legal holidays.)

(a) Invoice payments. (1) Types of invoice payments. For purposes of this clause, there are several types of invoice payments that may occur under this contract, as follows:

(i) Progress payments, if provided for elsewhere in this contract, based on Contracting Officer approval of the estimated amount and value of work or services performed, including payments for reaching milestones in any project:

(A) The due date for making such payments shall be 14 days after receipt of the payment request by the designated billing office. If the designated billing office fails to annotate the payment request with the actual date of receipt at the time of receipt, the payment due date shall be the 14th day after the date of the Contractor's payment request, provided a proper payment request is received and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(B) The due date for payment of any amounts retained by the Contracting Officer in accordance with the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts, shall be as specified in the contract or, if not specified, 30 days after approval for release to the Contractor by the Contracting Officer.

(ii) Final payments based on completion and acceptance of all work and presentation of release of all claims against the Government arising by virtue of the contract, and payments for partial deliveries that have been accepted by the Government (e.g., each separate building, public work, or other division of the contract for which the price is stated separately in the contract):

(A) The due date for making such payments shall be either the 30th day after receipt by the designated billing office of a proper invoice from the Contractor, or the 30th day after Government acceptance of the work or services completed by the Contractor, whichever is later. If the designated billing office fails to annotate the invoice with the date of actual receipt at the time of receipt, the invoice payment due date shall be the 30th day after the date of the Contractor's invoice, provided a proper invoice is received and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(B) On a final invoice where the payment amount is subject to contract settlement actions (e.g., release of claims), acceptance shall be deemed to have occurred on the effective date of the contract settlement.

(2) Contractor's invoice. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in subdivisions (a)(2)(i) through (a)(2)(ix) of this clause. If the invoice does not comply with these requirements, it shall be returned within 7 days after the date the designated billing office received the invoice, with a statement of the reasons why it is not a proper invoice. Untimely notification will be taken into account in computing any interest penalty owed the Contractor in the manner described in subparagraph (a)(4) of this clause.

(i) Name and address of the Contractor.

(ii) Invoice date. (The Contractor is encouraged to date invoices as close as possible to the date of mailing or transmission.)

(iii) Contract number or other authorization for work or services performed (including order number and contract line item number).

(iv) Description of work or services performed.

(v) Delivery and payment terms (e.g., prompt payment discount terms).

(vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).

(vii) Name (where practicable), title, phone number, and mailing address of person to be notified in the event of a defective invoice.

(viii) For payments described in subdivision (a)(1)(i) of this clause, substantiation of the amounts requested and certification in accordance with the requirements of the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts.

(ix) Any other information or documentation required by the contract.

(x) While not required, the Contractor is strongly encouraged to assign an identification number to each invoice.

(3) Interest penalty. An interest penalty shall be paid automatically by the designated payment office, without request from the Contractor, if payment is not made by the due date and the conditions listed in subdivisions (a)(3)(i) through (a)(3)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday when Federal Government offices are closed and Government business is not expected to be conducted, payment may be made on the following business day without incurring a late payment interest penalty.

(i) A proper invoice was received by the designated billing office.

(ii) A receiving report or other Government documentation authorizing payment was processed and there was no disagreement over quantity, quality, Contractor compliance with any contract term or condition, or requested progress payment amount.

(iii) In the case of a final invoice for any balance of funds due the Contractor for work or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.

(4) Computing penalty amount. The interest penalty shall be at the rate established by the Secretary of the Treasury under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) that is in effect on the day after the due date, except where the interest penalty is prescribed by other governmental authority (e.g., tariffs). This rate is referred to as the "Renegotiation Board Interest Rate," and it is published in the Federal Register semiannually on or about January 1 and July 1. The interest penalty shall accrue daily on the invoice principal payment amount approved by the Government until the payment date of such approved principal amount; and will be compounded in 30-day increments inclusive from the first day after the due date through the payment date. That is, interest accrued at the end of any 30-day period will be added to the approved invoice principal payment amount and will be subject to interest penalties if not paid in the succeeding 30-day period. If the designated billing office failed to notify the Contractor of a defective invoice within the periods prescribed in subparagraph (a)(2) of this clause, the due date on the corrected invoice will be adjusted by subtracting from such date the number of days taken beyond the prescribed notification of defects period. Any interest penalty owed the Contractor will be based on this adjusted due date. Adjustments will be made by the designated payment office for errors in calculating interest penalties.

(i) For the sole purpose of computing an interest penalty that might be due the Contractor for payments described in subdivision (a)(1)(ii) of this clause, Government acceptance or approval shall be deemed to have occurred constructively on the 7th day after the Contractor has completed the work or services in accordance with the terms and conditions of the contract. In the event that actual acceptance or approval occurs within the constructive acceptance or approval period, the determination of an interest penalty shall be based on the actual date of acceptance or approval. Constructive acceptance or constructive approval requirements do not apply if there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. These requirements also do not compel Government officials to accept work or services, approve Contractor estimates, perform contract administration functions, or make payment prior to fulfilling their responsibilities.

(ii) The following periods of time will not be included in the determination of an interest penalty:

(A) The period taken to notify the Contractor of defects in invoices submitted to the Government, but this may not exceed 7 days.

(B) The period between the defects notice and resubmission of the corrected invoice by the Contractor.

(C) For incorrect electronic funds transfer (EFT) information, in accordance with the EFT clause of this contract.

(iii) Interest penalties will not continue to accrue after the filing of a claim for such penalties under the clause at 52.233-1, Disputes, or for more than 1 year. Interest penalties of less than \$1 need not be paid.

(iv) Interest penalties are not required on payment delays due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance, or on amounts temporarily withheld or retained in accordance with the terms of the contract. Claims involving disputes, and any interest that may be payable, will be resolved in accordance with the clause at 52.233-1, Disputes.

(5) Prompt payment discounts. An interest penalty also shall be paid automatically by the designated payment office, without request from the Contractor, if a discount for prompt payment is taken improperly. The interest penalty will be calculated on the amount of discount taken for the period beginning with the first day after the end of the discount period through the date when the Contractor is paid.

(6) Additional interest penalty. (i) If this contract was awarded on or after October 1, 1989, a penalty amount, calculated in accordance with subdivision (a)(6)(iii) of this clause, shall be paid in addition to the interest penalty amount if the Contractor--

(A) Is owed an interest penalty of \$1 or more;

(B) Is not paid the interest penalty within 10 days after the date the invoice amount is paid; and

(C) Makes a written demand to the designated payment office for additional penalty payment, in accordance with subdivision (a)(6)(ii) of this clause, postmarked not later than 40 days after the date the invoice amount is paid.

(ii)(A) Contractors shall support written demands for additional penalty payments with the following data. No additional data shall be required. Contractors shall--

(1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;

(2) Attach a copy of the invoice on which the unpaid late payment interest was due; and

(3) State that payment of the principal has been received, including the date of receipt.

(B) Demands must be postmarked on or before the 40th day after payment was made, except that--

(1) If the postmark is illegible or nonexistent, the demand must have been received and annotated with the date of receipt by the designated payment office on or before the 40th day after payment was made; or

(2) If the postmark is illegible or nonexistent and the designated payment office fails to make the required annotation, the demand's validity will be determined by the date the Contractor has placed on the demand; provided such date is no later than the 40th day after payment was made.

(iii)(A) The additional penalty shall be equal to 100 percent of any original late payment interest penalty, except--

(1) The additional penalty shall not exceed \$5,000;

(2) The additional penalty shall never be less than \$25; and

(3) No additional penalty is owed if the amount of the underlying interest penalty is less than \$1.

(B) If the interest penalty ceases to accrue in accordance with the limits stated in subdivision (a)(4)(iii) of this clause, the amount of the additional penalty shall be calculated on the amount of interest penalty that would have accrued in the absence of these limits, subject to the overall limits on the additional penalty specified in subdivision (a)(6)(iii)(A) of this clause.

(C) For determining the maximum and minimum additional penalties, the test shall be the interest penalty due on each separate payment made for each separate contract. The maximum and minimum additional penalty shall not be based upon individual invoices unless the invoices are paid separately. Where payments are consolidated for disbursing purposes, the maximum and minimum additional penalty determination shall be made separately for each contract therein.



(D) The additional penalty does not apply to payments regulated by other Government regulations (e.g., payments under utility contracts subject to tariffs and regulation).

(b) Contract financing payments. (1) Due dates for recurring financing payments. If this contract provides for contract financing, requests for payment shall be submitted to the designated billing office as specified in this contract or as directed by the Contracting Officer. Contract financing payments shall be made on the 30<sup>th</sup> day after receipt of a proper contract financing request by the designated billing office. In the event that an audit or other review of a specific financing request is required to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled to make payment by the due date specified.

(2) Due dates for other contract financing. For advance payments, loans, or other arrangements that do not involve recurring submissions of contract financing requests, payment shall be made in accordance with the corresponding contract terms or as directed by the Contracting Officer.

(3) Interest penalty not applicable. Contract financing payments shall not be assessed an interest penalty for payment delays.

(c) Subcontract clause requirements. The Contractor shall include in each subcontract for property or services (including a material supplier) for the purpose of performing this contract the following:

(1) Prompt payment for subcontractors. A payment clause that obligates the Contractor to pay the subcontractor for satisfactory performance under its subcontract not later than 7 days from receipt of payment out of such amounts as are paid to the Contractor under this contract.

(2) Interest for subcontractors. An interest penalty clause that obligates the Contractor to pay to the subcontractor an interest penalty for each payment not made in accordance with the payment clause--

(i) For the period beginning on the day after the required payment date and ending on the date on which payment of the amount due is made; and

(ii) Computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.

(3) Subcontractor clause flowdown. A clause requiring each subcontractor to include a payment clause and an interest penalty clause conforming to the standards set forth in subparagraphs (c)(1) and (c)(2) of this clause in each of its subcontracts, and to require each of its subcontractors to include such clauses in their subcontracts with each lower-tier subcontractor or supplier.

(d) Subcontract clause interpretation. The clauses required by paragraph (c) of this clause shall not be construed to impair the right of the Contractor or a subcontractor at any tier to negotiate, and to include in their subcontract, provisions that--

(1) Retainage permitted. Permit the Contractor or a subcontractor to retain (without cause) a specified percentage of each progress payment otherwise due to a subcontractor for satisfactory performance under the subcontract without incurring any obligation to pay a late payment interest penalty, in accordance with terms and conditions agreed to by the parties to the subcontract, giving such recognition as the parties deem appropriate to the ability of a subcontractor to furnish a performance bond and a payment bond;

(2) Withholding permitted. Permit the Contractor or subcontractor to make a determination that part or all of the subcontractor's request for payment may be withheld in accordance with the subcontract agreement; and

(3) Withholding requirements. Permit such withholding without incurring any obligation to pay a late payment penalty if--

(i) A notice conforming to the standards of paragraph (g) of this clause previously has been furnished to the subcontractor; and

(ii) A copy of any notice issued by a Contractor pursuant to subdivision (d)(3)(i) of this clause has been furnished to the Contracting Officer.

(e) Subcontractor withholding procedures. If a Contractor, after making a request for payment to the Government but before making a payment to a subcontractor for the subcontractor's performance covered by the payment request, discovers that all or a portion of the payment otherwise due such subcontractor is subject to withholding from the subcontractor in accordance with the subcontract agreement, then the Contractor shall--

(1) Subcontractor notice. Furnish to the subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon ascertaining the cause giving rise to a withholding, but prior to the due date for subcontractor payment;

(2) Contracting Officer notice. Furnish to the Contracting Officer, as soon as practicable, a copy of the notice furnished to the subcontractor pursuant to subparagraph (e)(1) of this clause

(3) Subcontractor progress payment reduction. Reduce the subcontractor's progress payment by an amount not to exceed the amount specified in the notice of withholding furnished under subparagraph (e)(1) of this clause;

(4) Subsequent subcontractor payment. Pay the subcontractor as soon as practicable after the correction of the identified subcontract performance deficiency, and--

(i) Make such payment within--

(A) Seven days after correction of the identified subcontract performance deficiency (unless the funds therefor must be recovered from the Government because of a reduction under subdivision (e)(5)(i)) of this clause; or

(B) Seven days after the Contractor recovers such funds from the Government; or

(ii) Incur an obligation to pay a late payment interest penalty computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contracts Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty;

(5) Notice to Contracting Officer. Notify the Contracting Officer upon--

(i) Reduction of the amount of any subsequent certified application for payment; or

(ii) Payment to the subcontractor of any withheld amounts of a progress payment, specifying--

(A) The amounts withheld under subparagraph (e)(1) of this clause; and

(B) The dates that such withholding began and ended; and

(6) Interest to Government. Be obligated to pay to the Government an amount equal to interest on the withheld payments (computed in the manner provided in 31 U.S.C. 3903(c)(1)), from the 8th day after receipt of the withheld amounts from the Government until--

(i) The day the identified subcontractor performance deficiency is corrected; or

(ii) The date that any subsequent payment is reduced under subdivision (e)(5)(i) of this clause.

(f) Third-party deficiency reports. (1) Withholding from subcontractor. If a Contractor, after making payment to a first-tier subcontractor, receives from a supplier or subcontractor of the first-tier subcontractor (hereafter referred to as a "second-tier subcontractor") a written notice in accordance with section 2 of the Act of August 24, 1935 (40 U.S.C. 270b, Miller Act), asserting a deficiency in such first-tier subcontractor's performance under the contract for which the Contractor may be ultimately liable, and the Contractor determines that all or a portion of future payments otherwise due such first-tier subcontractor is subject to withholding in accordance with the subcontract agreement, the Contractor may, without incurring an obligation to pay an interest penalty under subparagraph (e)(6) of this clause--

(i) Furnish to the first-tier subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon making such determination; and

(ii) Withhold from the first-tier subcontractor's next available progress payment or payments an amount not to exceed the amount specified in the notice of withholding furnished under subdivision (f)(1)(i) of this clause.

(2) Subsequent payment or interest charge. As soon as practicable, but not later than 7 days after receipt of satisfactory written notification that the identified subcontract performance deficiency has been corrected, the Contractor shall--

(i) Pay the amount withheld under subdivision (f)(1)(ii) of this clause to such first-tier subcontractor; or

(ii) Incur an obligation to pay a late payment interest penalty to such first-tier subcontractor computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contracts Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.

(g) Written notice of subcontractor withholding. A written notice of any withholding shall be issued to a subcontractor (with a copy to the Contracting Officer of any such notice issued by the Contractor), specifying--

(1) The amount to be withheld;

(2) The specific causes for the withholding under the terms of the subcontract; and

(3) The remedial actions to be taken by the subcontractor in order to receive payment of the amounts withheld.

(h) Subcontractor payment entitlement. The Contractor may not request payment from the Government of any amount withheld or retained in accordance with paragraph (d) of this clause until such time as the Contractor has determined and certified to the Contracting Officer that the subcontractor is entitled to the payment of such amount.

(i) Prime-subcontractor disputes. A dispute between the Contractor and subcontractor relating to the amount or entitlement of a subcontractor to a payment or a late payment interest penalty under a clause included in the subcontract pursuant to paragraph (c) of this clause does not constitute a dispute to which the United States is a party. The United States may not be interpleaded in any judicial or administrative proceeding involving such a dispute.

(j) Preservation of prime-subcontractor rights. Except as provided in paragraph (i) of this clause, this clause shall not limit or impair any contractual, administrative, or judicial remedies otherwise available to

the Contractor or a subcontractor in the event of a dispute involving late payment or nonpayment by the Contractor or deficient subcontract performance or nonperformance by a subcontractor.

(k) Non-recourse for prime contractor interest penalty. The Contractor's obligation to pay an interest penalty to a subcontractor pursuant to the clauses included in a subcontract under paragraph (c) of this clause shall not be construed to be an obligation of the United States for such interest penalty. A cost-reimbursement claim may not include any amount for reimbursement of such interest penalty.

#### 52.232-34 PAYMENT BY ELECTRONIC FUNDS TRANSFER--OTHER THAN CENTRAL CONTRACTOR REGISTRATION (MAY 1999) (CESAJ ADAPTATION)

(a) Method of payment. (1) All payments by the Government under this contract shall be made by electronic funds transfer (EFT) except as provided in paragraph (a)(2) of this clause. As used in this clause, the term "EFT" refers to the funds transfer and may also include the payment information transfer. (2) In the event the Government is unable to release one or more payments by EFT, the Contractor agrees to either--

- (i) Accept payment by check or some other mutually agreeable method of payment; or
- (ii) Request the Government to extend payment due dates until such time as the Government makes payment by EFT (but see paragraph (d) of this clause).

(b) Mandatory submission of Contractor's EFT information. (1) The Contractor is required to provide the Government with the information required to make payment by EFT (see paragraph (j) of this clause). The Contractor shall provide this information directly to the office designated in this contract to receive that information (hereafter: "designated office") by no later than 15 days prior to submission of the first request for payment. If not otherwise specified in this contract, the payment office is the designated office for receipt of the Contractor's EFT information. If more than one designated office is named for the contract, the Contractor shall provide a separate notice to each office. In the event that the EFT information changes, the Contractor shall be responsible for providing the updated information to the designated office(s).

(2) If the Contractor provides EFT information applicable to multiple contracts, the Contractor shall specifically state the applicability of this EFT information in terms acceptable to the designated office. However, EFT information supplied to a designated office shall be applicable only to contracts that identify that designated office as the office to receive EFT information for that contract.

(c) Mechanisms for EFT payment. The Government may make payment by EFT through either the Automated Clearing House (ACH) network, subject to the rules of the National Automated Clearing House Association, or the Fedwire Transfer System. The rules governing Federal payments through the ACH are contained in 31 CFR part 210.

(d) Suspension of payment. (1) The Government is not required to make any payment under this contract until after receipt, by the designated office, of the correct EFT payment information from the Contractor. Until receipt of the correct EFT information, any invoice or contract financing request shall be deemed not to be a proper invoice for the purpose of prompt payment under this contract. The prompt payment terms of the contract regarding notice of an improper invoice and delays in accrual of interest penalties apply.

(2) If the EFT information changes after submission of correct EFT information, the Government shall begin using the changed EFT information no later than 30 days after its receipt by the designated office to the extent payment is made by EFT. However, the Contractor may request that no further payments be made until the updated EFT information is implemented by the payment office. If such suspension would result in a late payment under the prompt payment terms of this contract, the Contractor's request for suspension shall extend the due date for payment by the number of days of the suspension.

(e) Liability for uncompleted or erroneous transfers. (1) If an uncompleted or erroneous transfer occurs because the Government used the Contractor's EFT information incorrectly, the Government remains responsible for--

- (i) Making a correct payment;
- (ii) Paying any prompt payment penalty due; and
- (iii) Recovering any erroneously directed funds.

(2) If an uncompleted or erroneous transfer occurs because the Contractor's EFT information was incorrect, or was revised within 30 days of Government release of the EFT payment transaction instruction to the Federal Reserve System, and--

(i) If the funds are no longer under the control of the payment office, the Government is deemed to have made payment and the Contractor is responsible for recovery of any erroneously directed funds; or

(ii) If the funds remain under the control of the payment office, the Government shall not make payment and the provisions of paragraph (d) shall apply.

(f) EFT and prompt payment. A payment shall be deemed to have been made in a timely manner in accordance with the prompt payment terms of this contract if, in the EFT payment transaction instruction released to the Federal Reserve System, the date specified for settlement of the payment is on or before the prompt payment due date, provided the specified payment date is a valid date under the rules of the Federal Reserve System.

(g) EFT and assignment of claims. If the Contractor assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the Contractor shall require as a condition of any such assignment, that the assignee shall provide the EFT information required by paragraph (j) of this clause to the designated office, and shall be paid by EFT in accordance with the terms of this clause. In all respects, the requirements of this clause shall apply to the assignee as if it were the Contractor. EFT information that shows the ultimate recipient of the transfer to be other than the Contractor, in the absence of a proper assignment of claims acceptable to the Government, is incorrect EFT information within the meaning of paragraph (d) of this clause.

(h) Liability for change of EFT information by financial agent. The Government is not liable for errors resulting from changes to EFT information provided by the Contractor's financial agent.

(i) Payment information. The payment or disbursing office shall forward to the Contractor available payment information that is suitable for transmission as of the date of release of the EFT instruction to the Federal Reserve System. The Government may request the Contractor to designate a desired format and method(s) for delivery of payment information from a list of formats and methods the payment office is capable of executing. However, the Government does not guarantee that any particular format or method of delivery is available at any particular payment office and retains the latitude to use the format and delivery method most convenient to the Government. If the Government makes payment by check in accordance with paragraph (a) of this clause, the Government shall mail the payment information to the remittance address in the contract.

(j) EFT information. The Contractor shall provide the following information to the designated office. The Contractor may supply this data for this or multiple contracts (see paragraph (b) of this clause). The Contractor shall designate a single financial agent per contract capable of receiving and processing the EFT information using the EFT methods described in paragraph (c) of this clause.

(1) The contract number (or other procurement identification number).

(2) The Contractor's name and remittance address, as stated in the contract(s).

(3) The signature (manual or electronic, as appropriate), title, and telephone number of the Contractor official authorized to provide this information.

(4) The name, address, and 9-digit Routing Transit Number of the Contractor's financial agent.

(5) The Contractor's account number and the type of account (checking, saving, or lockbox).

(6) If applicable, the Fedwire Transfer System telegraphic abbreviation of the Contractor's financial agent.

(7) If applicable, the Contractor shall also provide the name, address, telegraphic abbreviation, and 9-digit Routing Transit Number of the correspondent financial institution receiving the wire transfer payment if the Contractor's financial agent is not directly on-line to the Fedwire Transfer System; and, therefore, not the receiver of the wire transfer payment. A form and instructions for submission of EFT information may be obtained at <http://www.fc.usace.army.mil/adobe/pub/directdep.pdf>.

(End of clause)

#### 52.233-1 DISPUTES. (DEC 1998)

(a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613).

(b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.

(c) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. A claim arising under a contract, unlike a claim relating to that contract, is a claim that can be resolved under a contract clause that provides for the relief sought by the claimant. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding \$100,000 is not a claim under the Act until certified as required by subparagraph (d)(2) of this clause. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

(d)(1) A claim by the Contractor shall be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer.

(2)(i) The contractors shall provide the certification specified in subparagraph (d)(2)(iii) of this clause when submitting any claim -

(A) Exceeding \$100,000; or

(B) Regardless of the amount claimed, when using -

(1) Arbitration conducted pursuant to 5 U.S.C. 575-580; or

(2) Any other alternative means of dispute resolution (ADR) technique that the agency elects to handle in accordance with the Administrative Dispute Resolution Act (ADRA).

(ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.

(iii) The certification shall state as follows: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am duly authorized to certify the claim on behalf of the Contractor.

(3) The certification may be executed by any person duly authorized to bind the Contractor with respect to the claim.

(e) For Contractor claims of \$100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over \$100,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in the Act.

(g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative dispute resolution (ADR). If the Contractor refuses an offer for ADR, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the request.

(h) The Government shall pay interest on the amount found due and unpaid from (1) the date the Contracting Officer receives the claim (certified, if required); or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in (FAR) 48 CFR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.

(i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under the contract, and comply with any decision of the Contracting Officer.

(End of clause)

#### 52.233-3 PROTEST AFTER AWARD (AUG. 1996)

(a) Upon receipt of a notice of protest (as defined in FAR 33.101) or a determination that a protest is likely (see FAR 33.102(d)), the Contracting Officer may, by written order to the Contractor, direct the Contractor to stop performance of the work called for by this contract. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Upon receipt of the final decision in the protest, the Contracting Officer shall either--

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

(b) If a stop-work order issued under this clause is canceled either before or after a final decision in the protest, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if--

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to an adjustment within 30 days after the end of the period of work stoppage; provided, that if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon a proposal at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

(e) The Government's rights to terminate this contract at any time are not affected by action taken under this clause.

(f) If, as the result of the Contractor's intentional or negligent misstatement, misrepresentation, or miscertification, a protest related to this contract is sustained, and the Government pays costs, as

provided in FAR 33.102(b)(2) or 33.104(h)(1), the Government may require the Contractor to reimburse the Government the amount of such costs. In addition to any other remedy available, and pursuant to the requirements of Subpart 32.6, the Government may collect this debt by offsetting the amount against any payment due the Contractor under any contract between the Contractor and the Government.

#### 52.236-2 DIFFERING SITE CONDITIONS (APR 1984)

As prescribed in 36.502, insert the following clause in solicitations and contracts when a fixed-price construction contract or a fixed-price dismantling, demolition, or removal of improvements contract is contemplated and the contract amount is expected to exceed the small purchase limitation. The Contracting Officer may insert the clause in solicitations and contracts when a fixed-price construction or a fixed-price contract for dismantling, demolition, or removal of improvements is contemplated and the contract amount is expected to be within the small purchase limitation.

(a) The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer of

(1) subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or

(2) unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.

(b) The Contracting Officer shall investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, an equitable adjustment shall be made under this clause and the contract modified in writing accordingly.

(c) No request by the Contractor for an equitable adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required; provided, that the time prescribed in (a) above for giving written notice may be extended by the Contracting Officer.

(d) No request by the Contractor for an equitable adjustment to the contract for differing site conditions shall be allowed if made after final payment under this contract.

#### 52.236-3 SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK (APR 1984)

(a) The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location of the work, and that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including but not limited to

(1) conditions bearing upon transportation, disposal, handling, and storage of materials;

(2) the availability of labor, water, electric power, and roads;

(3) uncertainties of weather, river stages, tides, or similar physical conditions at the site;

(4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed preliminary to and during work performance. The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the Government, as well as from the drawings and specifications



made a part of this contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the Government.

(b) The Government assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the Government. Nor does the Government assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers or agents before the execution of this contract, unless that understanding or representation is expressly stated in this contract.

#### 52.236-5 MATERIAL AND WORKMANSHIP (APR 1984)

(a) All equipment, material, and articles incorporated into the work covered by this contract shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this contract. References in the specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. The Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of the Contracting Officer, is equal to that named in the specifications, unless otherwise specifically provided in this contract.

(b) The Contractor shall obtain the Contracting Officer's approval of the machinery and mechanical and other equipment to be incorporated into the work. When requesting approval, the Contractor shall furnish to the Contracting Officer the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the machinery and mechanical and other equipment. When required by this contract or by the Contracting Officer, the Contractor shall also obtain the Contracting Officer's approval of the material or articles which the Contractor contemplates incorporating into the work. When requesting approval, the Contractor shall provide full information concerning the material or articles. When directed to do so, the Contractor shall submit samples for approval at the Contractor's expense, with all shipping charges prepaid. Machinery, equipment, material, and articles that do not have the required approval shall be installed or used at the risk of subsequent rejection.

(c) All work under this contract shall be performed in a skillful and workmanlike manner. The Contracting Officer may require, in writing, that the Contractor remove from the work any employee the Contracting Officer deems incompetent, careless, or otherwise objectionable.

#### 52.236-6 SUPERINTENDENCE BY THE CONTRACTOR (APR 1984)

At all times during performance of this contract and until the work is completed and accepted, the Contractor shall directly superintend the work or assign and have on the worksite a competent superintendent who is satisfactory to the Contracting Officer and has authority to act for the Contractor.

#### 52.236-7 PERMITS AND RESPONSIBILITIES (NOV 1991)

The Contractor shall, without additional expense to the Government, be responsible for obtaining any necessary licenses and permits, and for complying with any Federal, State, and municipal laws, codes, and regulations applicable to the performance of the work. The Contractor shall also be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence. The Contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.

#### 52.236-8 OTHER CONTRACTS (APR 1984)

The Government may undertake or award other contracts for additional work at or near the site of the work under this contract. The Contractor shall fully cooperate with the other contractors and with Government employees and shall carefully adapt scheduling and performing the work under this contract to accommodate the additional work, heeding any direction that may be provided by the Contracting Officer. The Contractor shall not commit or permit any act that will interfere with the performance of work by any other contractor or by Government employees.

#### 52.236-9 PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS (APR 1984)

(a) The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed and which do not unreasonably interfere with the work required under this contract. The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.

(b) The Contractor shall protect from damage all existing improvements and utilities

(1) at or near the work site, and

(2) on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. The Contractor shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.

#### 52.236-10 OPERATIONS AND STORAGE AREAS (APR 1984)

(a) The Contractor shall confine all operations (including storage of materials) on Government premises to areas authorized or approved by the Contracting Officer. The Contractor shall hold and save the Government, its officers and agents, free and harmless from liability of any nature occasioned by the Contractor's performance.

(b) Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be erected by the Contractor only with the approval of the Contracting Officer and shall be built with labor and materials furnished by the Contractor without expense to the Government. The temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor at its expense upon completion of the work. With the written consent of the Contracting Officer, the buildings and utilities may be abandoned and need not be removed.

(c) The Contractor shall, under regulations prescribed by the Contracting Officer, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by the Contracting Officer. When materials are transported in prosecuting the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State, or local law or regulation. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

52.236-11 USE AND POSSESSION PRIOR TO COMPLETION (APR 1984)

(a) The Government shall have the right to take possession of or use any completed or partially completed part of the work. Before taking possession of or using any work, the Contracting Officer shall furnish the Contractor a list of items of work remaining to be performed or corrected on those portions of the work that the Government intends to take possession of or use. However, failure of the Contracting Officer to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract. The Government's possession or use shall not be deemed an acceptance of any work under the contract.

(b) While the Government has such possession or use, the Contractor shall be relieved of the responsibility for the loss of or damage to the work resulting from the Government's possession or use, notwithstanding the terms of the clause in this contract entitled "Permits and Responsibilities." If prior possession or use by the Government delays the progress of the work or causes additional expense to the Contractor, an equitable adjustment shall be made in the contract price or the time of completion, and the contract shall be modified in writing accordingly.

52.236-12 CLEANING UP (APR 1984)

The Contractor shall at all times keep the work area, including storage areas, free from accumulations of waste materials. Before completing the work, the Contractor shall remove from the work and premises any rubbish, tools, scaffolding, equipment, and materials that are not the property of the Government. Upon completing the work, the Contractor shall leave the work area in a clean, neat, and orderly condition satisfactory to the Contracting Officer.

52.236-13 ACCIDENT PREVENTION (NOV 1991) – ALTERNATE I (NOV 1991)

(a) The Contractor shall provide and maintain work environments and procedures which will

(1) safeguard the public and Government personnel, property, materials, supplies, and equipment exposed to Contractor operations and activities;

(2) avoid interruptions of Government operations and delays in project completion dates; and

(3) control costs in the performance of this contract.

(b) For these purposes on contracts for construction or dismantling, demolition, or removal of improvements, the Contractor shall-

(1) Provide appropriate safety barricades, signs, and signal lights;

(2) Comply with the standards issued by the Secretary of Labor at 29 CFR Part 1926 and 29 CFR Part 1910; and

(3) Ensure that any additional measures the Contracting Officer determines to be reasonably necessary for the purposes are taken.

If this contract is for construction or dismantling, demolition or removal of improvements with any Department of Defense agency or component, the Contractor shall comply with all pertinent provisions of the latest version of U.S. Army Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, in effect on the date of the solicitation.

Whenever the Contracting Officer becomes aware of any noncompliance with these requirements or any condition which poses a serious or imminent danger to the health or safety of the public or Government personnel, the Contracting Officer shall notify the Contractor orally, with written confirmation, and request immediate initiation of corrective action. This notice, when delivered to the Contractor or the Contractor's representative at the work site, shall be deemed sufficient notice of the noncompliance and that corrective action is required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to promptly take corrective action, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor shall not be entitled to any equitable adjustment of the contract price or extension of the performance schedule on any stop work order issued under this clause.

(e) The Contractor shall insert this clause, including this paragraph (e), with appropriate changes in the designation of the parties, in subcontracts.

(f) Before commencing the work, the Contractor shall-

(1) Submit a written proposed plan for implementing this clause. The plan shall include an analysis of the significant hazards to life, limb, and property inherent in contract work performance and a plan for controlling these hazards; and

(2) Meet with representatives of the Contracting Officer to discuss and develop a mutual understanding relative to administration of the overall safety program.

#### 52.236-15 SCHEDULES FOR CONSTRUCTION CONTRACTS (APR 1984)

(a) The Contractor shall, within five days after the work commences on the contract or another period of time determined by the Contracting Officer, prepare and submit to the Contracting Officer for approval three copies of a practicable schedule showing the order in which the Contractor proposes to perform the work, and the dates on which the Contractor contemplates starting and completing the several salient features of the work (including acquiring materials, plant, and equipment). The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period. If the Contractor fails to submit a schedule within the time prescribed, the Contracting Officer may withhold approval of progress payments until the Contractor submits the required schedule.

(b) The Contractor shall enter the actual progress on the chart as directed by the Contracting Officer, and upon doing so shall immediately deliver three copies of the annotated schedule to the Contracting Officer. If, in the opinion of the Contracting Officer, the Contractor falls behind the approved schedule, the Contractor shall take steps necessary to improve its progress, including those that may be required by the Contracting Officer, without additional cost to the Government. In this circumstance, the Contracting Officer may require the Contractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules in chart form as the Contracting Officer deems necessary to demonstrate how the approved rate of progress will be regained.

(c) Failure of the Contractor to comply with the requirements of the Contracting Officer under this clause shall be grounds for a determination by the Contracting Officer that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the contract. Upon making this determination, the Contracting Officer may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the default terms of this contract.

#### 52.236-21 SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION (FEB 1997)

(a) The Contractor shall keep on the work site a copy of the drawings and specifications and shall at all times give the Contracting Officer access thereto. Anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. In case of difference between drawings and specifications, the specifications shall govern. In case of discrepancy in the figures, in the drawings, or in the specifications, the matter shall be promptly submitted to the Contracting Officer, who shall promptly make a determination in writing. Any adjustment by the Contractor without such a determination shall be at its own risk and expense. The Contracting Officer shall furnish from time to time such detailed drawings and other information as considered necessary, unless otherwise provided.

(b) Wherever in the specifications or upon the drawings the words "directed", "required", "ordered", "designated", "prescribed", or words of like import are used, it shall be understood that the "direction", "requirement", "order", "designation", or "prescription", of the Contracting Officer is intended and similarly the words "approved", "acceptable", "satisfactory", or words of like import shall mean "approved by," or "acceptable to", or "satisfactory to" the Contracting Officer, unless otherwise expressly stated.

(c) Where "as shown," "as indicated", "as detailed", or words of similar import are used, it shall be understood that the reference is made to the drawings accompanying this contract unless stated otherwise. The word "provided" as used herein shall be understood to mean "provide complete in place," that is "furnished and installed".

(d) Shop drawings means drawings, submitted to the Government by the Contractor, subcontractor, or any lower tier subcontractor pursuant to a construction contract, showing in detail (1) the proposed fabrication and assembly of structural elements, and (2) the installation (i.e., fit, and attachment details) of materials or equipment. It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the contractor to explain in detail specific portions of the work required by the contract. The Government may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.

(e) If this contract requires shop drawings, the Contractor shall coordinate all such drawings, and review them for accuracy, completeness, and compliance with contract requirements and shall indicate its approval thereon as evidence of such coordination and review. Shop drawings submitted to the Contracting Officer without evidence of the Contractor's approval may be returned for resubmission. The Contracting Officer will indicate an approval or disapproval of the shop drawings and if not approved as submitted shall indicate the Government's reasons therefor. Any work done before such approval shall be at the Contractor's risk. Approval by the Contracting Officer shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this contract, except with respect to variations described and approved in accordance with (f) below.

(f) If shop drawings show variations from the contract requirements, the Contractor shall describe such variations in writing, separate from the drawings, at the time of submission. If the Contracting Officer approves any such variation, the Contracting Officer shall issue an appropriate contract modification, except that, if the variation is minor or does not involve a change in price or in time of performance, a modification need not be issued.

(g) The Contractor shall submit to the Contracting Officer for approval four copies (unless otherwise indicated) of all shop drawings as called for under the various headings of these specifications. Three sets (unless otherwise indicated) of all shop drawings, will be retained by the Contracting Officer and one set will be returned to the Contractor.

#### 52.236-26 PRECONSTRUCTION CONFERENCE (FEB 1995)

If the Contracting Officer decides to conduct a preconstruction conference, the successful offeror will be notified and will be required to attend. The Contracting Officer's notification will include specific details

regarding the date, time, and location of the conference, any need for attendance by subcontractors, and information regarding the items to be discussed.

#### 52.242-13 BANKRUPTCY. (JUL 1995)

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

#### 52.242-14 SUSPENSION OF WORK (APR 1984)

(a) The Contracting Officer may order the Contractor, in writing, to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the convenience of the Government.

(b) If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted (1) by an act of the Contracting Officer in the administration of this contract, or (2) by the Contracting Officer's failure to act within the time specified in this contract (or within a reasonable time if not specified), an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by the unreasonable suspension, delay, or interruption, and the contract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor, or for which an equitable adjustment is provided for or excluded under any other term or condition of this contract. (c) A claim under this clause shall not be allowed (1) for any costs incurred more than 20 days before the Contractor shall have notified the Contracting Officer in writing of the act or failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension order), and (2) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the suspension, delay, or interruption, but not later than the date of final payment under the contract.

#### 52.243-4 CHANGES (AUG 1987)

(a) The Contracting Officer may, at any time, without notice to the sureties, if any, by written order designated or indicated to be a change order, make changes in the work within the general scope of the contract, including changes--

- (1) In the specifications (including drawings and designs);
- (2) In the method or manner of performance of the work;
- (3) In the Government-furnished facilities, equipment, materials, services, or site; or
- (4) Directing acceleration in the performance of the work.

(b) Any other written or oral order (which, as used in this paragraph (b), includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this clause; provided, that the Contractor gives the Contracting Officer written notice stating

(1) the date, circumstances, and source of the order and

(2) that the Contractor regards the order as a change order.

(c) Except as provided in this clause, no order, statement, or conduct of the Contracting Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment.

(d) If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing. However, except for an adjustment based on defective specifications, no adjustment for any change under paragraph (b) of this clause shall be made for any costs incurred more than 20 days before the Contractor gives written notice as required. In the case of defective specifications for which the Government is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.

(e) The Contractor must assert its right to an adjustment under this clause within 30 days after

(1) receipt of a written change order under paragraph (a) of this clause or (2) the furnishing of a written notice under paragraph (b) of this clause, by submitting to the Contracting Officer a written statement describing the general nature and amount of the proposal, unless this period is extended by the Government. The statement of proposal for adjustment may be included in the notice under paragraph (b) above.

(f) No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this contract.

#### 52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS AND COMMERCIAL COMPONENTS

(a) Definitions.

"Commercial item," as used in this clause, has the meaning contained in the clause at 52.202-1, Definitions.

"Subcontract," as used in this clause, includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.

(b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or nondevelopmental items as components of items to be supplied under this contract.

(c) Notwithstanding any other clause of this contract, the Contractor is not required to include any FAR provision or clause, other than those listed below to the extent they are applicable and as may be required to establish the reasonableness of prices under Part 15, in a subcontract at any tier for commercial items or commercial components:

(1) 52.222-26, Equal Opportunity (E.O. 11246);

(2) 52.222-35, Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era (38 U.S.C. 4212(a));

(3) 52.222-36, Affirmative Action for Workers with Disabilities (29 U.S.C. 793); and

(4) 52.247-64, Preference for Privately Owned U.S.-Flagged Commercial Vessels (46 U.S.C. 1241) (flow down not required for subcontracts awarded beginning May 1, 1996).

(d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

(End of clause)

#### 52.246-12 INSPECTION OF CONSTRUCTION (AUG 1996)

(a) Definition. "Work" includes, but is not limited to, materials, workmanship, and manufacture and fabrication of components.

(b) The Contractor shall maintain an adequate inspection system and perform such inspections as will ensure that the work performed under the contract conforms to contract requirements. The Contractor shall maintain complete inspection records and make them available to the Government. All work shall be conducted under the general direction of the Contracting Officer and is subject to Government inspection and test at all places and at all reasonable times before acceptance to ensure strict compliance with the terms of the contract.

(c) Government inspections and tests are for the sole benefit of the Government and do not--

(1) Relieve the Contractor of responsibility for providing adequate quality control measures;

(2) Relieve the Contractor of responsibility for damage to or loss of the material before acceptance;

(3) Constitute or imply acceptance; or

(4) Affect the continuing rights of the Government after acceptance of the completed work under paragraph (i) of this section.

(d) The presence or absence of a Government inspector does not relieve the Contractor from any contract requirement, nor is the inspector authorized to change any term or condition of the specification without the Contracting Officer's written authorization.

(e) The Contractor shall promptly furnish, at no increase in contract price, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required by the Contracting Officer. The Government may charge to the Contractor any additional cost of inspection or test when work is not ready at the time specified by the Contractor for inspection or test, or when prior rejection makes reinspection or retest necessary. The Government shall perform all inspections and tests in a manner that will not unnecessarily delay the work. Special, full size, and performance tests shall be performed as described in the contract.

(f) The Contractor shall, without charge, replace or correct work found by the Government not to conform to contract requirements, unless in the public interest the Government consents to accept the work with an appropriate adjustment in contract price. The Contractor shall promptly segregate and remove rejected material from the premises.

(g) If the Contractor does not promptly replace or correct rejected work, the Government may (1) by contract or otherwise, replace or correct the work and charge the cost to the Contractor or (2) terminate for default the Contractor's right to proceed.

(h) If, before acceptance of the entire work, the Government decides to examine already completed work by removing it or tearing it out, the Contractor, on request, shall promptly furnish all necessary facilities, labor, and material. If the work is found to be defective or nonconforming in any material respect due to the fault of the Contractor or its subcontractors, the Contractor shall defray the expenses of the examination and of satisfactory reconstruction. However, if the work is found to meet contract requirements, the Contracting Officer shall make an equitable adjustment for the additional services involved in the examination and reconstruction, including, if completion of the work was thereby delayed, an extension of time.

(i) Unless otherwise specified in the contract, the Government shall accept, as promptly as practicable after completion and inspection, all work required by the contract or that portion of the work the Contracting Officer determines can be accepted separately. Acceptance shall be final and conclusive



except for latent defects, fraud, gross mistakes amounting to fraud, or the Government's rights under any warranty or guarantee.

52.248-3 VALUE ENGINEERING--CONSTRUCTION (FEB 2000) - ALTERNATE I (APR 1984)

(a) General. The Contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECP's) voluntarily. The Contractor shall share in any instant contract savings realized from accepted VECP's, in accordance with paragraph (f) below.

(b) Definitions. "Collateral costs," as used in this clause, means agency costs of operation, maintenance, logistic support, or Government-furnished property.

"Collateral savings," as used in this clause, means those measurable net reductions resulting from a VECP in the agency's overall projected collateral costs, exclusive of acquisition savings, whether or not the acquisition cost changes.

"Contractor's development and implementation costs," as used in this clause, means those costs the Contractor incurs on a VECP specifically in developing, testing, preparing, and submitting the VECP, as well as those costs the Contractor incurs to make the contractual changes required by Government acceptance of a VECP.

"Government costs," as used in this clause, means those agency costs that result directly from developing and implementing the VECP, such as any net increases in the cost of testing, operations, maintenance, and logistic support. The term does not include the normal administrative costs of processing the VECP.

"Instant contract savings," as used in this clause, means the estimated reduction in Contractor cost of performance resulting from acceptance of the VECP, minus allowable Contractor's development and implementation costs, including subcontractors' development and implementation costs (see paragraph (h) below).

"Value engineering change proposal (VECP)" means a proposal that--

(1) Requires a change to this, the instant contract, to implement; and

(2) Results in reducing the contract price or estimated cost without impairing essential functions or characteristics; provided, that it does not involve a change--

(i) In deliverable end item quantities only; or

(ii) To the contract type only.

(c) VECP preparation. As a minimum, the Contractor shall include in each VECP the information described in subparagraphs (1) through (7) below. If the proposed change is affected by contractually required configuration management or similar procedures, the instructions in those procedures relating to format, identification, and priority assignment shall govern VECP preparation. The VECP shall include the following:

(1) A description of the difference between the existing contract requirement and that proposed, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, and the effect of the change on the end item's performance.

(2) A list and analysis of the contract requirements that must be changed if the VECP is accepted, including any suggested specification revisions.

(3) A separate, detailed cost estimate for (i) the affected portions of the existing contract requirement and (ii) the VECP. The cost reduction associated with the VECP shall take into account the Contractor's allowable development and implementation costs, including any amount attributable to subcontracts under paragraph (h) below.

(4) A description and estimate of costs the Government may incur in implementing the VECP, such as test and evaluation and operating and support costs.

(5) A prediction of any effects the proposed change would have on collateral costs to the agency.

(6) A statement of the time by which a contract modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the contract completion time or delivery schedule.

(7) Identification of any previous submissions of the VECP, including the dates submitted, the agencies and contract numbers involved, and previous Government actions, if known.

(d) Submission. The Contractor shall submit VECP's to the Resident Engineer at the worksite, with a copy to the Contracting Officer.

(e) Government action. (1) The Contracting Officer shall notify the Contractor of the status of the VECP within 45 calendar days after the contracting office receives it. If additional time is required, the Contracting Officer shall notify the Contractor within the 45-day period and provide the reason for the delay and the expected date of the decision. The Government will process VECP's expeditiously; however, it shall not be liable for any delay in acting upon a VECP.

(2) If the VECP is not accepted, the Contracting Officer shall notify the Contractor in writing, explaining the reasons for rejection. The Contractor may withdraw any VECP, in whole or in part, at any time before it is accepted by the Government. The Contracting Officer may require that the Contractor provide written notification before undertaking significant expenditures for VECP effort.

(3) Any VECP may be accepted, in whole or in part, by the Contracting Officer's award of a modification to this contract citing this clause. The Contracting Officer may accept the VECP, even though an agreement on price reduction has not been reached, by issuing the Contractor a notice to proceed with the change. Until a notice to proceed is issued or a contract modification applies a VECP to this contract, the Contractor shall perform in accordance with the existing contract. The decision to accept or reject all or part of any VECP is a unilateral decision made solely at the discretion of the Contracting Officer.

(f) Sharing.

(1) Rates. The Government's share of savings is determined by subtracting Government costs from instant contract savings and multiplying the result by (i) 45 percent for fixed-price contracts or (ii) 75 percent for cost-reimbursement contracts.

(2) Payment. Payment of any share due the Contractor for use of a VECP on this contract shall be authorized by a modification to this contract to--

(i) Accept the VECP;

(ii) Reduce the contract price or estimated cost by the amount of instant contract savings; and

(iii) Provide the Contractor's share of savings by adding the amount calculated to the contract price or fee.

(g) Subcontracts. The Contractor shall include an appropriate value engineering clause in any subcontract of \$50,000 or more and may include one in subcontracts of lesser value. In computing any

adjustment in this contract's price under paragraph (f) above, the Contractor's allowable development and implementation costs shall include any subcontractor's allowable development and implementation costs clearly resulting from a VECP accepted by the Government under this contract, but shall exclude any value engineering incentive payments to a subcontractor. The Contractor may choose any arrangement for subcontractor value engineering incentive payments; provided, that these payments shall not reduce the Government's share of the savings resulting from the VECP.

(h) Data. The Contractor may restrict the Government's right to use any part of a VECP or the supporting data by marking the following legend on the affected parts:

"These data, furnished under the Value Engineering--Construction clause of contract, shall not be disclosed outside the Government or duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a value engineering change proposal submitted under the clause. This restriction does not limit the Government's right to use information contained in these data if it has been obtained or is otherwise available from the Contractor or from another source without limitations."

If a VECP is accepted, the Contractor hereby grants the Government unlimited rights in the VECP and supporting data, except that, with respect to data qualifying and submitted as limited rights technical data, the Government shall have the rights specified in the contract modification implementing the VECP and shall appropriately mark the data. (The terms "unlimited rights" and "limited rights" are defined in Part 27 of the Federal Acquisition Regulation.)

(j) Collateral savings. If a VECP is accepted, the Contracting Officer will increase the instant contract amount by 20 percent of any projected collateral savings determined to be realized in a typical year of use after subtracting any Government costs not previously offset. However, the Contractor's share of collateral savings will not exceed the contract's firm-fixed-price or estimated cost, at the time the VECP is accepted, or \$100,000, whichever is greater. The Contracting Officer will be the sole determiner of the amount of collateral savings.

(End of clause)

#### 52.249-2 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) (SEP 1996) - ALTERNATE I (SEP 1996)

(a) The Government may terminate performance of work under this contract in whole or, from time to time, in part if the Contracting Officer determines that a termination is in the Government's interest. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.

(b) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

(1) Stop work as specified in the notice.

(2) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the contract.

(3) Terminate all subcontracts to the extent they relate to the work terminated.

(4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.

(5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause.

(6) As directed by the Contracting Officer, transfer title and deliver to the Government ( i) the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated, and (ii) the completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government.

(7) Complete performance of the work not terminated.

(8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.

(9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in subparagraph (b)(6) of this clause; provided, however, that the Contractor (i) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer.

(c) The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.

(d) After expiration of the plant clearance period as defined in Subpart 45.6 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days, the Government will accept title to those items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.

(e) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(f) Subject to paragraph (e) of this clause, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount to be paid or remaining to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph (g) or paragraph (g) of this clause, exclusive of costs shown in subparagraph (g)(3) of this clause, may not exceed the total contract price as reduced by (1) the amount of payments previously made and (2) the contract price of work not terminated. The contract shall be modified, and the Contractor paid the agreed amount. Paragraph (g) of this clause shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this paragraph.

(g) If the Contractor and Contracting Officer fail to agree on the whole amount to be paid the Contractor because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined as follows, but without duplication of any amounts agreed upon under paragraph (f) of this clause:

(1) For contract work performed before the effective date of termination, the total (without duplication of any items) of--

(i) The cost of this work;

(ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (g)(1)(i) of this clause; and

(iii) A sum, as profit on subdivision (g)(1)(i) of this clause, determined by the Contracting Officer under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Contracting Officer shall allow no profit under this subdivision (iii) and shall reduce the settlement to reflect the indicated rate of loss.

(2) The reasonable costs of settlement of the work terminated, including--

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

(h) Except for normal spoilage, and except to the extent that the Government expressly assumed the risk of loss, the Contracting Officer shall exclude from the amounts payable to the Contractor under paragraph (g) of this clause, the fair value, as determined by the Contracting Officer, of property that is destroyed, lost, stolen, or damaged so as to become undeliverable to the Government or to a buyer.

(i) The cost principles and procedures of Part 31 of the Federal Acquisition Regulation, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.

(j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (e), (g), or (l) of this clause, except that if the Contractor failed to submit the termination settlement proposal or request for equitable adjustment within the time provided in paragraph (e) or (l), respectively, and failed to request a time extension, there is no right of appeal.

(k) In arriving at the amount due the Contractor under this clause, there shall be deducted--

(1) All unliquidated advance or other payments to the Contractor under the terminated portion of this contract;

(2) Any claim which the Government has against the Contractor under this contract; and

(3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the Government.

(l) If the termination is partial, the Contractor may file a proposal with the Contracting Officer for an equitable adjustment of the price(s) of the continued portion of the contract. The Contracting Officer shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by the Contracting Officer.

(m)(1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

(2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.

(n) Unless otherwise provided in this contract or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this contract for 3 years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and expenses under this contract. The Contractor shall make these records and documents available to the Government, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the Contracting Officer, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

#### 52.249-10 DEFAULT (FIXED-PRICE CONSTRUCTION) (APR 1984)

(a) If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this contract including any extension, or fails to complete the work within this time, the Government may, by written notice to the Contractor, terminate the right to proceed with the work (or the separable part of the work) that has been delayed. In this event, the Government may take over the work and complete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the Government resulting from the Contractor's refusal or failure to complete the work within the specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the Government in completing the work.

(b) The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this clause, if--

(1) The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include

(i) acts of God or of the public enemy,

(ii) acts of the Government in either its sovereign or contractual capacity,

(iii) acts of another Contractor in the performance of a contract with the Government,

(iv) fires,

- (v) floods,
- (vi) epidemics,
- (vii) quarantine restrictions,
- (viii) strikes,
- (ix) freight embargoes,
- (x) unusually severe weather, or delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and the subcontractors or suppliers; and

(2) The Contractor, within 10 days from the beginning of any delay (unless extended by the Contracting Officer), notifies the Contracting Officer in writing of the causes of delay. The Contracting Officer shall ascertain the facts and the extent of delay. If, in the judgment of the Contracting Officer, the findings of fact warrant such action, the time for completing the work shall be extended. The findings of the Contracting Officer shall be final and conclusive on the parties, but subject to appeal under the Disputes clause.

(c) If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the Government.

The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

#### 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

The use in this solicitation or contract of any Defense FAR Supplement (48 CFR Chapter 2) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

#### 52.253-1 COMPUTER GENERATED FORMS (JAN 1991)

(a) Any data required to be submitted on a Standard or Optional Form prescribed by the Federal Acquisition Regulation (FAR) may be submitted on a computer generated version of the form, provided there is no change to the name, content, or sequence of the data elements on the form, and provided the form carries the Standard or Optional Form number and edition date.

(b) Unless prohibited by agency regulations, any data required to be submitted on an agency unique form prescribed by an agency supplement to the FAR may be submitted on a computer generated version of the form provided there is no change to the name, content, or sequence of the data elements on the form and provided the form carries the agency form number and edition date.

If the Contractor submits a computer generated version of a form that is different than the required form, then the rights and obligations of the parties will be determined based on the content of the required form.

#### 252.201-7000 CONTRACTING OFFICER'S REPRESENTATIVE (DEC 1991)

(a) "Definition. Contracting officer's representative" means an individual designated in accordance with subsection 201.602-2 of the Defense Federal Acquisition Regulation Supplement and authorized in writing by the contracting officer to perform specific technical or administrative functions.

(b) If the Contracting Officer designates a contracting officer's representative (COR), the Contractor will receive a copy of the written designation. It will specify the extent of the COR's authority to act on behalf of the contracting officer. The COR is not authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract.

(End of clause)

252.203-7001 PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE-  
CONTRACT-RELATED FELONIES (MAR 1999)

(a) Definitions. As used in this clause—

(1) "Arising out of a contract with the DoD" means any act in connection with—

(i) Attempting to obtain;

(ii) Obtaining, or

(iii) Performing a contract or first-tier subcontract of any agency, department, or component of the Department of Defense (DoD).

(2) "Conviction of fraud or any other felony" means any conviction for fraud or a felony in violation of state or Federal criminal statutes, whether entered on a verdict or plea, including a plea of nolo contendere, for which sentence has been imposed.

(3) "Date of conviction" means the date judgment was entered against the individual.

(b) Any individual who is convicted after September 29, 1988, of fraud or any other felony arising out of a contract with the DoD is prohibited from serving--

(1) In a management or supervisory capacity on any DoD contract or first-tier subcontract;

(2) On the board of directors of any DoD contractor or first-tier subcontractor;

(3) As a consultant, agent, or representative for any DoD contractor or first-tier subcontractor; or

(4) In any other capacity with the authority to influence, advise, or control the decisions of any DoD contractor or subcontractor with regard to any DoD contract or first-tier subcontract.

(c) Unless waived, the prohibition in paragraph (b) of this clause applies for not less than 5 years from the date of conviction.

(d) 10 U.S.C. 2408 provides that a defense contractor or first-tier subcontractor shall be subject to a criminal penalty of not more than \$500,000 if convicted of knowingly—

(1) Employing a person under a prohibition specified in paragraph (b) of this clause; or

(2) Allowing such a person to serve on the board of directors of the contractor or first-tier subcontractor.



(e) In addition to the criminal penalties contained in 10 U.S.C. 2408, the Government may consider other available remedies, such as—

- (1) Suspension or debarment;
- (2) Cancellation of the contract at no cost to the Government; or
- (3) Termination of the contract for default.

(f) The Contractor may submit written requests for waiver of the prohibition in paragraph (b) of this clause to the Contracting Officer. Requests shall clearly identify—

- (1) The person involved;
- (2) The nature of the conviction and resultant sentence or punishment imposed;
- (3) The reasons for the requested waiver; and
- (4) An explanation of why a waiver is in the interest of national security.

(g) The Contractor agrees to include the substance of this clause, appropriately modified to reflect the identity and relationship of the parties, in all first-tier subcontracts exceeding the simplified acquisition threshold in Part 2 of the Federal Acquisition Regulation, except those for commercial items or components.

(h) Pursuant to 10 U.S.C. 2408(c), defense contractors and subcontractors may obtain information as to whether a particular person has been convicted of fraud or any other felony arising out of a contract with the DoD by contacting The Office of Justice Programs, The Denial of Federal Benefits Office, U.S. Department of Justice, telephone (202) 616-3507.

(End of clause)

#### 252.203-7002 DISPLAY OF DOD HOTLINE POSTER (DEC 1991)

(a) The Contractor shall display prominently in common work areas within business segments performing work under Department of Defense (DoD) contracts, DoD Hotline Posters prepared by the DoD Office of the Inspector General.

(b) DoD Hotline Posters may be obtained from the DoD Inspector General, ATTN: Defense Hotline, 400 Army Navy Drive, Washington, DC 22202-2884.

The Contractor need not comply with paragraph (a) of this clause if it has established a mechanism, such as a hotline, by which employees may report suspected instances of improper conduct, and instructions that encourage employees to make such reports.

(End of clause)

#### 252.204-7003 CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT (APR 1992)

The Contractor's procedures for protecting against unauthorized disclosure of information shall not require Department of Defense employees or members of the Armed Forces to relinquish control of their work products, whether classified or not, to the contractor.

(End of clause)

252.204-7004 REQUIRED CENTRAL CONTRACTOR REGISTRATION.(MAR 1998)

(a) Definitions.

As used in this clause--

(1) Central Contractor Registration (CCR database means the primary DoD repository for contractor information required for the conduct of business with DoD.

(2) Data Universal Numbering System (DUNS) number means the 9-digit number assigned by Dun and Bradstreet Information Services to identify unique business entities.

(3) Data Universal Numbering System +4 (DUNS+4) number means the DUNS number assigned by Dun and Bradstreet plus a 4-digit suffix that may be assigned by a parent (controlling) business concern. This 4-digit suffix may be assigned at the discretion of the parent business concern for such purposes as identifying subunits or affiliates of the parent business concern.

(4) Registered in the CCR database means that all mandatory information, including the DUNS number or the DUNS+4 number, if applicable, and the corresponding Commercial and Government Entity (CAGE) code, is in the CCR database; the DUNS number and the CAGE code have been validated; and all edits have been successfully completed.

(b)(1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee must be registered in the CCR database prior to award, during performance, and through final payment of any contract resulting from this solicitation, except for awards to foreign vendors for work to be performed outside the United States.

(2) The offeror shall provide its DUNS or, if applicable, its DUNS+4 number with its offer, which will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.

(3) Lack of registration in the CCR database will make an offeror ineligible for award.

(4) DoD has established a goal of registering an applicant in the CCR database within 48 hours after receipt of a complete and accurate application via the Internet. However, registration of an applicant submitting an application through a method other than the Internet may take up to 30 days. Therefore, offerors that are not registered should consider applying for registration immediately upon receipt of this solicitation.

(c) The Contractor is responsible for the accuracy and completeness of the data within the CCR, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to confirm on an annual basis that its information in the CCR database is accurate and complete.

(d) Offerors and contractors may obtain information on registration and annual confirmation requirements by calling 1-888-227-2423, or via the Internet at <http://ccr.edi.disa.mil>.

252.205-7000 PROVISION OF INFORMATION TO COOPERATIVE AGREEMENT HOLDERS (DEC 1991)

(a) Definition.

"Cooperative agreement holder" means a State or local government; a private, nonprofit organization; a tribal organization (as defined in section 4(c) of the Indian Self-Determination and Education Assistance Act (Pub. L. 93-268; 25 U.S.C. 450 (c))); or an economic enterprise (as defined in section 3(e) of the

Indian Financing Act of 1974 (Pub. L. 93-362; 25 U.S.C. 1452(e)) whether such economic enterprise is organized for profit or nonprofit purposes; which has an agreement with the Defense Logistics Agency to furnish procurement technical assistance to business entities.

(b) The Contractor shall provide cooperative agreement holders, upon their request, with a list of those appropriate employees or offices responsible for entering into subcontracts under defense contracts. The list shall include the business address, telephone number, and area of responsibility of each employee or office.

(c) The Contractor need not provide the listing to a particular cooperative agreement holder more frequently than once a year.

(End of clause)

#### 252.209-7000 ACQUISITION FROM SUBCONTRACTORS SUBJECT TO ONSITE INSPECTION UNDER THE INTERMEDIATE-RANGE NUCLEAR FORCES (INF) TREATY (NOV 1995)

(a) The Contractor shall not deny consideration for a subcontract award under this contract to a potential subcontractor subject to on-site inspection under the INF Treaty, or a similar treaty, solely or in part because of the actual or potential presence of Soviet inspectors at the subcontractor's facility, unless the decision is approved by the Contracting Officer.

(b) The Contractor shall incorporate this clause, including this paragraph (b), in all solicitations and contracts exceeding the simplified acquisition threshold in part 13 of the Federal Acquisition Regulation, except those for commercial items.

#### 252.209-7004 SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE GOVERNMENT OF A TERRORIST COUNTRY (MAR 1998)

(a) Unless the Government determines that there is a compelling reason to do so, the Contractor shall not enter into any subcontract in excess of \$25,000 with a firm, or a subsidiary of a firm, that is identified, on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a terrorist country.

(b) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is identified, on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a terrorist country. The notice must include the name of the proposed subcontractor and the compelling reason(s) for doing business with the subcontractor notwithstanding its inclusion on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs.

(End of clause)

#### 252.215-7000 PRICING ADJUSTMENTS (DEC 1991)

The term "pricing adjustment," as used in paragraph (a) of the clauses entitled "Price Reduction for Defective Cost or Pricing Data--Modifications," "Subcontractor Cost or Pricing Data," and "Subcontractor Cost or Pricing Data--Modifications," means the aggregate increases and/or decreases in cost plus applicable profits.

(End of clause)

252.219-7003 SMALL, SMALL DISADVANTAGED AND WOMEN-OWNED SMALL BUSINESS  
SUBCONTRACTING PLAN (DOD CONTRACTS) (APR. 1996)

This clause supplements the Federal Acquisition Regulation 52.219-9, Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan, clause of this contract.

(a) Definitions. Historically black colleges and universities, as used in this clause, means institutions determined by the Secretary of Education to meet the requirements of 34 CFR 608.2. The term also means any nonprofit research institution that was an integral part of such a college or university before November 14, 1986.

Minority institutions, as used in this clause, means institutions meeting the requirements of section 1046(3) of the Higher Education Act of 1965 (20 U.S.C. 1135d-5(3)). The term also includes Hispanic-serving institutions as defined in section 316(b)(1) of such Act (20 U.S.C. 1059c(b)(1)).

(b) Except for company or division-wide commercial items subcontracting plans, the term small disadvantaged business, when used in the FAR 52.219-9 clause, includes historically black colleges and universities and minority institutions, in addition to small disadvantaged business concerns.

(c) Work under the contract or its subcontracts shall be credited toward meeting the small disadvantaged business concern goal required by paragraph (d) of the FAR 52.219-9 clause when:

(1) It is performed on Indian lands or in joint venture with an Indian tribe or a tribally-owned corporation, and

(2) It meets the requirements of 10 U.S.C. 2323a.

(d) Subcontracts awarded to workshops approved by the Committee for Purchase from People Who are Blind or Severely Disabled (41 U.S.C. 46-48), may be counted toward the Contractor's small business subcontracting goal.

(e) A mentor firm, under the Pilot Mentor-Protege Program established under Section 831 of Pub. L. 101-510, as amended, may count toward its small disadvantaged business goal, subcontracts awarded--

(f) The master plan approval referred to in paragraph (f) of the FAR 52.219-9 clause is approval by the Contractor's cognizant contract administration activity.

(g) In those subcontracting plans which specifically identify small, small disadvantaged, and women-owned small businesses, the Contractor shall notify the Administrative Contracting Officer of any substitutions of firms that are not small, small disadvantaged, or women-owned small businesses for the firms listed in the subcontracting plan. Notifications shall be in writing and shall occur within a reasonable period of time after award of the subcontract. Contractor-specified formats shall be acceptable.

(End of clause)

252.223-7001 HAZARD WARNING LABELS (DEC 1991)

(a) "Hazardous material," as used in this clause, is defined in the Hazardous Material Identification and Material Safety Data clause of this contract.

(b) The Contractor shall label the item package (unit container) of any hazardous material to be delivered under this contract in accordance with the Hazard Communication Standard (29 CFR 1910.1200 et seq). The Standard requires that the hazard warning label conform to the requirements of the standard unless the material is otherwise subject to the labeling requirements of one of the following statutes:

- (1) Federal Insecticide, Fungicide and Rodenticide Act;
- (2) Federal Food, Drug and Cosmetics Act;
- (3) Consumer Product Safety Act;
- (4) Federal Hazardous Substances Act; or
- (5) Federal Alcohol Administration Act.

(c) The Offeror shall list which hazardous material listed in the Hazardous Material Identification and Material Safety Data clause of this contract will be labeled in accordance with one of the Acts in paragraphs (b)(1) through (5) of this clause instead of the Hazard Communication Standard. Any hazardous material not listed will be interpreted to mean that a label is required in accordance with the Hazard Communication Standard.

MATERIAL (If None, Insert "None.")      ACT

\_\_\_\_\_

(d) The apparently successful Offeror agrees to submit, before award, a copy of the hazard warning label for all hazardous materials not listed in paragraph (c) of this clause. The Offeror shall submit the label with the Material Safety Data Sheet being furnished under the Hazardous Material Identification and Material Safety Data clause of this contract.

(e) The Contractor shall also comply with MIL-STD-129, Marking for Shipment and Storage (including revisions adopted during the term of this contract).

(End of clause)

252.223-7004    DRUG-FREE WORK FORCE (SEP 1988)

(a) Definitions.

(1) "Employee in a sensitive position," as used in this clause, means an employee who has been granted access to classified information; or employees in other positions that the Contractor determines involve national security; health or safety, or functions other than the foregoing requiring a high degree of trust and confidence.

(2) "Illegal drugs," as used in this clause, means controlled substances included in Schedules I and II, as defined by section 802(6) of title 21 of the United States Code, the possession of which is unlawful under chapter 13 of that Title. The term "illegal drugs" does not mean the use of a controlled substance pursuant to a valid prescription or other uses authorized by law.

(b) The Contractor agrees to institute and maintain a program for achieving the objective of a drug-free work force. While this clause defines criteria for such a program, contractors are encouraged to implement alternative approaches comparable to the criteria in paragraph (c) that are designed to achieve the objectives of this clause.

(c) Contractor programs shall include the following, or appropriate alternatives:

(1) Employee assistance programs emphasizing high level direction, education, counseling, rehabilitation, and coordination with available community resources;

(2) Supervisory training to assist in identifying and addressing illegal drug use by Contractor employees;

(3) Provision for self-referrals as well as supervisory referrals to treatment with maximum respect for individual confidentiality consistent with safety and security issues;

(4) Provision for identifying illegal drug users, including testing on a controlled and carefully monitored basis. Employee drug testing programs shall be established taking account of the following:

(i) The Contractor shall establish a program that provides for testing for the use of illegal drugs by employees in sensitive positions. The extent of and criteria for such testing shall be determined by the Contractor based on considerations that include the nature of the work being performed under the contract, the employee's duties, and efficient use of Contractor resources, and the risks to health, safety, or national security that could result from the failure of an employee adequately to discharge his or her position.

(ii) In addition, the Contractor may establish a program for employee drug testing--

(A) When there is a reasonable suspicion that an employee uses illegal drugs; or

(B) When an employees has been involved in an accident or unsafe practice;

(C) As part of or as a follow-up to counseling or rehabilitation for illegal drug use;

(D) As part of a voluntary employee drug testing program.

(iii) The Contractor may establish a program to test applicants for employment for illegal drug use.

(iv) For the purpose of administering this clause, testing for illegal drugs may be limited to those substances for which testing is prescribed by section 2.1 of subpart B of the "Mandatory Guidelines for Federal Workplace Drug Testing Programs" (53 FR 11980 (April 11, 1988), issued by the Department of Health and Human Services.

(d) Contractors shall adopt appropriate personnel procedures to deal with employees who are found to be using drugs illegally. Contractors shall not allow any employee to remain on duty or perform in a sensitive position who is found to use illegal drugs until such times as the Contractor, in accordance with procedures established by the Contractor, determines that the employee may perform in such a position.

(e) The provisions of this clause pertaining to drug testing program shall not apply to the extent that are inconsistent with state or local law, or with an existing collective bargaining agreement; provided that with respect to the latter, the Contractor agrees those issues that are in conflict will be a subject of negotiation at the next collective bargaining session.

(End of clause)

#### 252.223-7006 PROHIBITION ON STORAGE AND DISPOSAL OF TOXIC AND HAZARDOUS MATERIALS (APR 1993)

(a) "Definitions".

As used in this clause --

(1) "Storage" means a non-transitory, semi-permanent or permanent holding, placement, or leaving of material. It does not include a temporary accumulation of a limited quantity of a material used in or a waste generated or resulting from authorized activities, such as servicing, maintenance, or repair of Department of Defense (DoD) items, equipment, or facilities.

(2) "Toxic or hazardous materials" means:

(i) Materials referred to in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 U.S.C. 9601(14)) and materials designated under section 102 of CERCLA (42 U.S.C. 9602) (40 CFR part 302);

(ii) Materials that are of an explosive, flammable, or pyrotechnic nature; or

(iii) Materials otherwise identified by the Secretary of Defense as specified in DoD regulations.

(b) In accordance with 10 U.S.C. 2692, the Contractor is prohibited from storing or disposing of non-DoD-owned toxic or hazardous materials on a DoD installation, except to the extent authorized by a statutory exception to 10 U.S.C. 2692 or as authorized by the Secretary of Defense or his designee.

(End of clause)

252.225-7031 SECONDARY ARAB BOYCOTT OF ISRAEL (JUN 1992)

(a) Definitions. As used in this clause--

(1) "Foreign person" means any person other than a United States person as defined in Section 16(2) of the Export Administration Act of 1979 (50 U.S.C. App. Sec 2415).

(2) "United States person" is defined in Section 16(2) of the Export Administration Act of 1979 and means any United States resident or national (other than an individual resident outside the United States and employed by other than a United States person), any domestic concern (including any permanent domestic establishment of any foreign concern), and any foreign subsidiary or affiliate (including any permanent foreign establishment) of any domestic concern which is controlled in fact by such domestic concerns, as determined under regulations of the President.

(b) Certification. By submitting this offer, the Offeror, if a foreign person, company or entity, certifies that it--

(1) Does not comply with the Secondary Arab Boycott of Israel; and

(2) Is not taking or knowingly agreeing to take any action, with respect to the Secondary Boycott of Israel by Arab countries, which 50 U.S.C. App. Sec 2407(a) prohibits a United States person from taking.

(End of clause)

252.231-7000 SUPPLEMENTAL COST PRINCIPLES (DEC 1991)

When the allowability of costs under this contract is determined in accordance with part 31 of the Federal Acquisition Regulation (FAR), allowability shall also be determined in accordance with part 231 of the Defense FAR Supplement, in effect on the date of this contract.

252.236-7000 MODIFICATION PROPOSALS - PRICE BREAKDOWN. (DEC 1991)

(a) The Contractor shall furnish a price breakdown, itemized as required and within the time specified by the Contracting Officer, with any proposal for a contract modification.

(b) The price breakdown --

- (1) Must include sufficient detail to permit an analysis of profit, and of all costs for --
  - (i) Material;
  - (ii) Labor;
  - (iii) Equipment;
  - (iv) Subcontracts; and
  - (v) Overhead; and
- (2) Must cover all work involved in the modification, whether the work was deleted, added, or changed.
- (c) The Contractor shall provide similar price breakdowns to support any amounts claimed for subcontracts.
- (d) The Contractor's proposal shall include a justification for any time extension proposed.

252.236-7002 OBSTRUCTION OF NAVIGABLE WATERWAYS. (DEC 1991)

- (a) The Contractor shall --
  - (1) Promptly recover and remove any material, plant, machinery, or appliance which the contractor loses, dumps, throws overboard, sinks, or misplaces, and which, in the opinion of the Contracting Officer, may be dangerous to or obstruct navigation;
  - (2) Give immediate notice, with description and locations of any such obstructions, to the Contracting Officer; and
  - (3) When required by the Contracting Officer, mark or buoy such obstructions until the same are removed.
- (b) The Contracting Officer may --
  - (1) Remove the obstructions by contract or otherwise should the Contractor refuse, neglect, or delay compliance with paragraph (a) of this clause; and
  - (2) Deduct the cost of removal from any monies due or to become due to the Contractor; or
  - (3) Recover the cost of removal under the Contractor's bond.
- (c) The Contractor's liability for the removal of a vessel wrecked or sunk without fault or negligence is limited to that provided in sections 15, 19, and 20 of the River and Harbor Act of March 3, 1899 (33 U.S.C. 410 et. seq.).

252.236-7008 CONTRACT PRICES - BIDDING SCHEDULES. (DEC 1991)

- (a) The Government's payment for the items listed in the Bidding Schedule shall constitute full compensation to the Contractor for --
  - (1) Furnishing all plant, labor, equipment, appliances, and materials; and



(2) Performing all operations required to complete the work in conformity with the drawings and specifications.

(b) The Contractor shall include in the prices for the items listed in the Bidding Schedule all costs for work in the specifications, whether or not specifically listed in the Bidding Schedule.

252.242-7000 POSTAWARD CONFERENCE (DEC 1991)

The Contractor agrees to attend any postaward conference convened by the contracting activity or contract administration office in accordance with Federal Acquisition Regulation subpart 42.5.

(End of clause)

252.243-7001 PRICING OF CONTRACT MODIFICATIONS (DEC 1991)

When costs are a factor in any price adjustment under this contract, the contract cost principles and procedures in FAR part 31 and DFARS part 231, in effect on the date of this contract, apply.

252.243-7002 REQUESTS FOR EQUITABLE ADJUSTMENT (MAR 1998)

(a) The amount of any request for equitable adjustment to contract terms shall accurately reflect the contract adjustment for which the Contractor believes the Government is liable. The request shall include only costs for performing the change, and shall not include any costs that already have been reimbursed or that have been separately claimed. All indirect costs included in the request shall be properly allocable to the change in accordance with applicable acquisition regulations.

(b) In accordance with 10 U.S.C. 2410(a), any request for equitable adjustment to contract terms that exceeds the simplified acquisition threshold shall bear, at the time of submission, the following certificate executed by an individual authorized to certify the request on behalf of the Contractor:

I certify that the request is made in good faith, and that the supporting data are accurate and complete to the best of my knowledge and belief.

-----  
(Official's Name)

-----  
(Title)

(c) The certification in paragraph (b) of this clause requires full disclosure of all relevant facts, including--

(1) Cost or pricing data if required in accordance with subsection 15.403-4 of the Federal Acquisition Regulation (FAR); and

(2) Information other than cost or pricing data, in accordance with subsection 15.403-3 of the FAR, including actual cost data and data to support any estimated costs, even if cost or pricing data are not required.

(d) The certification requirement in paragraph (b) of this clause does not apply to----

(1) Requests for routine contract payments; for example, requests for payment for accepted supplies and services, routine vouchers under a cost-reimbursement type contract, or progress payment invoices; or

(2) Final adjustment under an incentive provision of the contract.

SECTION 00800  
SPECIAL CONTRACT REQUIREMENTS

UNAUTHORIZED INSTRUCTIONS FROM GOVERNMENT OR OTHER PERSONNEL

The Contractor shall not accept any instructions issued by any person, employed by the Government or otherwise, other than the Contracting Officer or the Contracting Officer's Representative (COR) acting within the limits of the COR's authority. See the Contracting Officer's Representative clause of this contract.

(End of paragraph number 52.201-4002)

DFARS 203-70 – CONTRACTOR STANDARDS OF CONDUCT

The following excerpt from DFARS subpart 203.70 is presented as a reminder:

203.7000 Policy. Government contractors must conduct themselves with the highest degree of integrity and honesty. Contractors should have standards of conduct and internal control systems that--

- (1) Are suitable to the size of the company and the extent of their involvement in Government contracting;
- (2) Promote such standards;
- (3) Facilitate timely discovery and disclosure of improper conduct in connection with Government contracts; and
- (4) Ensure corrective measures are promptly instituted and carried out.

203.7001 Procedures.

- (a) A contractor's system of management controls should provide for--
  - (1) A written code of business ethics and conduct and an ethics training program for all employees;
  - (2) Periodic reviews of company business practices, procedures, policies, and internal controls for compliance with standards of conduct and the special requirements of Government contracting;
  - (3) A mechanism, such as a hotline, by which employees may report suspected instances of improper conduct, and instructions that encourage employees to make such reports;
  - (4) Internal and/or external audits, as appropriate;
  - (5) Disciplinary action for improper conduct;
  - (6) Timely reporting to appropriate Government officials of any suspected or possible violation of law in connection with Government contracts or any other irregularities in connection with such contracts; and
  - (7) Full cooperation with any Government agencies responsible for either investigation or corrective actions.

(End of paragraph number 52.203-4000)

52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984)

The Contractor shall be required to (a) commence work under this contract within 30 calendar days after the date the Contractor receives the SECOND PARTIAL NOTICE TO PROCEED, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than 275 calendar days for the base work and 50 calendar days for the option work, for a total of 325 days after receipt of the notice to proceed. The time stated for completion shall include final cleanup of the premises.

(End of clause)

52.211-12 LIQUIDATED DAMAGES--CONSTRUCTION (APR 1984)

(a) If the Contractor fails to complete the work within the time specified in the contract, or any extension, the Contractor shall pay to the Government as liquidated damages, the sum of \$4,516.41 for each day of delay.

(b) If the Government terminates the Contractor's right to proceed, the resulting damage will consist of liquidated damages until such reasonable time as may be required for final completion of the work together with any increased costs occasioned the Government in completing the work.

(c) If the Government does not terminate the Contractor's right to proceed, the resulting damage will consist of liquidated damages until the work is completed or accepted.

(End of clause)

52.217-7 OPTION FOR INCREASED QUANTITY--SEPARATELY PRICED LINE ITEM (MAR 1989)

The Government may require the delivery of the numbered line item, identified in the Schedule as an option item, in the quantity and at the price stated in the Schedule. The Contracting Officer may exercise the option by written notice to the Contractor at any time prior to demobilization of equipment. Delivery of added items shall continue at the same rate that like items are called for under the contract, unless the parties otherwise agree.

(End of clause)

RETAINAGE FOR FAILURE TO COMPLY WITH SUBCONTRACTING PLAN REPORTING REQUIREMENTS

(a) Read this paragraph in conjunction with Liquidated Damages--Small Business Subcontracting Plan (FAR 52.219-16) clause of this contract.

(b) Should the Contractor fail to submit SF 294 and/or SF 295 reports in a timely manner, the Government will consider this failure as evidence of possible failure to make a good faith effort to achieve goals contained in the Contractor's subcontracting plan. In order to protect the Government's ability to assess liquidated damages in the event the Contractor does fail to meet the goals and such failure results from a lack of good faith effort, the Contracting Officer will retain from progress payments an amount deemed sufficient to satisfy the Contractor's liability. The amount of the retainage will be determined in accordance with the following formula:

Total dollar amount proposed for subcontracting to small business multiplied by the percentage of actual progress on the contract, up to a maximum of 10% of the progress payment, will be withheld from the next progress payment that is due after the Contractor's failure to submit a required report. If one or more reports have been submitted before a failure to submit a required report, this formula will be adjusted by deducting any amounts reported as subcontracted to small business from the total dollar amount proposed to be subcontracted. See examples below.

Example 1 (No previous reports submitted)

Total proposed subcontracting	\$500,000	Current progress payment	\$100,000
Percent of work completed	x .10	Maximum retainage percentage	x .10
Retainage	\$ 50,000	Retainage	\$10,000

Maximum that can be retained is \$10,000.

Example 2 (Previous reports submitted)

Total proposed subcontracting	\$500,000	Current progress payment	\$100,000
Subcontracting previously reported(\$100,000)			
Percent of work completed	x .10	Maximum retainage percentage	x .10

Retainage \$ 40,000 Retainage \$10,000  
Maximum that can be retained is \$10,000.

(c) Contracting Officer's Representative (COR). In addition to any other COR appointments that may be made under this contract, Debra K. Nix, Deputy for Small Business, is appointed COR for matters relating to enforcement of the Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan clause of this contract. In this regard, she is authorized to conduct reviews of the Contractor's records; correspond with the Contractor (both verbally and in writing); and, in accordance with subparagraph (b) above, authorize retainage for failure to achieve goals.  
(End of paragraph number 52.219-4001)

52.223-3 HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (JAN 1997)  
(CESAJ ADAPTATION)

(a) "Hazardous material", as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).

(b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract (see Note 1 below). The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Material Safety Data Sheet submitted under this contract.

Material Identification No.  
(If none, insert "None") (See Note 2 below)

_____	_____
_____	_____
_____	_____

(c) This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.

(d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered nonresponsible and ineligible for award.

(e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.

(f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

(g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.

(h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

(1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to--

(i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;

(ii) Obtain medical treatment for those affected by the material; and

(iii) Have others use, duplicate, and disclose the data for the Government for these purposes.

(2) To use, duplicate, and disclose data furnished under this clause, in accordance with subparagraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.

(3) The Government is not precluded from using similar or identical data acquired from other sources.

(End of clause)

#### Notes:

1. The phrase "to be delivered under this contract" shall be interpreted to include hazardous materials to be consumed in the performance of the work even though such materials may not be delivered to the Government as end items.

2. The use (or consumption) of some kind of hazardous material is required for the performance of almost every construction (including dredging) contract and in many service contracts. Therefore, the offeror should not enter "none" without first evaluating the work and making a positive determination that no such materials will be introduced to the job site. If the offeror is not sure of the identity of hazardous materials that may be used during the performance of the work, the offeror should enter "unknown at this time." Regardless of the offeror's entry, the successful offeror (the Contractor) will be required to submit material safety data sheets prior to introducing any hazardous materials to the job site.

(End of notes)

#### WORK IN QUARANTINED AREA

The work called for by this contract involves activities in counties quarantined by the Department of Agriculture to prevent the spread of certain plant pests that may be present in the soil. The Contractor agrees that all construction equipment and tools to be moved from such counties shall be thoroughly cleaned of all soil residues at the construction site with water under pressure and that hand tools shall be thoroughly cleaned by brushing or other means to remove all soil. In addition, if this contract involves the identification, shipping, storage, testing, or disposal of soils from such a quarantined area, the Contractor agrees to comply with the provisions of ER 1110-1-5 and attachments, a copy of which will be made available by the Contracting Officer upon request. The Contractor agrees to assure compliance with this obligation by all subcontractors.

(End of paragraph number 52.223-4001)

#### SAFETY REQUIREMENTS -- CONSTRUCTION CONTRACTS

(a) The Contractor's attention is directed to the Accident Prevention clause of this contract, the U.S. Army Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, dated 3 September 1996, and all changes and amendments thereto (copies available upon request), the Jacksonville District Safety and Occupational Health Program, CESAJR 385-1-1, dated 1 September 1998 (copies available upon request), and the latest OSHA standards, and applicable Coast Guard safety regulations, to assure himself that he has full knowledge of the personal protective equipment that must be provided workmen and that he is familiar with the safety standards applicable to the prevention of accidents during the construction of this project and shall comply with all applicable provisions.

(b) The Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, is consistent with OSHA Construction Safety and Health Regulations 29 CFR 1926, and will be complied with for all construction activities. When an operation is identified as not being covered under EM 385-1-1, applicable OSHA standards will be complied with. Those operations not covered by EM 385-1-1, CESAJR 385-1-1, or OSHA standards, will comply with appropriate DA, DOD, or National Concensus Standards.

(c) Contractor's operations shall not commence until all plant and equipment for the work are in compliance with the safety requirements referenced in the specifications.  
(End of paragraph number 52.223-4002)

#### SAFETY SCOREBOARD

Within 15 calendar days after commencement of work, the Contractor shall erect and maintain a safety scoreboard at job sites, including dredges. The safety scoreboard shall contain current data and shall be placed in an area at the jobsite conspicuous to all workers. The safety scoreboard shall be of the format and style indicated on the sketch appended to Section 01000. The poster "Safety and Health Protection On The Job" required by OSHA, Department of Labor, for all private industrial operations shall be posted with safety posters, and literature as provided by the Contractor's insurance company and the Contracting Officer's representative. Such posting shall be in a weatherproof bulletin case, easily legible, adequately protected against the elements, and protected against removal by unauthorized persons.  
(End of paragraph number 52.223-4004)

#### SURVEILLANCE OF OCEAN DISPOSAL

(a) The Contractor shall notify the local Coast Guard Captain of the Port prior to the first ocean disposal. The notification will be by phone and by certified mail with a copy to the Contracting Officer. The following information shall be included in the notification:

- (1) Project designation; Corps of Engineers' Contracting Officer's name and contract number; and the Contractor's name, address, and telephone number.
- (2) Port of departure.
- (3) Location of ocean disposal area.
- (4) Quantity of material to be deposited in ocean.
- (5) Schedule for ocean disposal, giving date and time for ocean disposal.

#### FUEL OIL TRANSFER OPERATIONS

In accordance with U.S. Coast Guard regulations (33 CFR 156.120), couplings used in fuel oil transfer operations on any vessel with a capacity of 250 or more barrels of oil shall be either a bolted or full-threaded connection; or a quick-connect coupling approved by the Commandant; or an automatic back-pressure shutoff nozzle used to fuel the vessel. An executed fuel oil transfer (Declaration) form signed by the tanker operator shall be submitted to the Contracting Officer for each refueling operation. The U.S. Coast Guard shall also be notified prior to any refueling. A sample copy of this form is appended to the end of Section 01000 GENERAL REQUIREMENTS.  
(End of paragraph number 52.223-4007)

#### CONTRACTOR SAFETY PERSONNEL REQUIREMENT -- DREDGING CONTRACTS

(a) The Contractor shall employ at the project site at least one full-time (40 hours per week) Safety and Occupational Health person (Safety Officer) to manage the Contractor's accident prevention program. The Safety Officer shall be on duty during any work of a complex nature such as relocation of utilities; work on or around revetments; work on or around existing disposal area dikes; or when blasting will be performed. Duties which are not germane to the safety program shall not be assigned to the Safety Officer. The principal Safety Officer shall report to and work directly for the Contractor's on-site top

manager (or a higher level official), or the corporate safety office. The Safety Officer shall have the authority to take immediate steps to correct unsafe or unhealthful conditions. The presence of the Safety Officer will not abrogate safety responsibilities of other personnel.

(b) Qualifications for Safety Officer:

(1) Shall have a degree in engineering or safety in a four-year, or longer, program from an accredited school; or

(2) Shall have legal registration as a Professional Engineer or a Certified Safety Professional and, in addition, shall have at least one year of experience in safety and occupational health work (see note below); or

(3) Shall have at least 3 years of experience in safety and occupational health work (see note below). (Note: In order to be creditable toward satisfying the experience requirements specified in (2) and (3) above, at least 50 percent of the time during each year must have been devoted to safety and occupational health work. First aid work is not creditable.)

(c) Prior to the pre-work conference, the Contractor shall submit to the Contracting Officer, for approval, the name and qualifications of the proposed Safety Officer and a functional description of duties. (End of paragraph number 52.223-4011 (Alt I))

## HAZARD COMMUNICATION

(a) The Contractor shall comply with the requirements of OSHA 1910.1200, the Hazard Communication Standard.

(b) General requirements are as follows:

(1) Provide a written program describing implementation method of the above referenced standard.

(2) Ensure that Contractor's personnel are informed about health and physical hazards associated with materials to be used.

(3) Ensure that a hazardous material inventory is available to the Government upon request.

(4) Ensure proper labeling of hazardous material containers.

(5) Ensure availability of a Material Safety Data Sheet on site.

(End of paragraph number 52.223-4020)

## CONFINED SPACE ENTRY

(a) The Contractor shall submit a confined space entry plan as part of his written proposal for accident prevention, as specified in the Accident Prevention clause of this contract. This plan shall satisfy the requirements specified in EM 385-1-1.

(b) Confined space is any space having limited openings for entry and exit, not intended for continuous occupancy, and unfavorable natural ventilation which could contain or have produced dangerous concentrations of airborne contaminants or asphyxiants. Confined spaces may include but are not limited to storage tanks, holds of vessels, manholes, process vessels, vaults, tunnels, pipelines, trenches, vats, and open top spaces more than 4 feet in depth such as pits, tubs, vaults, and vessels, or any place with limited ventilation.

(c) A confined space entry permit system shall be established. A permit shall be developed for each confined space and renewed at the beginning of each shift. Permits (initial and renewal) shall be posted at all openings of every confined space.

(1) Permits shall include but not be limited to location of work, description of work, employees assigned, entry date and time, isolation checklists, hazardous work, hazards expected, fire safety precautions, personnel safety, results of atmospheric tests performed, and person performing them, authorization and permit expiration time.

(2) Permits shall be forwarded to the Contracting Officer's Representative prior to commencement of work.

(End of paragraph number 52.223-4021)

## OIL AND HAZARDOUS MATERIAL SPILLS AND CONTAINMENT

- (a) The Contractor shall ensure that all hazardous material spills are immediately reported to the Government.
- (b) All hazardous material spills shall be immediately cleaned up in accordance with EM 385-1-1.
- (c) In accordance with EM 385-1-1, the Contractor shall use suitable methods such as dikes or curbs to prevent the spread of hazardous materials from above ground storage tanks and piping in case of leakage.  
(End of paragraph number 52.223-4022)

**SIGNAL LIGHTS**

The Contractor shall display signal lights and conduct operations in accordance with the General Regulations of the Department of the Army and of the Coast Guard governing lights and day signals to be displayed by towing vessels with tows on which no signals can be displayed, vessels working on wrecks, dredges, and vessels engaged in laying cables or pipe or in submarine or bank protection operations, lights to be displayed on dredge pipe lines, and day signals to be displayed by vessels of more than 65 feet in length moored or anchored in a fairway or channel, and the passing by other vessels of floating plant working in navigable channels, as set forth in Commandant U.S. Coast Guard Instruction M16672.2, Navigation Rules: International-Inland (COMDTINST M16672.2), or 33 CFR 81 Appendix A (International) and 33 CFR 84 through 33 CFR 89 (Inland) as applicable.  
(End of paragraph number 52.223-4025)

**52.223-7001 HAZARD WARNING LABELS (DEC 1991)**

- (a) "Hazardous material," as used in this clause, is defined in the Hazardous Material Identification and Material Safety Data clause of this contract.
- (b) The Contractor shall label the item package (unit container) of any hazardous material to be delivered under this contract in accordance with the Hazard Communication Standard (29 CFR 1910.1200 et seq.). The Standard requires that the hazard warning label conform to the requirements of the standard unless the material is otherwise subject to the labelling requirements of one of the following statutes:
  - (1) Federal Insecticide, Fungicide and Rodenticide Act;
  - (2) Federal Food, Drug and Cosmetics Act;
  - (3) Consumer Product Safety Act;
  - (4) Federal Hazardous Substances Act; or
  - (5) Federal Alcohol Administration Act.
- (c) The Offeror shall list which hazardous material listed in the Hazardous Material Identification and Material Safety Data clause of this contract will be labelled in accordance with one of the Acts in paragraphs (b)(1) through (5) of this clause instead of the Hazard Communication Standard. Any hazardous material not listed will be interpreted to mean that a label is required in accordance with the Hazard Communication Standard.

Material (if none, insert "none.")	Act

- (d) The apparently successful Offeror agrees to submit, before award, a



copy of the hazard warning label for all hazardous materials not listed in paragraph (c) of this clause. The Offeror shall submit the label with the Material Safety Data Sheet being furnished under the Hazardous Material Identification and Material Safety Data clause of this contract.

(e) The Contractor shall also comply with MIL-STD-129, Marking for Shipment and Storage (including revisions adopted during the term of this contract).

(End of clause)

#### 52.231-5000 EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE (MAR 1995) -- EFARS

(a) This clause does not apply to terminations. See 52.249-5000, Basis for Termination Settlement Proposals, and FAR Part 49.

(b) Allowable cost for construction and marine plant and equipment in sound workable condition owned or controlled and furnished by a contractor or subcontractor at any tier shall be based on actual cost data for each piece of equipment or groups of similar serial and series for which the Government can determine both ownership and operating costs from the contractor's accounting records. When both ownership and operating costs cannot be determined for any piece of equipment or groups of similar serial or series equipment from the contractor's accounting records, costs for that equipment shall be based upon the applicable provisions of EP 1110-1-8, Construction Equipment Ownership and Operating Expense Schedule, Region III. Working conditions shall be considered to be average for determining equipment rates using the schedule unless specified otherwise by the contracting officer. For equipment not included in the schedule, rates for comparable pieces of equipment may be used or a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule in effect at the time of negotiations shall apply. For retroactive pricing, the schedule in effect at the time the work was performed shall apply.

(c) Equipment rental costs are allowable, subject to the provisions of FAR 31.105(d)(ii) and FAR 31.205-36. Rates for equipment rented from an organization under common control, lease-purchase arrangements, and sale-leaseback arrangements, will be determined using the schedule, except that actual rates will be used for equipment leased from an organization under common control that has an established practice of leasing the same or similar equipment to unaffiliated lessees.

(d) When actual equipment costs are proposed and the total amount of the pricing action exceeds the small purchase threshold, the contracting officer shall request the contractor to submit either certified cost or pricing data, or partial/limited data, as appropriate. The data shall be submitted on Standard Form 1411, Contract Pricing Proposal Cover Sheet.

(End of clause)

#### 52.232-5000 PAYMENT FOR MATERIALS DELIVERED OFF-SITE (MAR 1995) -- EFARS

(a) Pursuant to FAR clause 52.232-5, Payments Under Fixed Priced Construction Contracts, materials delivered to the contractor at locations other than the site of the work may be taken into consideration in making payments if included in payment estimates and if all the conditions of the General Provisions are fulfilled. Payment for items delivered to locations other than the work site will be limited to: (1) materials required by the technical provisions; or (3) materials that have been fabricated to the point where they are identifiable to an item of work required under this contract.

(b) Such payment will be made only after receipt of paid or receipted invoices or invoices with canceled check showing title to the items in the prime contractor and including the value of material and labor incorporated into the item. In addition to petroleum products, payment for materials delivered off-site is limited to the following items: None

(End of clause)

52.232-5002 CONTINUING CONTRACTS (ALTERNATE) (MAR 1995) -- EFARS

(a) Funds are not available at the inception of this contract to cover the entire contract price. The sum of \$25,000.00 has been reserved for this contract and is available for payment to the contractor during the current fiscal year. It is expected that Congress will make appropriations for future fiscal years from which additional funds, together with funds provided by one or more non-federal project sponsors will be reserved for this contract. The liability of the United States for payments beyond the funds reserved for this contract is contingent on the reservation of additional funds.

(b) Failure to make payments in excess of the amount currently reserved, or that may be reserved from time to time, shall not be considered a breach of this contract, and shall not entitle the contractor to a price adjustment under the terms of this contract except as specifically provided in paragraphs (e) and (h) below.

(c) The Government may at any time reserve additional funds for payments under the contract if there are funds available for such purpose. The contracting officer will promptly notify the contractor of any additional funds reserved for the contract by issuing an administrative modification to the contract.

(d) If earnings will be such that funds reserved for the contract will be exhausted before the end of any fiscal year, the contractor shall give written notice to the contracting officer of the estimated date of exhaustion and the amount of additional funds which will be needed to meet payments due or to become due under this contract during that fiscal year. This notice shall be given not less than 45 nor more than 60 days prior to the estimated date of exhaustion.

(e) No payments will be made after exhaustion of funds except to the extent that additional funds are reserved for the contract. If and when sufficient additional funds are reserved, the contractor shall be entitled to simple interest on any payment that the contracting officer determines was actually earned under the terms of this contract and would have been made except for exhaustion of funds. Interest shall be computed from the time such payment would otherwise have been made until actually or constructively made, and shall be at the rate established by the Secretary of the Treasury pursuant to Public Law 92-41, 85 STAT 97, as in effect on the first day of the delay in such payment.

(f) Any suspension, delay, or interruption of work arising from exhaustion or anticipated exhaustion of funds shall not constitute a breach of this contract and shall not entitle the contractor to any price adjustment under a Suspension of Work or similar clause or in any other manner under this contract.

(g) An equitable adjustment in performance time shall be made for any increase in the time required for performance of any part of the work arising from exhaustion of funds or the reasonable anticipation of exhaustion of funds.

(h) If, upon the expiration of 60 days after the beginning of the fiscal year following an exhaustion of funds, the Government has failed to reserve sufficient additional funds to cover payments otherwise due, the contractor, by written notice delivered to the contracting officer at any time before such additional funds are reserved, may elect to treat his right to proceed with the work as having been terminated. Such a termination shall be at no cost to the Government, except that, to the extent that additional funds to make payment therefore are allocated to this contract, it may be treated as a termination for the convenience of the Government.

(i) If at any time it becomes apparent that the funds reserved for any fiscal year are in excess of the funds required to meet all payments due or to become due the contractor because of work performed and to be performed under this contract during the fiscal year, the Government reserves the right, after notice to the contractor, to reduce said reservation by the amount of such excess.

(j) The term "Reservation" means monies that have been set aside and made available for payments under this contract.

(End of clause)

52.236-1 PERFORMANCE OF WORK BY THE CONTRACTOR (APR 1984)

The Contractor shall perform on the site, and with its own organization, work equivalent to at least forty (40) percent of the total amount of work to be performed under the contract. This percentage may be

reduced by a supplemental agreement to this contract if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the Government.

#### 52.236-4 PHYSICAL DATA (APR 1984) (CESAJ ADAPTATION)

Data and information furnished or referred to below are for the Contractor's information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

- (a) The indications of physical conditions on the drawings and in the specifications are the result of site investigations by (See Section 01000 of this contract).
- (b) Weather conditions (See Section 01000 of this contract).
- (c) transportation facilities (See Section 01000 of this contract).

(End of clause)

#### 52.236-16 QUANTITY SURVEYS (APR 1984)

- (a) Quantity surveys shall be conducted, and the data derived from these surveys shall be used in computing the quantities of work performed and the actual construction completed and in place.
- (b) The Government shall conduct the original and final surveys and make the computations based on them. The Contractor shall conduct the surveys for any periods for which progress payments are requested and shall make the computations based on these surveys. All surveys conducted by the Contractor shall be conducted under the direction of a representative of the Contracting Officer, unless the Contracting Officer waives this requirement in a specific instance.
- (c) Promptly upon completing a survey, the Contractor shall furnish the originals of all field notes and all other records relating to the survey or to the layout of the work to the Contracting Officer, who shall use them as necessary to determine the amount of progress payments. The Contractor shall retain copies of all such material furnished to the Contracting Officer.

#### BRIDGE-TO-BRIDGE COMMUNICATION

In order that radio communication may be made with passing vessels, all dredges engaged in work under this contract shall be equipped with bridge-to-bridge radio telephone equipment. The radio equipment shall operate on a single channel very high frequency (VHF), FM, on a frequency of 156.55 MC per second with low power output having a communication range of approximately ten miles. The frequency has been approved by the Federal Communications Commission. Channels #13 and #16 must be monitored at all times.

(End of paragraph number 52.236-4026)

#### NOTICE TO MARINERS -- DREDGING CONTRACTS

Should the Contractor, during dredging operations, encounter any objects on the channel bottom which could be a hazard to navigation, the Contractor shall immediately notify the Contracting Officer as to the location of said object and shall provide any other pertinent information necessary for the Contracting Officer to prepare and issue a Notice to Mariners.

(End of paragraph number 52.236-4030)

## ACCOMMODATIONS AND MEALS FOR INSPECTORS

(a) The Contractor shall furnish regularly to inspectors, for office purposes, a suitable separate room on board the dredge or other craft upon which they are employed or, if not available thereon, shall furnish suitable alternate accommodations ashore at a location approved by the Contracting Officer, and furnish suitable transportation between the alternate accommodations and the dredge or other craft upon which they are employed.

(b) If the Contractor maintains on this work an establishment for the subsistence of the Contractor's own employees, the Contractor shall, when required, furnish to inspectors employed on the work, and to all Government agents who may visit the work on official business, meals of a quality satisfactory to the Contracting Officer. The meals furnished will be paid for by the Government employees at a rate of \$1.75 per person for each meal.

(End of paragraph number 52.236.4051)

## ITEMS OF WORK TO BE PERFORMED BY THE CONTRACTOR

Attention is invited to the requirements of the PERFORMANCE OF WORK BY THE CONTRACTOR clause of this contract. The Contractor must furnish the Contracting Officer, within 5 days after award, a listing of the items of work that will be performed by the Contractor's own forces and the estimated cost of those items unless the information was submitted with the offer.

(End of paragraph number 52.236-4059)

## 252.236-7001 CONTRACT DRAWINGS, MAPS, AND SPECIFICATIONS (DEC 1991) (CESAJ ADAPTATION)

(a) The Government --

(1) Will provide the Contractor, without charge, (see note at end of clause) sets (five unless otherwise specified) of large-scale contract drawings and specifications except publications incorporated into the technical provisions by reference;

(2) Will furnish additional sets on request, for the cost of reproduction; and

(3) May, at its option, furnish the Contractor one set of reproducibles, or half-size drawings, in lieu of the drawings in paragraph (a)(1) of this clause.

(b) The Contractor shall --

(1) Check all drawings furnished immediately upon receipt;

(2) Compare all drawings and verify the figures before laying out the work;

(3) Promptly notify the Contracting Officer of any discrepancies; and

(4) Be responsible for any errors which might have been avoided by complying with this paragraph (b).

(c) Large scale drawings shall, in general, govern small scale drawings. Figures marked on drawings shall, in general, be followed in preference to scale measurements.

(d) Omissions from the drawings or specifications or the misdescription of details of work which are manifestly necessary to carry out the intent of the drawings and specifications, or which are customarily performed, shall not relieve the contractor from performing such omitted or misdescribed details of the

work, but shall be performed as if fully and correctly set forth and described in the drawings and specifications.

(e) The work shall conform to the specifications and the contract drawings identified on the following index of drawings:

Title File and Drawing No:

Modifications to Sunny Isles Segment, Shore Protection Project, Dade County, Florida  
D.O. File No. 24-37,823 dated April 1999 in 20 Sheets.

Note: In lieu of providing drawings in the formats mentioned in subparagraphs (a)(1), (a)(2), and (a)(3) above, the Government will provide on CD-ROM without charge, one complete set of electronic files containing the contract drawings. The files will be provided in the latest version of Bentley Systems' Microstation.

(End of note)

252.236-7004 PAYMENT FOR MOBILIZATION AND DEMOBILIZATION. (DEC 1991)

(a) The Government will pay all costs for the mobilization and demobilization of all of the Contractor's plant and equipment at the contract lump sum price for this item.

(1) Sixty (60) percent of the lump sum price upon completion of the contractor's mobilization at the work site.

(2) The remaining forty (40) percent upon completion of demobilization.

(b) The Contracting Officer may require the Contractor to furnish cost data to justify this portion of the bid if the Contracting Officer believes that the percentages in paragraphs (a) (1) and (2) of this clause do not bear a reasonable relation to the cost of the work in this contract.

(1) Failure to justify such price to the satisfaction of the Contracting Officer will result in payment, as determined by the Contracting Officer, of --

(i) Actual mobilization costs at completion of mobilization;

(ii) Actual demobilization costs at completion of demobilization; and

(iii) The remainder of this item in the final payment under this contract.

(2) The Contracting Officer's determination of the actual costs in paragraph (b)(1) of this clause is not subject to appeal.

#### YEAR 2000 COMPLIANCE -- CONSTRUCTION CONTRACTS

In accordance with section 39.106 of the Federal Acquisition Regulation, the Contractor shall ensure that, with respect to any design, construction, goods, or services provided under this contract, including any task orders (if applicable) issued under this contract, all information technology contained therein shall be Year 2000 compliant. Specifically, the Contractor shall:

(1) Perform, maintain, and provide an inventory of all major components to include structures, equipment, items, parts, and furnishings under this contract and each task order which may be affected by the Year 2000 compliance requirement.

(2) Indicate whether each component is currently Year 2000 compliant or requires an upgrade for compliance prior to Government acceptance.

(End of paragraph 52.239-4002)

#### 52.249-5000 BASIS FOR TERMINATION SETTLEMENT PROPOSALS -- EFARS

Actual costs will be used to determine equipment costs for a settlement proposal submitted on the total cost basis under FAR 49.206-2(b). In evaluating a termination settlement proposal using the total cost basis, the following principles will be applied to determine allowable equipment costs:

Actual costs for each piece of equipment, or groups of similar serial or series equipment, need not be available in the contractor's accounting records to determine total actual equipment costs.

If equipment costs have been allocated to a contract using predetermined rates, those charges will be adjusted to actual costs.

(3) Recorded job costs adjusted for unallowable expenses will be used to determine equipment operating expenses.

(4) Ownership costs (depreciation) will be determined using the contractor's depreciation schedule (subject to the provisions of FAR 31.205-11).

(5) License, taxes, storage and insurance costs are normally recovered as an indirect expense and unless the contractor charges these costs directly to contracts, they will be recovered through the indirect expense rate.

(End of Clause)

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01000

GENERAL REQUIREMENTS

PART 1 GENERAL

- 1.1 PARTNERING
- 1.2 REFERENCES
- 1.3 SUBMITTALS
- 1.4 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK
- 1.5 LIQUIDATED DAMAGES-CONSTRUCTION
- 1.6 PROJECT RECORD DOCUMENTS
  - 1.6.1 As-Built Contract Drawings
  - 1.6.2 Electronic As-Built Files
- 1.7 PHYSICAL DATA
  - 1.7.1 Physical Conditions
  - 1.7.2 Location
  - 1.7.3 Weather Conditions
    - 1.7.3.1 Publications
  - 1.7.4 Transportation Facilities
    - 1.7.4.1 Major Highways, Airports, Port Facilities, and Rail Access
    - 1.7.4.2 Contractor Investigation
  - 1.7.5 Maritime Traffic
  - 1.7.6 Local Conditions - Water Stages
    - 1.7.6.1 Water Fluctuations
    - 1.7.6.2 Water Levels
  - 1.7.7 Subsurface Investigations
  - 1.7.8 Obstruction of Channel
- 1.8 PROGRESS CHART
  - 1.8.1 Schedules for Construction Contracts
  - 1.8.2 Forms 2454
  - 1.8.3 Preparation of Progress Chart
  - 1.8.4 Modifications
- 1.9 LAYOUT OF WORK
  - 1.9.1 Established Monuments
  - 1.9.2 Layout
  - 1.9.3 Survey
- 1.10 INSPECTION
  - 1.10.1 Quality Assurance Representative (QAR)
  - 1.10.2 Failure to Comply
- 1.11 STONE SOURCES
- 1.12 RETESTING OF CONSTRUCTION MATERIALS
- 1.13 CRITICAL LIFT PLAN OPERATION
  - 1.13.1 Definition of a Critical Lift
  - 1.13.2 Critical Lift Plan Submittal

- 1.14 ACCOMMODATIONS FOR GOVERNMENT PERSONNEL
  - 1.14.1 General
  - 1.14.2 Office Trailer
  - 1.14.3 Office Equipment
  - 1.14.4 Utilities
  - 1.14.5 Janitorial Services
  - 1.14.6 Payment
- 1.15 CONSTRUCTION PROJECT SIGNS
  - 1.15.1 Signage Removal
  - 1.15.2 Signage Costs
- 1.16 WATER
- 1.17 ELECTRICITY
- 1.18 HURRICANE AND SEVERE STORM PLAN
  - 1.18.1 Plan Contents
  - 1.18.2 Sample Plan
  - 1.18.3 Monitoring of Weather
- 1.19 PRECONSTRUCTION CONFERENCE
  - 1.19.1 Preconstruction Conference Submittal Items
  - 1.19.2 Failure to Comply
  - 1.19.3 Contracting Officer Representative Responsibility
    - 1.19.3.1 Report Preparation Instruction
    - 1.19.3.2 Contractor Indoctrination
    - 1.19.3.3 Letter of Record
- 1.20 NOTICE TO PROCEED
- 1.21 CONSTRUCTION PROGRESS CHART, ENG FORM 2454
- 1.22 CONSTRUCTION PROJECT SIGNS
- 1.23 DECLARATION OF INSPECTION FOR REFUELING
- 1.24 SAMPLE - HURRICANE AND SEVERE STORM PLAN
- 1.25 SAMPLE - GUIDE FOR EMPLOYEE SAFETY AND OCCUPATIONAL HEALTH  
INDOCTRINATION
- 1.26 CONTROL MONUMENT DESCRIPTIONS
- 1.27 CORE BORING LOGS AND LABORATORY DATA

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICATION)

-- End Section Table of Contents --



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 (Sep 1998) Safety and Occupational Health Program

ENGINEERING MANUALS (EM)

EM 385-1-1 (Sep 1996) 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.

SD-07 Schedules

Progress Chart; GA|AE.

Refer to paragraph PROGRESS CHARTS below and Clause SCHEDULES FOR CONSTRUCTION CONTRACTS of Section 00700 CONTRACT CLAUSES.

SD-08 Statements

Critical Lift Plan; GA|SO.

Refer to paragraph CRITICAL LIFT PLAN OPERATION below.

SD-18 Records

The Contractor shall submit the following in either completed or draft form prior to the Preconstruction Conference:

Letter Appointing Superintendent; FIO.

Refer to Clause SUPERINTENDENCE BY THE CONTRACTOR of Section 00700 CONTRACT CLAUSES.

Signature Authority; FIO.

A power of attorney or a notarized letter of authority from Contractor identifying local representatives authorized to sign contract documents.

Affirmative Action Plan; FIO.

Documentation of compliance with Clause AFFIRMATIVE ACTION COMPLIANCE REQUIREMENTS FOR CONSTRUCTION of Section 00700 CONTRACT CLAUSES. (See subparagraph (g) items 1 through 16 for Affirmative Action Plan format.)

Drug-Free Workplace; FIO.

A record to demonstrate compliance with Clause DRUG-FREE WORKPLACE of Section 00700 CONTRACT CLAUSES. (See subparagraph (b) items (1) through (7).)

List of Subcontractors; FIO.

Submit a list of proposed subcontractors. Include company name, person to contact, street address, mail address, phone number, type of speciality and estimated subcontract quote.

Hazard Communication Program; FIO.

Refer to Clause HAZARD COMMUNICATION of Section 00800 SPECIAL CONTRACT REQUIREMENTS.

#### 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/Contracting Officer's Representative (CO/COR).

#### 1.5 LIQUIDATED DAMAGES-CONSTRUCTION

Refer to the Clause LIQUIDATED DAMAGES-CONSTRUCTION (FAR 52.211-12) of Section 00700 CONTRACT CLAUSES.

#### 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. At the Preconstruction Conference, the CO/COR 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.

##### 1.6.1 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 CO/COR prior to acceptance of the work. The Government reserves the right to withhold final payment until acceptable as-built contract drawings have been submitted.

##### 1.6.2 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. Upon

completion of construction, and as a condition to final payment, the Contractor shall furnish to the CO/COR two sets of electronic files, as approved by the CO/COR, reflecting the final "as-built" contract drawings. Electronic files shall incorporate all marked-up changes made to the "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 this Section 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

The project site is located at Sunny Isles in Dade County, Florida.

##### 1.7.3 Weather Conditions

The project area is subject to tropical storms and hurricanes from June through November and to windy and/or rainy weather during any time of the year. The climate of the area is essentially subtropical, marine. Temperatures below freezing are rare. The wet season in the project area is from May through October. 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 south Florida. 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.

It shall be the Contractor's responsibility to obtain information concerning rain and wind. Reference is made to the following publication which 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, N.C. Subscription price and ordering information available from the National Climatic Data Center, Federal Building, Asheville, N.C. 28801. This publication gives hourly wind speed and direction observations for "Miami International Airport, Florida". The Annual Summary gives a summary of the observations for the period of record.

#### 1.7.3.1 Publications

The following publications which include wave, wind and tide information are also available for review in the Jacksonville District Office or from the named agencies:

1. East Coast of North and South America Tide Tables, U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service. Provides daily tidal predictions at locations along the coastline of North and South America, including locations in the vicinity of the project. It also provides mean and spring tide ranges and mean tide levels. Some astronomical data is also included, such as time of sunrise, sunset, moonrise, and moonset. This publication is available through NOAA.

2. 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.

3. Hindcast Wave Information for the U.S. Atlantic Coast, Wave Information Studies of U.S. Coastlines, WIS Report 30, Waterways Experiment Station, March 1993. This report presents 20-year wave hindcast summaries at various stations located along the east coast of the United States, including several stations located offshore of the southeast Florida coastline. Available data includes wave height, period, and direction tables for the 20-year period 1956-1975, 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. This publication is available from National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia.

4. National Data Buoy Center (NDBC) Website. This Internet website provides a wide range of real-time and archived meteorological and oceanographic buoy data collected worldwide.

#### 1.7.4 Transportation Facilities

##### 1.7.4.1 Major Highways, Airports, Port Facilities, and Rail Access

The city of Miami is served by Interstate 95 and U.S. Highways, port facilities, the Miami International Airport, and the Florida East Coast Railroad.

##### 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

Marine Traffic in the project area consists of cruise ships, 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

###### 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 Levels

Water levels in the project area are mainly affected by tidal fluctuations in the Atlantic Ocean. The project area is also subject to storm surges from hurricanes and tropical storms from June through November. Surges from extratropical storms may affect the area during any time of the year. Elevations of tidal datums referred to mean lower low water (MLLW) are provided in the following table. These values are based in field measurements taken at a tide gage operated by the National Ocean and Atmospheric Administration (NOAA), National Ocean Service (NOS). This tide gage was located on the Haulover Fishing Pier prior to its destruction during Hurricane Andrew.

MEAN HIGHER HIGH WATER (MHHW)	=	2.73 FEET
MEAN HIGH WATER (MHW)	=	2.67 FEET
MEAN TIDE LEVEL (MTL)	=	1.40 FEET
*NATIONAL GEODETIC VERTICAL DATUM - 1929 (NGVD)	=	0.92 FOOT
MEAN LOW WATER (MLW)	=	0.13 FOOT
MEAN LOWER LOW WATER (MLLW)	=	0.00 FOOT

\*NGVD reference based on adjustment of 1976 and NOS levels of 1979.

#### 1.7.7 Subsurface Investigations

Refer to core boring logs and laboratory data appended to the end of this Section.

#### 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 this Section.

### 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 this Section.

### 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 CO/COR 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 CO/COR 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 CO/COR, at his discretion, and the expense of replacement will be deducted from any amounts due or to become due the Contractor. The CO/COR 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 CO/COR 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.

b. To furnish, on the request of the CO/COR or any QAR, suitable transportation from all points on shore designated by the CO/COR to and from the various pieces of plant, and to and from the 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 CO/COR and the cost thereof will be deducted from any amounts due or to become due the Contractor.

##### 1.11 STONE SOURCES (JAN 2000)

The Contractor shall be responsible for all arrangements in obtaining and testing of proposed stone sources. Bidders must verify that sources can meet gradation and quantity requirements. The Contractor shall submit within 10 days after Notice of Award the proposed stone sources for all classes of stone, including all laboratory test data and service records for the proposed stone source(s). The Contractor shall submit a letter stating that he has verified that the stone, or sources, which he plans to use will be able to produce, either solely or collectively, the quantity of stone, of an acceptable quality, necessary for this project. This letter must include a list of the source or sources from which the Contractor plans to obtain the stone. The Government reserves the right to revoke approval and reject any or all material furnished from any source at any time during the course of the contract if and when it is determined by the CO/COR that such material does not conform to the gradation or quality specified. The Contractor's

attention is called to the fact that the specified gradations are not industry standard and processing of materials will be required to meet the specified gradations. The Contractor shall submit the "Stone Source Information" form for each stone source. A sample of this form is appended to the end of Section 02278 STONE PROTECTION.

#### 1.12 RETESTING OF CONSTRUCTION MATERIALS

Where specified, initial tests on construction materials, which are specifically indicated in these specifications to be tested by the Government, will be performed at the expense of the Government unless otherwise specified hereinafter. Any retesting due to failure of the materials to meet the requirements in the initial test or any retesting requested by the Contractor shall be performed at the Contractor's expense. The retests shall be at laboratories approved by the CO/COR. The cost of retests made at Government Laboratories will be deducted from the total amount due the Contractor.

#### 1.13 CRITICAL LIFT PLAN OPERATION

##### 1.13.1 Definition of a Critical Lift

A non-routine crane lift which requires detailed planning and additional or unusual safety precautions. Critical lifts include lifts made when the load weight is 75 percent of the rated capacity of the crane; lifts which require that the load will be lifted, swung, or placed out of the operator's view; lifts made with more than one crane; lifts involving a non-routine or technically difficult rigging arrangement; or, any lift which the crane operator believes should be considered critical.

##### 1.13.2 Critical Lift Plan Submittal

In such a case, the Contractor shall submit a Critical Lift Plan, hereinafter referred to as "Plan", prior to making a critical lift. The Plan shall be prepared by the crane operator, lift supervisor, and rigger. All personnel involved in the lift shall review and sign the Plan. The Plan shall be documented and a copy provided to the CO/COR for approval. The Plan shall be submitted at the Preconstruction Conference to permit time for review and shall contain the following information:

- a. The Plan shall specify the exact size and weight of the load to be lifted as well as all crane and rigging components which add to the weight.
- b. The Plan shall specify the lift geometry and procedures, including the crane position, height of the lift, the load radius, the boom length, and angle for the entire range of the lift.
- c. The Plan shall designate the crane operator, lift supervisor, and rigger, and state their qualifications.
- d. The Plan shall include a rigging plan which shows the lift points, describes rigging procedures, and hardware requirements.

e. The Plan shall describe the ground conditions, outrigger or crawler track requirements, and if necessary, the design of mats necessary to achieve a level, stable foundation of sufficient bearing capacity for the lift. For floating cranes or derricks, the plan shall describe the operating base (platform) condition.

f. The Plan shall list environmental conditions under which lift operations are to be stopped.

g. The Plan shall specify coordination and communication requirements for the lift operation.

h. For tandem or tailing crane lifts, the Plan shall specify the make and model of the cranes, the line, boom and swing speeds, and requirements for an equalizer beam.

#### 1.14 ACCOMMODATIONS FOR GOVERNMENT PERSONNEL

##### 1.14.1 General

The Contractor shall furnish and maintain an office trailer for the exclusive use of Government personnel throughout the contract period. The office trailer shall be independent of any building or trailer used by the Contractor. The trailer shall be set up and furnished as specified, ready for Government occupancy no later than 30 calendar days after receipt of the Notice to Proceed.

##### 1.14.2 Office Trailer

The office trailer shall be of light, but weatherproof construction, with a minimum of 600 square feet, 7-1/2 feet of head room, and not less than 8 feet in width. The trailer shall be partitioned into three spaces, two offices and one conference room, and have two entrance doors. The walls and ceilings shall be insulated, and the interior walls shall be finished. The trailer shall have a restroom and shall be complete with flush toilet, lavatory, and medicine cabinet. A minimum of two double socket wall outlets and one ceiling light shall be provided in each separate room of the building. The trailer shall have a sufficient number of windows to admit ample working light, and windows shall be arranged to open and to be securely fastened from the inside. Glass panels in windows shall be equipped with bars or heavy mesh screens which will prevent easy access into the trailer through the windows. Insect screens shall be provided for windows and doors. The doors shall be of solid core construction and be equipped with butt hinges, and a padlock and heavy duty hasp bolted to the doors. The trailer shall be equipped with air conditioning of sufficient capacity for the intended geographic location to maintain an ambient air temperature of 72 °F (winter) to 78 °F (summer) throughout the trailer. The office trailer shall be located at a site convenient to the work area and as approved by the CO/COR. It shall be leveled and set on blocks, and shall be secured by tie-down anchors sufficient to withstand hurricane force winds. The office trailer and furnished equipment will remain the property of the Contractor. Upon

completion of all work under this contract, the office trailer shall be removed by the Contractor from the project site.

#### 1.14.3 Office Equipment

The office trailer shall be equipped as follows:

- 1 - Plan Table installed in one office (may be built in) with a minimum working surface of 4 feet by 6 feet, and draftsman stool
- 1 - Table with a minimum working surface of 30 inches x 60 inches
- 2 - Six-drawer office desks with padded swivel chairs
- 1 - Conference Table with six chairs
- 2 - Locking 5-drawer file cabinets (legal size) 60 inches high
- 2 - Lockers (may be built in), minimum dimensions of 2 feet by 5 feet with a shelf 12 inches from the top, and one door equipped with two hinges, a hasp, and a padlock
- 3 - Garbage cans
- 1 - Seven cubic foot refrigerator
- 1 - Water cooler/dispenser with minimum 3 gallon capacity

#### 1.14.4 Utilities

Potable water shall be connected to the trailer's toilet and lavatory. Sewage disposal facilities shall be provided and comply with all local regulations. The Contractor shall make the necessary arrangements to either obtain or generate electrical power and shall connect, provide, and bear the cost of the electrical service for the office trailer described above. Electric service shall be 120/240 volt, single phase, three wire, 60 hertz, sufficient to handle the required load (operation of air conditioning, lights, appliances, electric calculators, etc.) and shall meet the current National Electric Code. The Contractor shall provide and maintain telephones and telephone service into the office trailer (three lines, three telephones). Where an acceptable and reliable network is not available, cellular telephones may be provided in lieu of a regular telephone line. Monthly charges for long distance calls made by the Government shall be reimbursed to the Contractor.

#### 1.14.5 Janitorial Services

The Contractor shall furnish daily janitorial services for the office space on the project site and perform any required maintenance of facilities and grounds as deemed necessary by the CO/COR during the entire life of the contract. Toilet facilities shall be kept clean and sanitary at all times. Services shall be performed at such a time and in such a manner to least interfere with Government use of the trailer, but shall be accomplished only when CO/COR is present. Service shall be accomplished to the satisfaction of the CO/COR. The Contractor shall also provide daily trash collection and cleanup of the trailer and adjacent outside areas.

#### 1.14.6 Payment

No separate or direct payment will be made for furnishing and setting up the equipped office trailer and utilities, or for operation and maintenance costs, and all appropriate costs, including utilities, shall be considered a

subsidiary obligation of the Contractor, in the same category as field supervision, and listed as an overhead item separately identifiable in the accounting system.

#### 1.15 CONSTRUCTION PROJECT SIGNS

Except when otherwise directed by the CO/COR, 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 this Section, 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 this Section 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 CO/COR.

##### 1.15.1 Signage Removal

Upon completion of construction and when so directed by the CO/COR, 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 CO/COR.

##### 1.15.2 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.

#### 1.16 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 CO/COR. 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 CO/COR. Before final acceptance, temporary connections and piping installed by the Contractor shall be removed in a manner satisfactory to the CO/COR.

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 CO/COR.

#### 1.17 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 CO/COR. 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 CO/COR. All temporary lines will be furnished, installed, connected, and maintained by the Contractor in a workmanlike manner satisfactory to the CO/COR 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.

#### 1.18 HURRICANE AND SEVERE STORM PLAN

##### 1.18.1 Plan Contents

Within 15 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.

#### 1.18.2 Sample Plan

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

#### 1.18.3 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.

#### 1.19 PRECONSTRUCTION CONFERENCE

A Preconstruction Conference will be arranged by the CO/COR after award of contract and shall be held before Notice to Proceed is issued. The CO/COR 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 CO/COR and signed by both the Contractor and the CO/COR. 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.

##### 1.19.1 Preconstruction Conference Submittal Items

Within fifteen (15) 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 CO/COR prior to the preconstruction conference:

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 this Section)).

Critical Lift Plan Operation, Refer to paragraph CRITICAL LIFT PLAN OPERATION of this Section.

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 this Section.

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

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.

#### 1.19.2 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.

#### 1.19.3 Contracting Officer Representative Responsibility

##### 1.19.3.1 Report Preparation Instruction

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

##### 1.19.3.2 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.

##### 1.19.3.3 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 CO/COR to all in attendance.

#### 1.20 NOTICE TO PROCEED

The Notice to Proceed (NTP) will be issued to the Contractor in two (2) parts after the Preconstruction Conference has been completed. The 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 CO/COR 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 CO/COR, the CO/COR 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.

a. The 1st partial NTP will be for the Pre-Condition Survey Report of Hardbottom/Reef Communities and Operational Box to verify Government data (refer to paragraph SUBMITTALS of Section 02391 BEACH FILL). The performance period for completion of this report is 20 calendar days after receipt of the 1st partial NTP.

b. The 2d partial NTP will be issued to the Contractor after the above requirement has been submitted and approved. The performance period as specified in Clause COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK of Section 00800 SPECIAL CONTRACT REQUIREMENTS is applicable to the issuance of the 2d partial NTP.

1.21 CONSTRUCTION PROGRESS CHART, ENG FORM 2454

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

1.22 CONSTRUCTION PROJECT SIGNS

See APPENDIX B at the end of this Section (6 pages).

1.23 DECLARATION OF INSPECTION FOR REFUELING

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

1.24 SAMPLE - HURRICANE AND SEVERE STORM PLAN

See APPENDIX D at the end of this Section (4 pages).

1.25 SAMPLE - GUIDE FOR EMPLOYEE SAFETY AND OCCUPATIONAL HEALTH  
INDOCTRINATION

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

1.26 CONTROL MONUMENT DESCRIPTIONS

See APPENDIX F at the end of this Section (43 pages).

1.27 CORE BORING LOGS AND LABORATORY DATA

See APPENDIX G at the end of this Section (84 pages).

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

-- End of Section --



The use of signs to identify Corps managed or supervised design, construction, and rehabilitation projects—both for military and civil works, is an important part of efforts to keep the public informed of Corps work. For this purpose, a construction project sign package has been adopted. This package consists of two signs; one for project identification and the other to show on-the-job safety performance of the contractor.

These two signs are to be displayed side by side and mounted for reading by passing viewers. Exact placement location will be designated by the Contracting Officer Representative.

The panel sizes and graphic formats have been standardized for visual consistency throughout all Corps operations.

Panels are fabricated using HDO plywood with dimensional lumber uprights and bracing. The sign faces are non-reflective vinyl.

All legends are to be die-cut or computer-cut in the sizes and typefaces specified and applied to the white panel background following the graphic formats shown on pages 16.2 and 16.3. The Communications Red panel on the left side of the construction project sign with Corps signature (reverse version) is screen printed onto the white background.

A display of these two signs is shown on the following two pages. Mounting and fabrication details are provided on page 16.4.

Special applications or situations not covered in these guidelines should be referred to the District/Division Sign Program Manager.

Below are two samples of the construction project identification sign showing how this panel is adaptable for use to identify either military (top) or civil works projects (bottom). The graphic format for this 4'x 6' sign panel follows the legend guidelines and layout as specified below. The large 4'x 4' section of the panel on the right is to be white with black legend.

The 2'x 4' section of the sign on the left with the full Corps Signature (reverse version) is to be screen printed Communications Red on the white background. The designation of a sponsor in the area indicated is optional with Military or Civil Works construction signs. Signs may list one sponsoring entity. If agreement on a sponsor designation cannot be achieved,

the area should be left blank.

This sign is to be placed with the Safety Performance sign shown on the following page. Mounting and fabrication details are provided on page 16.4.

Special applications or situations not covered in these guidelines should be referred to the District/Division Sign Program Manager.

Legend Group 1: One- to two-line description of Corps relationship to project.

Color: White  
Typeface: 1.25" Helvetica Regular  
Maximum line length: 19"

Legend Group 2: Division or District Name (optional). Placed below 10.5" reverse Signature (6" Castle).

Color: White  
Typeface: 1.25" Helvetica Regular

Legend Group 2a: One- to three-line identification of Military or Civil Works sponsor (optional). Place below Corps Signature to cross-align with Group 5a-b.

Color: White  
Typeface: 1.25" Helvetica Regular  
Maximum line length: 19"

Legend Group 3: One- to three-line project title legend describes the work being done under this contract.

Color: Black  
Typeface: 3" Helvetica Bold  
Maximum line length: 42"

Legend Group 4: One- to two-line identification of project or facility (civil works) or name of sponsoring department (military).

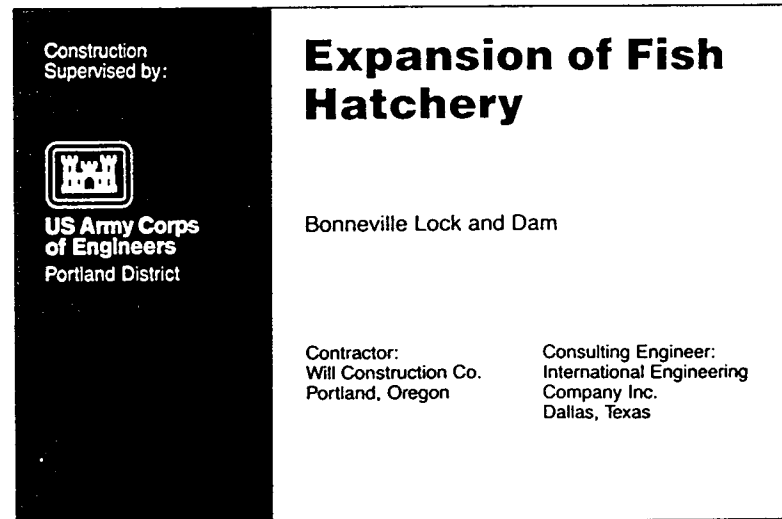
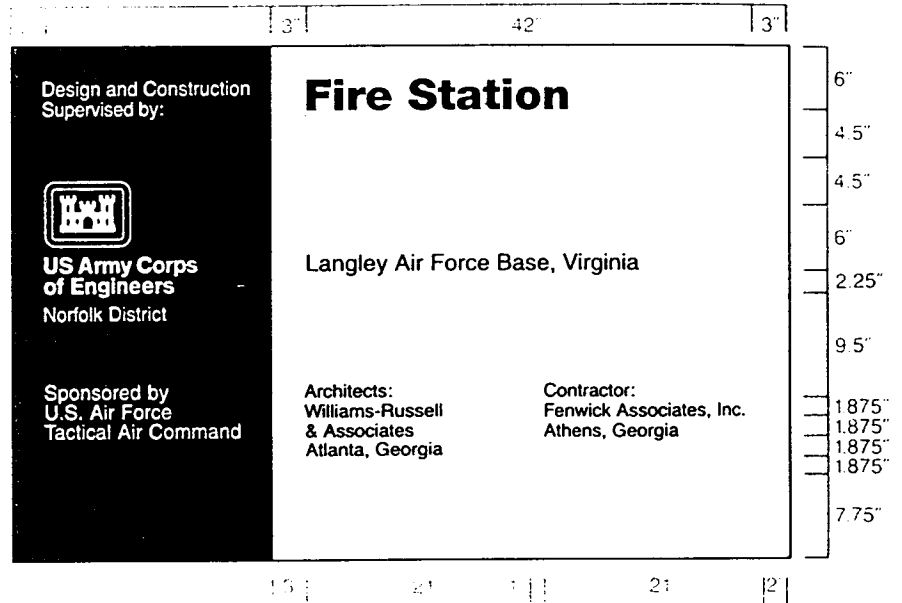
Color: Black  
Typeface: 1.5" Helvetica Regular  
Maximum line length: 42"

Cross-align the first line of Legend Group 4 with the first line of the Corps Signature (US Army Corps) as shown.

Legend Groups 5a-b: One- to five-line identification of prime contractors including: type (architect, general contractor, etc.), corporate or firm name, city, state. Use of Legend Group 5 is optional.

Color: Black  
Typeface: 1.25" Helvetica Regular  
Maximum line length: 21"

All typography is flush left and rag right, upper and lower case with initial capitals only as shown. Letter- and word-spacing to follow Corps standards as specified in Appendix D.



Sign Type	Legend Size (A)	Panel Size	Post Size	Specification Code	Mounting Height	Color Bkg/Lgd
CID-01	various	4' x 6'	4" x 4"	HDO-3	48"	WH-RD/BK

Each contractor's safety record is to be posted on Corps managed or supervised construction projects and mounted with the construction project identification sign specified on page 16.2.

The graphic format, color, size and type-faces used on the sign are to be reproduced exactly as specified below.

Legend Group 1: Standard two-line title "Safety is a Job Requirement" with (8" od.) Safety Green First Aid logo.  
Color: To match PMS 347  
Typeface: 3" Helvetica Bold  
Color: Black

Legend Group 2: One- to two-line project title legend describes the work being done under this contract and name of host project.  
Color: Black  
Typeface: 1.5" Helvetica Regular  
Maximum line length: 42"

Legend Group 3: One- to two-line identification: name of prime contractor and city, state address.  
Color: Black  
Typeface: 1.5" Helvetica Regular  
Maximum line length: 42"

Legend Group 4: Standard safety record captions as shown.  
Color: Black  
Typeface: 1.25" Helvetica Regular

Replaceable numbers are to be mounted on white .060 aluminum plates and screw-mounted to background.  
Color: Black  
Typeface: 3" Helvetica Regular  
Plate size: 2.5" x 4.5"

All typography is flush left and rag right, upper and lower case with initial capitals only as shown. Letter and word spacing to follow Corps standards as specified in Appendix D.

The title with First Aid logo in the top section of the sign, and the performance record captions are standard for all signs of this type. Legend groups 2 and 3 below identify the project and the contractor and are to be placed on the sign as shown.

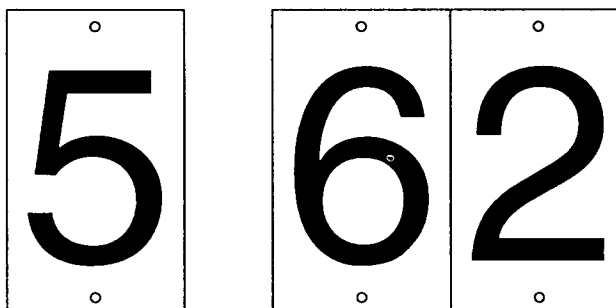
Safety record numbers are mounted on individual metal plates and are

screw-mounted to the background to allow for daily revisions to posted safety performance record.

Special applications or situations not covered in these guidelines should be referred to the District/Division Sign Program Manager.



Sign Type	Legend Size (A)	Panel Size	Post Size	Specification Code	Mounting Height	Color Bkg/Lgd
CID-02	various	4' x 4'	4" x 4"	HDO-3	48"	WH/BK-SG



01000-B3

All Construction Project Identification signs and Safety Performance signs are to be fabricated and installed as described below. The signs are to be erected at a location designated by the Contracting Officer Representative and shall conform to the size, format, and typographic standards shown on pages

16.2-3. Detailed specifications for HDO plywood panel preparation are provided in Appendix B.

For additional information on the proper method to prepare sign panel graphics, contact the District/Division Sign Program Manager.

Shown below the mounting diagram is a panel layout grid with spaces provided for project information. Photocopy this page and use as a worksheet when preparing sign legend orders.

The sign panels are to be fabricated from .75" High Density Overlay Plywood. Panel preparation to follow HDO specifications provided in Appendix B.

Sign graphics to be prepared on a white non-reflective vinyl film with positionable adhesive backing.

All graphics except for the Communications Red background with Corps signature on the project sign are to be die-cut or computer-cut non-reflective vinyl, pre-spaced legends prepared in the sizes and typefaces specified and applied to the background panel following the graphic formats shown on pages 16.2-3.

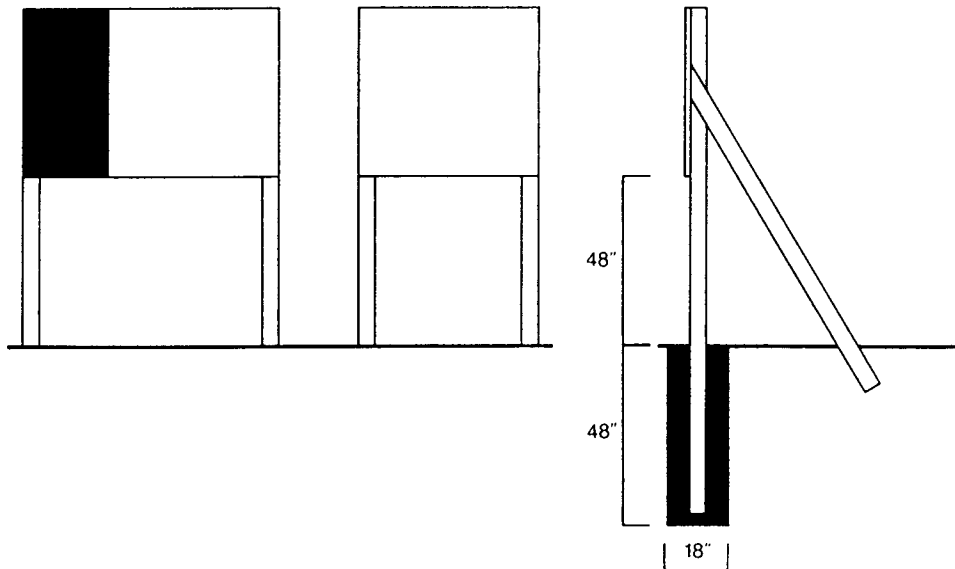
The 2' x 4' Communications Red panel (to match PMS-032) with full Corps signature (reverse version) is to be screen printed on the white background. Identification of the district or division may be applied under the signature with white cut vinyl letters prepared to Corps standards. Large scale reproduction artwork for the signature is provided on page 4.8 (photographically enlarge from 6.875" to 10.5").

Drill and insert six (6) .375" T-nuts from the front face of the HDO sign panel. Position holes as shown. Flange of T-nut to be flush with sign face.

Apply graphic panel to prepared HDO plywood panel following manufacturers' instructions.

Sign uprights to be structural grade 4" x 4" treated Douglas Fir or Southern Yellow Pine, No.1 or better. Post to be 12' long. Drill six (6) .375" mounting holes in uprights to align with T-nuts in sign panel. Countersink (.5") back of hole to accept socket head cap screw (4" x .375").

Assemble sign panel and uprights. Imbed assembled sign panel and uprights in 4' hole. Local soil conditions and/or wind loading may require bolting additional 2" x 4" struts on inside face of uprights to reinforce installation as shown.



Construction Project Sign  
Legend Group 1: Corps Relationship

1. \_\_\_\_\_
2. \_\_\_\_\_

Legend Group 2: Division/District Name

1. \_\_\_\_\_
2. \_\_\_\_\_

Legend Group 3: Project Title

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Legend Group 4: Facility Name

1. \_\_\_\_\_
2. \_\_\_\_\_

Legend Group 5a: Contractor/A&E

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

Legend Group 2a: Military/Civil Works Sponsor

1. \_\_\_\_\_
2. \_\_\_\_\_

Legend Group 5b: Contractor/A&E

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

Safety Performance Sign  
Legend Group 1: Project Title

1. \_\_\_\_\_
2. \_\_\_\_\_

Legend Group 2: Contractor/A&E

1. \_\_\_\_\_
2. \_\_\_\_\_

# In cooperation with



Legend Group 2a: One- to two-line identification of the sponsor's relationship to the project. Place below Corps Signature to cross align with Group 5a-b.

(FDEP logo) 6 inches height

Color: Black Lettering, Black and White Bird, Black Palm Tree, Turquoise water, Light Turquoise (50%) sun

Typeface: 1.25" Helvetica Regular



# SAFETY SCOREBOARD

(CONSECUTIVE SAFE DAYS WITHOUT RECORDABLE INJURY,  
ILLNESS OR PROPERTY DAMAGE OF \$2,000 OR GREATER)

NUMBER OF CALENDAR DAYS  
ON THE JOB STARTING DATE

CURRENT RECORD  
STARTING DATE

(USE CHALK ONLY)

SAFETY LITERATURE



36"

48"

01000-B6

DECLARATION OF INSPECTION

To Meet Requirement of 33 CFR 156.150

Facility Name: \_\_\_\_\_ Facility Address: \_\_\_\_\_  
\_\_\_\_\_

Vessel Name: \_\_\_\_\_ Date of Transfer: \_\_\_\_\_  
\_\_\_\_\_

MOORINGS: Yes No

Are mooring lines strong enough to hold vessel under all expected conditions of surge, current and weather? \_\_\_\_\_

Are mooring lines long enough to allow adjustment for changes in draft, drift, and tide? \_\_\_\_\_

LOADING EQUIPMENT:

Are hoses or loading arms long enough to allow vessel to move to the limits of its moorings? \_\_\_\_\_

Maximum movement will not place strain on hose, loading arm, or transfer piping system? \_\_\_\_\_

Is each hose supported in a manner that prevents strain on its coupling? \_\_\_\_\_

Is each part of the transfer system properly lined up as necessary to allow the intended flow of oil? \_\_\_\_\_

Has each part of the transfer system, not being used in the transfer operation, been checked to see that it is securely blanked off or shut off? \_\_\_\_\_

Is the transfer system connected to a fixed piping system on the receiving vessel or facility? \_\_\_\_\_

(NOTE: For fueling vessels the use of flush deck fittings is approved when serviced by fuel hoses fitted with an automatic back pressure shut-off nozzle.)

Is each coupling one of the following types:

1. Full threaded connection? \_\_\_\_\_

2. Bolted coupling? \_\_\_\_\_

3. Quick-connect coupling approved by USCG? \_\_\_\_\_

DECLARATION OF INSPECTION (Continued)

	<u>Yes</u>	<u>No</u>
DISCHARGE CONTAINMENT SYSTEM:		
Are discharge containment systems in place on both facility and vessel?	_____	_____
Are scupper and drains closed?	_____	_____
Is oil leaking from any transfer equipment?	_____	_____
Will containment system handle leak?	_____	_____
COMMUNICATIONS:		
Has two-way voice communications system between vessel and facility been tested?	_____	_____
Has emergency shutdown system been tested and found ready to operate?	_____	_____
PERSONNEL:		
Are persons required by Facility Operations Manual on duty?	_____	_____
Are personnel required by the Vessel Oil Transfer Procedure on duty?	_____	_____
Are any language problems involved?	_____	_____
If so, is a person present who can fluently speak the common languages used on the vessel and shore facility?	_____	_____
CONFERENCE OF PERSONS-IN-CHARGE:		
Did Person-in-Charge on Facility and Person-in-Charge on vessel hold a conference?	_____	_____
Were the following points discussed and understood by both:		
1. Identity of product to be transferred?	_____	_____
2. Sequence of transfer operation?	_____	_____
3. Transfer rate?	_____	_____
4. Name, title and stations of all persons participating in transfer?	_____	_____
5. Particulars of transferring and receiving systems?	_____	_____

DECLARATION OF INSPECTION (Continued)

	<u>Yes</u>	<u>No</u>
CONFERENCE OF PERSONS-IN-CHARGE (Continued):		
6. Critical stages in transfer operation?	_____	_____
7. Federal, State, and local rules that apply to transfer?	_____	_____
8. Emergency procedures?	_____	_____
9. Discharge containment procedures?	_____	_____
10. Discharge reporting procedures?	_____	_____
11. Watch or shift arrangements?	_____	_____
12. Transfer shutdown procedures?	_____	_____

LIGHTING:

If transfer operations occur between sunset and sunrise:  
are lights on vessel and facility working?

\_\_\_\_\_

Does lighting adequately cover all transfer connection  
and working areas?

\_\_\_\_\_

AGREEMENT TO START TRANSFER:

Are both Persons-in-Charge present?

\_\_\_\_\_

Do both Persons-in-Charge agree to begin transfer?

\_\_\_\_\_

The undersigned do certify that they have personally inspected or checked the items listed above and that their initials opposite each item indicate the regulations have been complied with.

PERSON-IN-CHARGE FACILITY

\_\_\_\_\_  
Signature and Title

\_\_\_\_\_  
Date and Time

PERSON-IN-CHARGE VESSEL

\_\_\_\_\_  
Signature and Title

\_\_\_\_\_  
Date and Time

"S A M P L E"

HURRICANE AND SEVERE STORM PLAN

A. WINTER STORM AND HURRICANE PREPAREDNESS PLAN

The following is a standardization of our weather classification, in order to better facilitate an orderly sequence of events, should Nature and her elements constitute a threat.

For continuity, we have categorized specific WEATHER PHENOMENA into four (4) distinct categories, called "CONDITIONS". Each condition, as it occurs, can be identified by its physical characteristics, time intervals, and actions.

The following will be banded on the weather conditions forecasted as follows: SUSTAINED WINDS OF 35 KNOTS, OR ABOVE, AND/OR GUST OF 35 TO 40 KNOTS, OR ABOVE. MAY CONTAIN RAIN AND/OR RAIN SQUALLS ACCOMPANIED BY HIGH WINDS.

C O N D I T I O N "4"

PHYSICAL CHARACTERISTICS: Possible threat of storm within seventy-two (72) hours.

ACTION: All non-essential gear and equipment should be stowed. Priority repairs should be made immediately, and a six (6) hour weather watch initiated. (Weather reports - bulletins - notices - and other pertinent weather information should be carefully checked every six (6) hours.)

C O N D I T I O N "3"

PHYSICAL CHARACTERISTICS: Storm in general area. (Within forty-eight (48) hours of location.)

ACTION: All non-essential equipment shall be moved to safe harbor. Movable equipment, i.e., drums, tanks, barrels, reels, spools, couplings, etc., shall be securely lashed and made fast to the vessel or structure. A three (3) hour weather watch initiated. ALL PERSONNEL INSTRUCTED TO WEAR LIFE VESTS. Derrick barges, work barges, pontoons, etc., shall be moved to safe harbor. Contact shall be made with a tug of adequate horsepower to handle the floating plant and equipment when the storm is within forty-eight (48) hours of the location or when the United States Weather Bureau issues a Hurricane Alert for our work area. Dredge shall be made ready to get underway within three (3) hours. (Weather: See Condition 4 for weather watch responsibility.)

C O N D I T I O N "2"

PHYSICAL CHARACTERISTICS: Storm in near vicinity (50 to 75 miles-- possibility that it will pass over location, or very near to location). (At this time the fringe effects of the storm may be experienced.)

ACTION: Vessel must be in or very near to safe harbor. All non-essential personnel evacuated to land based installations, unless deemed otherwise by the Captain or Supervisor. ALL PERSONNEL SHALL HAVE ON LIFE VESTS. Hatches, watertight doors, portals, etc., shall be made fast and secured. A check of pumps, radio communication, etc., shall be made. All personnel shall be instructed to keep movement to a minimum, in order to prevent accidents as a result of slips or falls. No man shall be permitted on deck without the expressed consent of the Captain. A CONSTANT WEATHER WATCH AND VESSEL DAMAGE CONTROL WATER SET UP AND MAINTAINED..

C O N D I T I O N "1"

PHYSICAL CHARACTERISTICS; Storm is imminent and will pass directly over, or very near to location within three (3) to six (6) hours.

ACTION: All personnel remaining on board shall be assigned to specific locations and remain in constant contact with the Captain or Supervisor. The Damage Control Watch shall stay in constant contact with the wheelhouse, lever room, or assigned control central. ALL PERSONNEL SHALL BE INSTRUCTED TO KEEP LIFE VESTS ON UNTIL AFTER THE STORM HAS PASSED. Personnel shall again be instructed to keep movement to a minimum, in order to prevent accidents as a result of slips or falls. There shall be no operation of stoves, coffee pots, or electrical devices that are non-essential. At this time the only operating devices should be equipment necessary to maintain the integrity and sea worthiness of the vessel.

After the storm has passed, all hands shall turn to and remove any and all debris from the vessel and equipment. The vessel shall be made ship-shape as rapidly as possible.

In the public interest, any refugees and/or survivors shall be assisted if and where possible.

This directive is intended as a minimum, with recommendation that it can and should be improved upon in each location.

NOTE: THIS DIRECTIVE IS WRITTEN PRIMARILY FOR THE HYDRAULIC DREDGES, BUT IS EASILY ADAPTABLE TO YOUR LOCATION.

It is the intent of the Safety Department that the superintendent, captain, and/or department heads made the CONDITION determinate based on the physical conditions listed. Once the Condition is determined, this should trigger the immediate implementation of the recommended procedures listed under ACTION in each condition.

Due to our geographical location, we shall operate under a CONDITION "4" between fifteen (15) June and fifteen (15) October of each year.

B. WINTER STORM 7 HURRICANE PREPAREDNESS PLAN  
Addendum No. 1

1. The free board of the Gator Point is 12". The Gator Point can safely work in no more than one-foot seas and can safely stay at standby to three-foot seas.
2. The nearest safe harbor is at Cedar Island which is located at the beginning of this project's channel. The dredge will be no more than 13,000 feet from Cedar Island during the dredging of this channel.
3. The dredge will be towed by a workboat that belongs to Florida Dredge and Dock, Inc. The workboat is powered by a 150-hp diesel engine and will be stationed at this project for its entirety. It will take approximately 1/2 hour to move the dredge from the farthest part of the channel to the safe harbor.

C. TORNADO ALERT

Due to the rapid movement and brief warning time associated with TORNADOES, the following shall be Standard Operational Procedure during a TORNADO ALERT.

When the Weather Bureau issues a Tornado Alert, for your area, an immediate check of all radio equipment is to be made, and a visual weather watch initiated.

Tornadoes and Severe Thunderstorms are associated with a Cumulonimbus Cloud. (Thunderstorms occur most frequently and reach their greatest intensity in the summer.)

They strike at any time over land, over rivers, and over inland lakes. They prefer the late afternoons or early evening. (They can occur at any time.)

A thunderstorm (Cumulonimbus Cloud) is an individual weather factory and has four (4) distinct characteristics.

1. An Anvil Top (a layer of Cirrus (white) Clouds shaped like a Blacksmith's Anvil). It will lean in the direction of the upper wind and generally tells the direction the storm is moving. (Cirrus Clouds are composed of ice crystals--not water droplets.)

2. The main body of the cloud is a large Cumulus of great height with cauliflower sides. (The Cumulus is capable of rising to 35,000 feet and above.)
3. A Roll Cloud is formed along the leading edge of the base of the Cumulus Cloud. (This is caused by violent air currents.)
4. There is a dark area within the storm extending from the base of the cloud to the earth. (Usually there is rain in the center with hail and rain at the edges.)

These storms move at about 25 miles per hour and usually travel from the southwest to the northeast. Probably, in an east, northeast direction. However, there is no guarantee to this.

The above is intended as a guide to what physical characteristics might be seen in a thunderstorm (Cumulonimbus Cloud).

Tornadoes are closely associated with Cumulonimbus Clouds for these clouds are their spawning ground. (Tornadoes occur most frequently in the spring.)

- a. On Vessels quartering personnel:

When the alert is given, all hands are to be awakened. They are to put on their life jackets and assemble in the galley.

- b. Attendant equipment:

Shall either head into the bank and tie up or tie up alongside the parent vessel. Engines shall be left running and the clutch placed in neutral position. All hands including operator to put on life jackets (work vests).

- c. Pontoon lines, etc.:

During the storm, no one will be allowed on the pontoon line, derrick barge, etc.

- d. Miscellaneous:

All loose equipment shall be stowed immediately and all movables secured.

Even though Tornadoes and Severe Thunderstorms are limited as to duration and size, they should command your attentive observation and action, for they are vicious and unpredictable.

As with the Hurricane Procedure--this information is intended as a minimum and with minor adaptation is applicable to all locations.



SAMPLE GUIDE FOR EMPLOYEE SAFETY AND OCCUPATIONAL  
HEALTH INDOCTRINATION

This information is intended only to serve as a guide to assist in preparing an Employee Safety and Occupational Health Indoctrination that will be acceptable for work to be performed under this contract. It is probable that all of the below areas will not apply to this contract. By the same token, there probably are other items that have not been listed in this guide that will apply to work under this contract.

**NOTE: It is imperative that the Indoctrination be signed and dated by the employee and supervisor giving the Indoctrination.**

- \_\_\_\_\_ 1. Contractor safety policy.
- \_\_\_\_\_ 2. Pertinent provisions of EM 385-1-1.
- \_\_\_\_\_ 3. Employee's responsibilities for property and the safety of others.
- \_\_\_\_\_ 4. Location of medical facilities and emergency phone numbers.
- \_\_\_\_\_ 5. Procedures for reporting or correcting unsafe conditions, practices, and for reporting accidents.
- \_\_\_\_\_ 6. Safe Clearance Procedures.
- \_\_\_\_\_ 7. Fire fighting and other emergency procedures.
- \_\_\_\_\_ 8. Alcohol/drug abuse policy.
- \_\_\_\_\_ 9. Segregation of vehicular and pedestrian traffic.
- \_\_\_\_\_ 10. Drinking water sanitation policy.
- \_\_\_\_\_ 11. Daily housekeeping requirements.
- \_\_\_\_\_ 12. Policy on use of Ropes, Slings, and Chains.
- \_\_\_\_\_ 13. Hazards of floor and wall openings.
- \_\_\_\_\_ 14. Policy on use of Personal Protective Equipment.
- \_\_\_\_\_ 15. Requirements when working around hot substances.
- \_\_\_\_\_ 16. Precautions with welding, cutting and grounding of machinery.
- \_\_\_\_\_ 17. Temporary electrical requirements.
- \_\_\_\_\_ 18. Proper use of hand tools and power tools.

- \_\_\_\_\_ 19. Proper precautions with compressed gas cylinders.
- \_\_\_\_\_ 20. Requirements for ramps, runways, platforms, and scaffolds.
- \_\_\_\_\_ 21. Requirements for excavation.
- \_\_\_\_\_ 22. Discuss appropriate Material Safety Data Sheets.
- \_\_\_\_\_ 23. Job Hazard Analyses. (Major Activity, Locations, Hazards, Controls)
- \_\_\_\_\_ 24. Activity Hazard Analyses. (Name of Activity, Potential Hazards, Recommended Controls)
- \_\_\_\_\_ 25. Other:
- \_\_\_\_\_ 26. Other:
- \_\_\_\_\_ 27. Other:
- \_\_\_\_\_ 28. Other:
- \_\_\_\_\_ 29. Other:
- \_\_\_\_\_ 30. Other:

\_\_\_\_\_  
Employee signature

\_\_\_\_\_  
Supervisor signature

Date: \_\_\_\_\_

Date: \_\_\_\_\_

APPENDIX F

CONTROL MONUMENT DESCRIPTIONS

Monument ID: DA T 005

Locality-Project : SUNNY ISLES  
Latitude : 0° 0' 0.00000"  
X(E) : 789378.350  
Zone : FLE  
Horizontal Datum : NAD 27/79  
Order : THIRD  
State : FL  
Monument Set By : FDNR

Date Added : 981028

Recovered By :  
Company (1) SEA SYS  
Person (1) SC-KJ  
Date (1) 1998  
Condition (1) GOOD

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 593197.050  
Elevation : 13.3610  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set :  
County : DADE

Date Changed : 990325

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

Monument ID: DA T 005.5 RESET 98

Locality-Project : N.MIAMI BEACH  
Latitude : 0° 0' 0.00000"  
X(E) : 789398.891  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : GPS  
State : FL  
Monument Set By : SEA SYSTE

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 592646.971  
Elevation : 11.4655  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1998  
County : DADE

Date Added : 990331

Date Changed : 990331

Recovered By :  
Company (1) SEA SYS (2)  
Person (1) UPHOFF (2)  
Date (1) 7/98 (2)  
Condition (1) GOOD (NEW) (2)

01000  
F1-0010

LOCATION: AT SUNNY ISLES BEACH, NORTH MIAMI BEACH, DADE COUNTY FLORIDA.

TO REACH THE STATION FROM THE INTERSECTION OF COUNTY LINE ROAD AND STATE ROAD A-1-A, GO SOUTH ON ROAD A-1-A FOR 0.45 MILE TO THE RESIDENCE NO. 255 AND THE STATION LOCATION ON THE BEACH SIDE (EAST SIDE OF ROAD).

STATION IS 35 FEET EAST OF A +/- 3 FOOT HIGH CONCRETE BLOCK WALL, 50.0 FEET SOUTHEAST OF A 6 FOOT CONCRETE BLOCK WALL EXTENDING PAST A COVERED PATIO WITH KITCHEN AT RESIDENT NO. 263, 63 FEET SOUTHWEST OF A BEACH SIGN "PRIVATE PROPERTY DO NOT TRESPASS", 2.0 FEET EAST OF WITNESS POST, 63.2 NORTHEAST OF NORTHEAST CORNER OF POOL HOUSE OF RESIDENT NO. 249.

MARK IS STAMPED "T5.5 RESET 1998 JAX. FLA." IS A USACOE BRONZE DISK SET IN THE CONCRETE IN A BEACH DUNE OF A VACANT LOT.

Monument ID: DA R 0006

Locality-Project : GOLDEN BEACH  
Latitude : 0° 0' 0.00000"  
X(E) : 789379.480  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : 3RD  
State : FL  
Monument Set By : FDNR

Date Added : 871214

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

Monument Type : DNR DISC  
Longitude : 0° 0' 0.00000"  
Y(N) : 592176.440  
Elevation : 11.4300  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1974  
County : DADE

Date Changed : 990331

01000  
FF-0010

LOCATION: AT GOLDEN BEACH, NORTH MIAMI BEACH, DADE COUNTY FLORIDA.

TO REACH THE STATION FROM THE INTERSECTION OF STATE ROAD 856 AND STATE ROAD A-1-A (COLLINS AVENUE), GO NORTH ON ROAD A-1-A (COLLINS AVENUE) FOR 0.45 MILE TO THE RESIDENCE NO. 215 AND THE STATION ON THE BEACH SIDE AS DESCRIBED.

STATION IS 35 FEET NORTH OF A CONCRETE BLOCK WALL, 21.0 FEET WEST OF THE EAST EDGE OF THE PATIO IN LINE WITH THE CONCRETE SEAWALL AND IN THE CENTER OF A CONCRETE STEP LEADING TO THE BEACH.

STATION MARK, STAMPED "DADE CO R 6 1974" IS A FLORIDA DEPARTMENT OF NATURAL RESOURCES DISK SET IN THE CONCRETE STEP OF A PATIO AT THE BEACH.

Monument ID: DA S 019

Locality-Project : SUNNY ISLES  
Latitude : 0° 0' 0.00000"  
X(E) : 789406.560  
Zone : FLE  
Horizontal Datum : NAD27-79  
Order : THIRD  
State : FL  
Monument Set By : COE/AE

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 591490.040  
Elevation : 12.9900  
Vertical Datum : NGVD 29  
Linear Units : FEET  
Date Set : 1986  
County : DADE

Date Added : 900208

Date Changed : 981028

Recovered By :  
Company (1) COE  
Person (1) PARTY 6  
Date (1) 2-90  
Condition (1) GOOD

(2) SEASYS  
(2) SC-KJ  
(2) 1998  
(2) GOOD

THIS MONUMENT SERVES AS DNR BEACH PROFILE R-6A.

LOCATION: IN SUNNY ISLES AT NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH THE STATION FROM THE INTERSECTION OF STATE ROAD A-1-A (COLLINS AVENUE) AND ROUTE 826 (SUNNY ISLES CAUSEWAY). GO NORTH ON ROAD A-1-A (COLLINS AVENUE) FOR 2.0 MILES TO THE STATION ON THE RIGHT AS DESCRIBED.

STATION STAMPED S-19 1986 IS A STANDARD U.S. ARMY CORPS OF ENGINEERS BRASS DISK SET FLUSH WITH THE TOP OF A CONCRETE SEAWALL AT A "T" INTERSECTION SEPARATING THE PROPERTY OF HOUSE NO. 145 AND HOUSE NO. 155 (PH LYNCH). IT IS 32.9 FEET NORTHEAST OF THE CORNER OF SWIMMING POOL IN THE YARD OF HOUSE 145, AND 19.5 FEET NORTH OF THE JUNCTION OF THE NORTHEAST EDGE OF SHUFFLEBOARD AND SEAWALL.

Monument ID: DA R 0007

Locality-Project : GOLDEN BEACH  
Latitude : 0° 0' 0.00000"  
X(E) : 789387.781  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : THIRD  
State : FL  
Monument Set By : USACOE

Date Added : 871214

Recovered By :  
Company (1) SEA SYS  
Person (1) STURGEON  
Date (1) 12/94  
Condition (1) GOOD

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 590979.292  
Elevation : 9.5100  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1990  
County : DADE

Date Changed : 990325

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

LOCATION IN GOLDEN BEACH AT NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH FROM THE INTERSECTION OF STATE ROAD 858 AND OCEAN BLVD. (A-1-A),  
PROCEED SOUTH ON OCEAN BLVD., 2.0 MILES TO THE "OCEAN ROCK RESORT MOTEL",  
19505 COLLINS AVE., THEN EAST THROUGH NORTH PARKING LOT OF MOTEL TO EAST  
END AND STATION LOCATION.

STATION IS LOCATED NORTHWEST 106.3 FEET FROM USACOE MONUMENT "MB-2", 9  
FEET EAST OF A NORTH/SOUTH SEAWALL AND 52.4 FEET NORTH OF THE 4 FEET HIGH  
CONCRETE WALL ALONG NORTH PROPERTY LINE OF THE OCEAN ROCK MOTEL.

MARK IS A USACOE BRONZE DISK AND STAMPED: "R-7, 7-24-90, 1990, JAX DIST".



Monument ID: DA S 018

Locality-Project : SUNNY ISLES BCH  
Latitude : 0° 0' 0.00000"  
X(E) : 789438.817  
Zone : FLE  
Horizontal Datum : NAD 27  
Order : THIRD  
State : FL  
Monument Set By : COE/AE

Date Added : 871214

Recovered By :  
Company (1) PARTY #6  
Person (1) WOODWARD  
Date (1) 2/90  
Condition (1) GOOD

Monument Type : DISC  
Longitude : 0° 0' 0.00000"  
Y(N) : 590407.428  
Elevation : 8.5600  
Vertical Datum : NGVD 1929  
Linear Units : FEET  
Date Set : 4/86  
County : DADE

Date Changed : 950621

(2) SEA SYS  
(2) STURGEON  
(2) 12/94  
(2) GOOD

THIS MONUMENT SERVES AS DNR BEACH PROFILE R-7A.

LOCATION IN SUNNY ISLES AT NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH FROM THE INTERSECTION OF STATE ROAD A-1-A (COLLINS AVENUE) AND  
ROUTE 826 (SUNNY ISLES CAUSEWAY), GO NORTH ON COLLINS AVENUE 1.8 MILES TO  
A PUBLIC PARKING AREA EAST OF COLLINS AVE., 194TH STREET AND STATION  
LOCATION.

STATION IS 8.9 FEET SOUTH OF A 2 FOOT HIGH BLOCKWALL WHICH CROSSES THE  
SEAWALL AND 76.8 FEET NORTH OF A BLOCK WALL AND FENCE WHICH CROSSES THE  
SEAWALL.

STATION MARK IS SET FLUSH IN THE SEAWALL BETWEEN PARKING AREA AND THE  
BEACH AND IS STAMPED "S-18, 1986".

Monument ID: DA PL D-3-B RESET 98

Locality-Project : SUNNY ISLES  
Latitude : 0° 0' 0.00000"  
X(E) : 789400.021  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : GPS  
State : FL  
Monument Set By : SEA SYSTE

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 589930.717  
Elevation : 13.6656  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1998  
County : DADE

Date Added : 990331  
Date Changed : 990406

Recovered By :  
Company (1) SEA SYST (2)  
Person (1) UPHOFF (2)  
Date (1) 7/98 (2)  
Condition (1) GOOD (NEW) (2)

LOCATED: IN NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH: FROM THE INTERSECTION OF STATE ROAD A-1-A AND COUNTY LINE ROAD,  
PROCEED SOUTH ON A-1-A 1.40 MILES TO NO. 19201 THE "RADISSON HOTEL" AND  
STATION LOCATION.

MARK IS LOCATED ON THE BULKHEAD, 59.6 FEET NORTH OF POOL PUMP HOUSE, 39.0  
EAST OF THE RADDISON HOTEL SWIMMING POOL, 1.7 FOOT WEST OF THE EAST EDGE  
OF THE CONCRETE BULKHEAD AND 19.2 FEET NORTHEAST OF A 1.5 FOOT HIGH  
CONCRETE PLANTER AT THE STAIRS.

STATION IS LOCATED IN THE POOL AND SUN DECK AREA ON THE EAST SIDE OF THE  
MARCO POLO HOTEL AND IS A STANDARD USACOE BRONZE DISK GLUE INTO THE  
BULKHEAD AND IS STAMPED "D-3-B RESET 98 JAX. FLA".

Monument ID: DA S 017 RST 98

Locality-Project : SUNNY ISLES  
Latitude : 0° 0' 0.00000"  
X(E) : 789364.770  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : GPS  
State : FL  
Monument Set By : SEA SYST.

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 589439.364  
Elevation : 7.9107  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1998  
County : DADE

Date Added : 990406

Date Changed : 990407

Recovered By :  
Company (1) SEA SYST (2)  
Person (1) COPELAND (2)  
Date (1) 7/98 (2)  
Condition (1) GOOD (NEW) (2)

LOCATION: IN SUNNY ISLES AT NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.  
TO REACH: FROM THE INTERSECTION OF STATE ROAD A-1-A (COLLINS AVENUE) AND  
ROUTE 826 (SUNNY ISLES CAUSEWAY), GO NORTH ON COLLINS AVENUE 1.6 MILES TO  
THE "CHATEAU HOTEL", NO. 19111 COLLINS AVENUE AND STATION LOCATION.  
STATION IS 3.6 FEET EAST OF THE EAST EDGE OF A 2.0 FOOT HIGH BLOCK WALL  
AND 14.0 FEET SOUTHEAST OF THE SOUTHEAST OUTSIDE CORNER OF THE CHATEAU  
HOTEL SWIMMING POOL, 5 FEET NORTHEAST OF A DECORATIVE 5 FOOT HIGH WALL.  
STATION MARK IS SET 0.4 FEET BELOW NATURAL GROUND NEAR THE SOUTHEAST  
PROPERTY CORNER OF THE "CHATEAU HOTEL", AND IS STAMPED: "S 17 RST 98 JAX  
FLA".

Monument ID: DA R 0009 RESET

Locality-Project : SUNNY ISLES BCH  
Latitude : 0° 0' 0.00000"  
X(E) : 789335.214  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : THIRD  
State : FL  
Monument Set By : USACOE

Date Added : 880607

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

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 588971.568  
Elevation : 8.6200  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1990  
County : DADE

Date Changed : 990325

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

LOCATED IN DADE COUNTY, FLORIDA, NORTH MIAMI BEACH.

TO REACH THE STATION FROM THE INTERSECTION OF STATE ROAD 826 (SUNNY ISLES CAUSEWAY) AND STATE ROAD A-1-A (COLLINS AVENUE). GO NORTH ON ROAD A-1-A FOR 1.55 MILES TO THE SEASHORE CLUB MOTEL AT 18975 COLLINS AVENUE AND THE STATION ON THE SEAWALL AS DESCRIBED.

STATION IS LOCATED 42.0 FEET NORTH OF THE CENTER OF A GATE LEADING TO THE BEACH, 5.9 FEET SOUTH OF A CHAINLINK FENCE, 0.3 FEET WEST OF THE EAST EDGE OF THE CONCRETE SEAWALL, 7.5 FEET SOUTH OF THE SOUTH END OF AN 6 FEET CHAIN LINK FENCE, UNDER AN ORNAMENTAL BRICK PILLAR AND WOODEN RAIL FENCE THAT IS ON THE EDGE OF THE SEAWALL.

STATION MARK, STAMPED "PL R-9, 2-1-90, 1990, JAX, FLA". IS A STANDARD U.S. ARMY CORPS OF ENGINEERS BRONZE DISK SET FLUSH WITH THE TOP OF A CONCRETE SEAWALL.

Monument ID: DA S 016

Locality-Project : SUNNY ISLES BCH  
Latitude : 0° 0' 0.00000"  
X(E) : 789335.460  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : 3RD  
State : FL  
Monument Set By : USACOE

Date Added : 871214

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

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 588526.410  
Elevation : 9.3200  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 4/86  
County : DADE

Date Changed : 000211

01000-F10

LOCATED IN SUNNY ISLES AT NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH FROM THE INTERSECTION OF STATE ROAD A-1-A (COLLINS AVENUE) AND ROUTE 826 (SUNNY ISLES CAUSEWAY), GO NORTH ON COLLINS AVENUE 1.4 MILES TO THE "WAIKIKI MOTEL" COMPLEX AND STATION LOCATION.

STATION IS 0.3 FOOT WEST OF THE WESTERN EDGE OF SEAWALL AND 3.3 FEET SOUTH OF BLOCK FENCE SEPARATING WAIKIKI AND THE "BEACH HARBOUR HOTEL" PROPERTY.

STATION MARK IS SET FLUSH WITH CONCRETE SUNDECK NEAR THE NORTHEAST PROPERTY CORNER OF WAIKIKI AND STAMPED "S-16 1986".

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

Monument ID: DA S 014

Locality-Project : SUNNY ISLES BCH  
Latitude : 0° 0' 0.00000"  
X(E) : 789324.900  
Zone : FLE  
Horizontal Datum : NAD27  
Order : THIRD  
State : FL  
Monument Set By : COE/AE

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 588102.230  
Elevation : 8.8300  
Vertical Datum : NGVD 29  
Linear Units : FEET  
Date Set : 4/86  
County : DADE

Date Added : 871214

Date Changed : 950427

Recovered By :  
Company (1) K & S  
Person (1) J COATES  
Date (1) 8/92  
Condition (1) GOOD

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

THIS MONUMENT SERVES AS DNR BEACH PROFILE R-9-B.

LOCATED IN SUNNY ISLES AT NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH FROM THE INTERSECTION OF STATE ROAD A-1-A (COLLINS AVENUE) AND ROUTE 826 (SUNNY ISLES CAUSEWAY), GO NORTH ON COLLINS AVENUE 1.3 MILES TO THE "WAIKIKI MOTEL" AND STATION LOCATION.

STATION IS 1.9 FEET WEST OF THE EAST EDGE OF SUNDECK, 1.9 FEET NORTH OF BLOCKWALL ALONG THE SOUTHERN PROPERTY LINE OF THE WAIKIKI AND 68.2 FEET SOUTHEAST OF THE MOST SOUTHERLY BUILDING CORNER OF THE WAIKIKI MOTEL.

STATION MARK IS SET FLUSH WITH THE CONCRETE SUNDECK NEAR THE SOUTHEAST PROPERTY CORNER OF THE WAIKIKI MOTEL AND IS STAMPED "S-14,1986".

Monument ID: DA PL D-4 RESET 98

Locality-Project : GOLDEN BEACH  
Latitude : 0° 0' 0.00000"  
X(E) : 789302.551  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : GPS  
State : FL  
Monument Set By : SEA SYST.

Date Added : 990405

Recovered By :  
Company (1) SEA SYSTE (2)  
Person (1) COPELAND (2)  
Date (1) 7/98 (2)  
Condition (1) GOOD (NEW) (2)

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 587589.166  
Elevation : 11.0815  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1998  
County : DADE

Date Changed : 990406

LOCATION IN NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH FROM THE INTERSECTION OF STATE ROAD A-1-A AND STATE ROAD 856,  
PROCEED SOUTH 0.20 MILES (ADDRESS NO.185) TO THE EAST END OF THE SOUTH  
PARKING LOT OF THE "GOLDEN NUGGET MOTEL" AND STATION LOCATION.

STATION IS 61.5 FEET EAST EDGE OF A CONCRETE CATCH BASIN IN PARKING LOT,  
47.8 FEET SOUTH SOUTHEAST CORNER OF A WOOD TOPPED POOL PUMP HOUSE, 10.0  
FEET NORTH OF THE SOUTH EDGE OF CONCRETE STAIRS AT THE SOUTH PROPERTY LINE  
4.0 FEET WEST OF A WITNESS POST.

STATION MARK IS A STANDARD USACOE BRONZE DISK SET (GLUED) FLUSH WITH THE  
CONCRETE STAIRS AND IS STAMPED: "D-4 RESET 98 JAX FLA."

Monument ID: DA S 015

Locality-Project : SUNNY ISLES BCH  
Latitude : 0° 0' 0.00000"  
X(E) : 789286.335  
Zone : FLE  
Horizontal Datum : NAD 27-79  
Order : 3RD  
State : FL  
Monument Set By : COE/AE

Date Added : 871214

Recovered By :  
Company (1) COE  
Person (1) PARTY 6  
Date (1) 2-90  
Condition (1) GOOD

Monument Type : MARKER  
Longitude : 0° 0' 0.00000"  
Y(N) : 587125.680  
Elevation : 8.9560  
Vertical Datum : NGVD 29  
Linear Units : FEET  
Date Set : 4/86  
County : DADE

Date Changed : 981028

(2) SEASYS  
(2) SC-KJ  
(2) 1998  
(2) GOOD

LOCATION: IN SUNNY ISLES AT NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH: FROM THE INTERSECTION OF STATE ROAD A-1-A (COLLINS AVENUE) AND ROUTE 826 (SUNNY ISLES CAUSEWAY), GO NORTH ON COLLINS AVENUE 1.1 MILE TO THE BOUNDARY OF THE "SAHARA MOTEL" AND THE "THUNDERBIRD MOTEL" COMPLEX AND STATION LOCATION.

STATION IS A SURVEY MARKER DRIVEN FLUSH INTO THE ASPHALT PARKING AREA, 4.6 FEET WEST OF THE SOUTHWEST CORNER OF A WOOD SALES SHED AT THE THUNDERBIRD MOTEL, 23.4 FEET WEST OF THE EASTERN EDGE OF SEAWALL AND 45.5 FEET NORTHEAST OF THE NORTHEAST BUILDING CORNER OF THE SAHARA MOTEL.

MARK IS STAMPED "S-15, 1986".



Monument ID: DA R 0011

Locality-Project : NORTH MIAMI BCH  
Latitude : 0° 0' 0.00000"  
X(E) : 789250.635  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : THIRD  
State : FL  
Monument Set By : FDNR

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 586725.012  
Elevation : 10.2900  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1980  
County : DADE

Date Added : 871214

Date Changed : 990325

Recovered By :  
Company (1) USACOE (2)  
Person (1) PARTY 6 (2)  
Date (1) 2-90 (2)  
Condition (1) GOOD (2)

LOCATED IN NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH FROM THE INTERSECTION OF A-1-A AND STATE ROAD 826, PROCEED NORTH 1.15 MILES TO THE MOST NORTHERLY DRIVE OF THE "BLUEGRASS MOTEL" AND STATION.

STATION IS 23.9 FEET FROM THE NORTHEAST CORNER OF THE BLUEGRASS MOTEL POOL AND 89.5 FEET FROM THE NORTHEAST CORNER OF THE BLUEGRASS MOTEL BUILDING. AN X-CUT IS IN THE CONCRETE FOOTER OF ABOVE MENTIONED WALL, 10.9 FEET EAST OF DISK. X-CUT IS AN EXTENSION OF THIS PROFILE LINE.

STATION MARK IS A FLORIDA DEPARTMENT OF NATURAL RESOURCES BRONZE DISK SET FLUSH WITH THE FOOT OF A 3.4 FOOT HIGH CONCRETE BARRIER WALL ON TOP OF THE SEAWALL.

Monument ID: DA S 013

Locality-Project : SUNNY ISLES BCH  
Latitude : 0° 0' 0.00000"  
X(E) : 789236.648  
Zone : FLE  
Horizontal Datum : NAD 27-79  
Order : 3RD  
State : FL  
Monument Set By : COE/AE

Date Added : 871214

Recovered By :  
Company (1) COE  
Person (1) PARTY 6  
Date (1) 2-90  
Condition (1) GOOD

Monument Type : DISC  
Longitude : 0° 0' 0.00000"  
Y(N) : 586221.615  
Elevation : 8.2600  
Vertical Datum : NGVD 29  
Linear Units : FEET  
Date Set : 4/86  
County : DADE

Date Changed : 981028

(2) SEASYS  
(2) SC-KJ  
(2) 1998  
(2) GOOD

LOCATION: IN SUNNY ISLES AT NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH: FROM THE INTERSECTION OF STATE ROAD A-1-A (COLLINS AVENUE) AND ROUTE 826 (SUNNY ISLES CAUSEWAY), GO NORTH ON COLLINS AVENUE 1.0 MILE TO THE "COLONIAL INN" AND STATION LOCATION.

STATION IS SET FLUSH AT THE NORTHEAST CORNER WITH THE CONCRETE DECK SURROUNDING THE SHUFFLEBOARD COURTS. STATION IS SOUTHEAST OF THE TENNIS COURTS 3.2 FEET WEST OF EAST EDGE OF DECK, 3.4 FEET SOUTH OF THE NORTH EDGE OF DECK AND 68.8 FEET NORTHEAST OF THE NORTHEAST CORNER OF THE COLONIAL INN BUILDING.

STATION MARK IS A STANDARD CORPS OF ENGINEERS BRASS DISC SET FLUSH INTO THE CONCRETE SHUFFLEBOARD DECK AND IS STAMPED "S-13, 1986".

Monument ID: DA S 012

Locality-Project : SUNNY ISLES BCH  
Latitude : 0° 0' 0.00000"  
X(E) : 789210.159  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : THIRD  
State : FL  
Monument Set By : USACOE

Date Added : 871214

Recovered By :  
Company (1) USACOE  
Person (1) PARTY 6  
Date (1) 2-90  
Condition (1) GOOD

Monument Type : DISC  
Longitude : 0° 0' 0.00000"  
Y(N) : 585726.376  
Elevation : 8.2100  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 4/86  
County : DADE

Date Changed : 000211

LOCATED IN SUNNY ISLES AT NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH FROM THE INTERSECTION OF STATE ROAD A-1-A (COLLINS AVENUE) AND ROUTE 826 (SUNNY ISLES CAUSEWAY), GO NORTH ON COLLINS AVENUE 0.9 MILE TO THE "SENIOR MEADOWS RESIDENTIAL MOTEL", WHICH IS JUST NORTH OF THE "GOLDEN STRAND MOTEL".

STATION IS SET FLUSH IN THE CONCRETE SUN DECK NEAR THE SOUTHEAST PROPERTY CORNER OF THE SENIOR MEADOWS RESIDENTIAL MOTEL. STATION IS 3.6 FEET NORTH OF FENCE MARKING THE SOUTH PROPERTY LINE AND 3.4 FEET WEST OF THE EASTERN EDGE OF SUNDECK.

STATION MARK IS A STANDARD U.S. ARMY CORPS OF ENGINEERS BRONZE DISK SET FLUSH IN THE CONCRETE SUNDECK AND IS STAMPED "S-12, 1986".

Monument ID: DA S 011

Locality-Project : SUNNY ISLE BCH  
Latitude : 0° 0' 0.00000"  
X(E) : 789166.438  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : THIRD  
State : FL  
Monument Set By : USACOE

Date Added : 871214

Recovered By :  
Company (1) USACOE  
Person (1) PARTY 6  
Date (1) 2-90  
Condition (1) GOOD

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 585130.159  
Elevation : 8.8300  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 4/86  
County : DADE

Date Changed : 000211

(2) SEASYS  
(2) SC-KJ  
(2) 1998  
(2) GOOD

LOCATED IN SUNNY ISLES AT NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH FROM THE INTERSECTION OF STATE ROAD A-1-A (COLLINS AVENUE) AND ROUTE 826 (SUNNY ISLES CAUSEWAY), GO NORTH ON COLLINS AVENUE 0.75 MILE TO THE "PAN AMERICAN RESORT" COMPLEX.

STATION IS SET FLUSH WITH CONCRETE SUN DECK NEAR A "T" INTERSECTION OF SEAWALL EAST OF THE PAN AMERICAN RESORT. STATION IS NORTHEAST OF THE MAIN SWIMMING POOL, 0.7 FOOT WEST OF WEST EDGE OF A NORTH-SOUTH SEAWALL, 2.0 FEET SOUTH OF EAST-WEST SEAWALL TYPE WALL AND 48.3 FEET EAST SOUTHEAST OF THE SOUTHEAST CORNER OF THE BUILDING JUST NORTH OF THE SWIMMING POOL.

STATION MARK IS A STANDARD U.S.ARMY CORPS OF ENGINEERS BRONZE DISK SET FLUSH WITH CONCRETE SUNDECK AND IS STAMPED: "S-11 1986".

Monument ID: DA PL D-5 RESET 98

Locality-Project : SUNNY ISLES BCH  
Latitude : 0° 0' 0.00000"  
X(E) : 789148.423  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : GPS  
State : FL  
Monument Set By : SEA SYST.

Date Added : 990406

Recovered By :  
Company (1) SEA SYST.  
Person (1) COPELAND  
Date (1) 7/98  
Condition (1) GOOD (NEW)

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 584773.424  
Elevation : 8.2376  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set :  
County : DADE

Date Changed : 990406

01000-1418

LOCATION: IN NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH: FROM THE INTERSECTION OF A-1-A AND STATE ROAD 826, PROCEED NORTH 0.70 MILES ON A-1-A TO THE "PLAYA PELERAMO HOTEL" AND STATION LOCATION.

THE STATION IS 15.0 FEET NORTH OF SOUTH EDGE OF PARKING LOT AT THE NORTH EDGE OF BRICK PAVERS ON A PATIO, 44.8 FEET SOUTH OF A CONCRETE WALL ALONG THE NORTH PROPERTY LINE, 51.2 FEET SOUTHEAST OF NORTHEAST CORNER OF 2 STORY HOTEL, 1.1 FEET WEST OF THE WEST FACE OF A 3 FOOT HIGH CONCRETE WALL WITH METAL FENCE.

STATION MARK IS A STANDARD USACOE BRONZE DISK SET/GLUED INTO THE ASPHALT PARKING LOT AT THE EAST END NEXT TO THE CONCRETE WALL WITH METAL FENCE AND IS STAMPED "D-5 RST 98 JAX FLA".

Monument ID: DA S 010

Locality-Project : SUNNY ISLES BCH  
Latitude : 0° 0' 0.00000"  
X (E) : 789111.065  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : 3RD  
State : FL  
Monument Set By : USACOE

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y (N) : 584219.925  
Elevation : 10.4500  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 4/86  
County : DADE

Date Added : 871214

Date Changed : 000211

Recovered By :  
Company (1) USACOE  
Person (1) PARTY 6  
Date (1) 2-90  
Condition (1) GOOD

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

LOCATED IN SUNNY ISLES AT NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH FROM THE INTERSECTION OF STATE ROAD A-1-A (COLLINS AVENUE) AND ROUTE 826 (SUNNY ISLES CAUSEWAY), GO NORTH ON COLLINS AVENUE 0.6 MILE TO THE "CONCORDE CONDO COMPLEX".

STATION IS SET FLUSH IN THE TOP OF SEAWALL NEAR THE SOUTHEAST PROPERTY CORNER OF THE CONCORDE. STATION IS 2.1 FEET WEST OF THE EASTERN EDGE OF SEAWALL AND 5.4 FEET NORTH OF JUNCTION OF SEAWALLS SEPARATING THE CONCORDE COMPLEX AND THE "MONACO MOTEL".

STATION MARK IS A STANDARD U.S. ARMY CORPS OF ENGINEERS BRONZE DISK SET FLUSH IN THE TOP OF SEAWALL AND IS STAMPED "S-10 1986".

Monument ID: DA R 0014

Locality-Project : NORTH MIAMI BCH  
Latitude : 0° 0' 0.00000"  
X(E) : 789002.800  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : 3RD  
State : FL  
Monument Set By : FDNR

Monument Type : DNR DISC  
Longitude : 0° 0' 0.00000"  
Y(N) : 583506.210  
Elevation : 10.9100  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1980  
County : DADE

Date Added : 871214

Date Changed : 990325

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

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

01000-F20

LOCATION: IN NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH: FROM THE INTERSECTION OF A-1-A AND STATE ROAD 826, PROCEED NORTH ON A-1-A 0.50 MILE TO THE NORTH PARKING AREA OF THE BLUE SEAS HOTEL, ADDRESS NO.17315 A-1-A AND STATION LOCATION.

STATION IS LOCATED IN THE TOP OF A CONCRETE SEAWALL ON THE WEST END OF A "L" SHAPED SEAWALL THAT FORMS THE NORTH BOUNDARY OF THE BLUE SEAS MOTEL. STATION IS 22.7 FEET FROM THE NORTHEAST CORNER OF THE "BLUE SEAS MOTEL" POOL AND 40.5 FROM THE FACE OF THE EAST SEAWALL AND 12.8 FEET FROM THE SOUTHEAST CORNER OF THE "SUN CITY PATIO BAR".

STATION MARK IS A FLORIDA DEPARTMENT OF NATURAL RESOURCES BRONZE DISK SET FLUSH WITH THE TOP OF THE CONCRETE.

Monument ID: DA S 009

Locality-Project : SUNNY ISLES BCH  
Latitude : 0° 0' 0.00000"  
X(E) : 788980.449  
Zone : FLE  
Horizontal Datum : NAD27-79  
Order : 3RD  
State : FL  
Monument Set By : COE/AE

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 583092.074  
Elevation : 8.4000  
Vertical Datum : NGVD 29  
Linear Units : FEET  
Date Set : 4/86  
County : DADE

Date Added : 871214

Date Changed : 981028

Recovered By :  
Company (1) SEA SYS  
Person (1) SC-KJ  
Date (1) 1998  
Condition (1) GOOD

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

LOCATION: IN SUNNY ISLES AT NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH: FROM THE INTERSECTION OF STATE ROAD A-1-A (COLLINS AVENUE) AND ROUTE 826 (SUNNY ISLES CAUSEWAY), GO NORTH ON COLLINS AVENUE 0.4 MILE TO THE "DESERT INN MOTEL".

STATION IS SET FLUSH WITH THE SUNDECK BETWEEN THE MOTEL BUILDING AND AN OPENING IN THE SEAWALL LEADING THE BEACH. STATION IS 22.3 FEET EAST NORTHEAST OF THE SOUTHEAST CORNER OF THE "DESERT INN MOTEL" BUILDING AND 3.0 FEET WEST OF THE SOUTH END OF SEAWALL AT OPENING FOR STEPS LEADING TO THE SAND BEACH.

STATION MARK IS A STANDARD CORPS OF ENGINEERS BRASS DISK SET FLUSH WITH THE SUNDECK AND STAMPED: "S-9, 1986".



Monument ID: DA R 0015

Locality-Project : NORTH MIAMI BCH  
Latitude : 0° 0' 0.00000"  
X(E) : 788921.320  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : 3RD  
State : FL  
Monument Set By : FDNR

Date Added : 871214

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

Monument Type : DNR DISC  
Longitude : 0° 0' 0.00000"  
Y(N) : 582600.930  
Elevation : 9.4300  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1980  
County : DADE  
Date Changed : 990325

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

LOCATION: NORTH MIAMI BEACH, DADE COUNTY, FLORIDA. STATION MARK IS A  
FLORIDA DEPARTMENT OF NATURAL RESOURCES BRONZE DISC STAMPED "R-15, 1974".  
NOTE: NO FURTHER DETAILED DESCRIPTION IS AVAILABLE AS OF 9-28-87.

Monument ID: DA S 008

Locality-Project : SUNNY ISLES BCH  
Latitude : 0° 0' 0.00000"  
X(E) : 788869.795  
Zone : FLE  
Horizontal Datum : NAD 27-79  
Order : THIRD  
State : FL  
Monument Set By : COE/AE

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 582000.783  
Elevation : 10.4090  
Vertical Datum : NGVD 29  
Linear Units : FEET  
Date Set : 1986  
County : DADE

Date Added : 871214

Date Changed : 981028

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

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

LOCATION: IN SUNNY ISLES AT NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.  
TO REACH: FORM THE INTERSECTION OF STATE ROAD A-1-A (COLLINS AVENUE) AND  
ROUTE 826 (SUNNY ISLES CAUSEWAY) GO NORTH ON COLLINS AVENUE 0.2 MILE TO  
THE "TAHITI MOTEL".  
STATION IS SET FLUSH WITH CONCRETE POOL DECK (SIDEWALL) NEAR THE SOUTHEAST  
PROPERTY CORNER OF THE "TAHITI MOTEL".  
STATION IS 28.4 FEET WEST OF THE EASTERN EDGE OF SEAWALL WITH RAILING, 5.4  
FEET SOUTH OF THE SOUTHWEST CORNER OF SWIMMING POOL AND 24.7 FEET SOUTH OF  
THE SOUTHEASTERN CORNER OF THE MOST SOUTHERN BUILDING OF THE "TAHITI  
MOTEL".  
STATION MARK IS A STANDARD CORPS OF ENGINEERS BRASS DISC SET FLUSH INTO  
THE CONCRETE POOL DECK AND STAMPED "S-8, 1986".

Monument ID: DA R 0016

Locality-Project : NORTH MIAMI BCH  
Latitude : 0° 0' 0.00000"  
X(E) : 788880.840  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : THIRD  
State : FL  
Monument Set By : FDNR

Date Added : 871214

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

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 581494.740  
Elevation : 12.8000  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1980  
County : DADE

Date Changed : 990325

LOCATED ON NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH FROM THE INTERSECTION OF STATE ROAD A-1-A AND SUNNY ISLES BOULEVARD, PROCEED NORTH ON STATE ROAD A-1-A 0.05 MILE TO THE NORTH PARKING LOT OF THE "NEWPORT HOTEL" AND TO THE EAST END AND STATION LOCATION.

STATION IS LOCATED IN THE NORTHEAST CORNER OF SEAWALL, 2.0 FEET SOUTH OF THE NORTH END OF WALL AND 2.0 FEET WEST OF THE EAST FACE.

STATION MARK IS A FLORIDA DEPARTMENT OF NATURAL RESOURCES BRONZE DISK SET FLUSH WITH THE TOP OF SEAWALL AND STAMPED: "DADE CO. R-16, 1974".

Monument ID: DA S 007

Locality-Project : SUNNY ISLES BCH  
Latitude : 0° 0' 0.00000"  
X(E) : 788862.874  
Zone : FLE  
Horizontal Datum : NAD 27-79  
Order : THIRD  
State : FL  
Monument Set By : COE

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 580988.100  
Elevation : 8.9320  
Vertical Datum : NGVD 29  
Linear Units : FEET  
Date Set : 1988  
County : DADE

Date Added : 880728

Date Changed : 981028

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

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

LOCATED: IN SUNNY ISLES AT NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.  
TO REACH: FROM THE INTERSECTION OF S.R. 1A (COLLINS AVE.) AND ROUTE 826  
(SUNNY ISLES BLVD.), GO EAST ON ROUTE 826 (SUNNY ISLES BLVD.) TO THE  
SUNNY ISLES FISHING PIER AND STATION LOCATION.  
STATION IS LOCATED: IN TOP OF THE NORTHEAST CORNER OF CONCRETE SEAWALL  
APPROXIMATELY 100 FEET SOUTH OF SUNNY ISLES FISHING PIER.  
MARK IS: A STANDARD CORPS OF ENGINEERS BRONZE DISK SET FLUSH IN TOP OF  
CONCRETE SEAWALL AND STAMPED: "S-7, 7-7-88, 1988, JAX, FLA".

Monument ID: DA S 006

Locality-Project : SUNNY ISLES BCH  
Latitude : 0° 0' 0.00000"  
X(E) : 788850.531  
Zone : FLE  
Horizontal Datum : C.O.E.  
Order : THIRD  
State : FL  
Monument Set By : C.O.E.

Date Added : 880725

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

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 580645.922  
Elevation : 11.0790  
Vertical Datum : NGVD 29  
Linear Units : FEET  
Date Set : 1988  
County : DADE

Date Changed : 981028

LOCATED: IN SUNNY ISLES AT NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH: FROM THE INTERSECTION OF S.R. A1A (COLLINS AVE.) AND ROUTE 826 (SUNNY ISLES CAUSEWAY), GO SOUTH ON S.R. A1A (COLLINS AVE.) 0.05 MILE TO "OCEANIA" SALES OFFICE, 16375 COLLINS AVE. AND STATION LOCATION.

STATION IS LOCATED: ON CONCRETE SEAWALL AT APPROXIMATE CENTER OF PROPERTY AND 34.5 FT. NORTH OF JOG IN SEAWALL.

MARK IS: A STANDARD CORPS OF ENGINEERS BRONZE DISK SET FLUSH IN TOP OF CONCRETE SEAWALL AND STAMPED: "S-6, 7-7-88, 1988, JAX FLA".

Monument ID: DA S 005

Locality-Project : SUNNY ISLES BCH  
Latitude : 0° 0' 0.00000"  
X(E) : 788820.019  
Zone : FLE  
Horizontal Datum : NAD 27-79  
Order : THIRD  
State : FL  
Monument Set By : COE/AE

Date Added : 871214

Recovered By :  
Company (1) PARTY #6  
Person (1) WOODWARD  
Date (1) 7/88  
Condition (1) DESTROYED

Monument Type : DISC  
Longitude : 0° 0' 0.00000"  
Y(N) : 580111.175  
Elevation : 8.7370  
Vertical Datum : NGVD 29  
Linear Units : FEET  
Date Set : 1986  
County : DADE

Date Changed : 981028

LOCATION: IN SUNNY ISLES AT NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH: FROM THE INTERSECTION OF STATE ROAD A-1-A (COLLINS AVENUE) AND ROUTE 826 (SUNNY ISLES CAUSEWAY) GO SOUTH ON COLLINS AVENUE 0.15 MILE TO THE "CASTAWAY SALES OFFICE".

STATION IS LOCATED ON THE BEACH BETWEEN THE SEAWALL AND THE OCEAN. STATION IS 38.5 FEET EAST OF THE CORNER OF THE SEAWALL ON AN EXTENDED LINE OF THE SOUTH SEAWALL.

STATION MARK IS A STANDARD CORPS OF ENGINEERS BRASS DISK SET IN A 4 INCH PVC PIPE, 3 INCHES BELOW THE SAND LEVEL AND STAMPED S-5, 1986.

Monument ID: DA S 004

Locality-Project : SUNNY ISLES BCH  
Latitude : 0° 0' 0.00000"  
X(E) : 788748.100  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : THIRD  
State : FL  
Monument Set By : COE/AE

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 579625.050  
Elevation : 13.9300  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1986  
County : DADE

Date Added : 871214

Date Changed : 000211

Recovered By :

Company (1)  
Person (1)  
Date (1)  
Condition (1)

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

LOCATION: IN SUNNY ISLES AT NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH: FROM THE INTERSECTION OF STATE ROAD A-1-A (COLLINS AVENUE) AND ROUTE 826 (SUNNY ISLES CAUSEWAY) GO SOUTH ON COLLINS AVENUE 0.3 MILE TO THE SEA BREEZE MOTEL COMPLEX.

STATION IS SET FLUSH IN THE TOP OF THE ELEVATED SEAWALL AT THE NORTHERN PART OF THE PROPERTY. STATION IS 0.8 FEET WEST OF THE EASTERN EDGE OF THE SEAWALL, 2.2 FEET SOUTH OF NORTH END OF ELEVATED SEAWALL AND 51.1 FEET NORTHEAST OF THE NORTHEAST CORNER OF A MOTEL BUILDING (SECOND BUILDING SOUTH OF NORTH PROPERTY LINE).

STATION MARK IS A STANDARD U.S. ARMY CORPS OF ENGINEERS BRONZE DISK SET FLUSH INTO THE TOP OF THE ELEVATED SEAWALL AND IS STAMPED "S-4, 1986".

Monument ID: DA S 003

Locality-Project : SUNNY ISLES BCH  
Latitude : 0° 0' 0.00000"  
X(E) : 788739.560  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : THIRD  
State : FL  
Monument Set By : COE/AE

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 579229.970  
Elevation : 12.1300  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1986  
County : DADE

Date Added : 871214

Date Changed : 000211

Recovered By :

- Company (1)
  - Person (1)
  - Date (1)
  - Condition (1)
- (2)
  - (2)
  - (2)
  - (2)

THIS MONUMENT SERVES AS DADE CO. BEACH PL-27.

LOCATED AT NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH FROM THE INTERSECTION OF STATE ROAD A-1-A (COLLINS AVENUE) AND ROUTE 826 (SUNNY ISLES CAUSEWAY) GO SOUTH ON COLLINS AVENUE 0.3 MILES TO THE SEA BREEZE MOTEL COMPLEX AT 16161 COLLINS AVENUE.

STATION IS LOCATED 29.4 FEET EAST OF THE SOUTHEAST CORNER OF THE MOST SOUTHERLY SEA BREEZE BUILDING AND 3.4 FEET NORTH OF BLOCK WALL ATOP THE SEAWALL NEAR THE SOUTHEAST PROPERTY CORNER.

MARK IS A STANDARD U.S. ARMY CORPS OF ENGINEERS BRONZE DISK, SET FLUSH WITH THE TOP OF A SEAWALL NEAR THE SOUTHEAST CORNER OF THE SEABREEZE MOTEL AND IS STAMPED "S-3 1986".



Monument ID: DA S 002

Locality-Project : SUNNY ISLES BCH  
Latitude : 0° 0' 0.00000"  
X(E) : 788718.960  
Zone : FLE  
Horizontal Datum : NAD27  
Order : 3RD  
State : FL  
Monument Set By : COE/AE

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 578722.920  
Elevation : 10.7600  
Vertical Datum : NGVD 29  
Linear Units : FEET  
Date Set : 4/86  
County : DADE

Date Added : 871214

Date Changed : 000526

Recovered By :

Company (1)  
Person (1)  
Date (1)  
Condition (1)

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

01000-F30

LOCATION: IN SUNNY ISLES AT NORTH MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH: FROM THE INTERSECTION OF STATE ROAD A-1-A (COLLINS AVENUE) AND ROUTE 826 (SUNNY ISLES CAUSEWAY) GO SOUTH ON COLLINS AVENUE FOR 0.4 MILE TO THE LA PLAYA DE VARADERO CONDOS (15901 COLLINS AVENUE) AND STATION LOCATION.

STATION IS 2.7 FEET WEST OF THE EASTERN EDGE OF THE SUNDECK, 86 FEET SOUTH SOUTHEAST OF THE NORTHEAST CORNER OF BUILDING AND 39 FEET NORTHEAST OF THE SOUTHEAST CORNER OF BUILDING IN A TUNNEL LIKE OPENING LEADING TO THE SWIMMING POOL.

STATION MARK IS A STANDARD U.S. ARMY CORPS OF ENGINEERS BRONZE DISK, SET FLUSH IN A CONCRETE SUNDECK BETWEEN THE BEACH AND THE BUILDING, AND IS STAMPED "S-2, 1986".

Monument ID: DA R 0019

Locality-Project : N MIAMI BEACH  
Latitude : 0° 0' 0.00000"  
X(E) : 788703.530  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : THIRD  
State : FL  
Monument Set By : FDNR

Date Added : 880607

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

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 578221.300  
Elevation : 10.8300  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1974  
County : DADE

Date Changed : 990325

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

LOCATED IN DADE COUNTY, FL, AT NORTH MIAMI BEACH.

TO REACH FROM THE NORTH END OF HAULOVER INLET BRIDGE, GO NORTH ALONG A1A  
1.5 MILES TO THE OLYMPIA MOTEL, 157 SOUTH OCEAN DRIVE AND STATION  
LOCATION.

STATION IS LOCATED AT NORTHEAST CORNER OF MOTEL PROPERTY IN SEAWALL, 66.0  
FEET EAST OF DRILL HOLE IN SEAWALL.

STATION IS A FDNR BRONZE DISK, SET FLUSH WITH TOPOF SEAWALL AND STAMPED  
"DADE COUNTY R-19, 1974".

Monument ID: DA R 0041A

Locality-Project : MIAMI BEACH  
Latitude : 0° 0' 0.00000"  
X(E) : 789560.173  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : GPS  
State : FL  
Monument Set By : SEASYSTEM

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 554421.851  
Elevation : 10.9986  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1998  
County : DADE

Date Added : 990120  
Date Changed : 990120

Recovered By :  
Company (1) SEASYSTEM (2)  
Person (1) UPHOFF (2)  
Date (1) 08/98 (2)  
Condition (1) GOOD (NEW) (2)

STATION IS LOCATED IN MIAMI BEACH, FLORIDA DADE COUNTY.

TO REACH FROM THE INTERSECTION OF 71ST STREET AND COLLINS AVE. GO NORTH ON COLLINS AVE. PAST 71ST STREET APPROX. 150 FEET. STATION IS LOCATED ON TOP OF THE BEACH DUNE EAST OF BUILDING NO. 7135 ON COLLINS AVE. THE "BURLLEIGH HOUSE" CONDO. STATION IS LOCATED ON TOP OF DUNE EAST OF CONDO.

STATION IS LOCATED 90.1 FEET EAST OF THE EAST FACE OF SAID CONDO (MEAS. 90 DEGREES), 62.5 FEET EAST OF THE CENTERLINE OF A DIRT BEACH ACCESS ROAD AND 108.3 FEET SOUTH OF THE SOUTHSIDE OF A WOODEN DUNE WALKWAY, AND 1.0 FEET EAST OF AN ORANGE CARSONITE WITNESS POST.

MARK IS A STANDARD COE DISK SET IN A 6 INCH PVC PIPE FILLED WITH CONCRETE AND REBAR AND STAMPED R-41A, 98, JAX. FL.

Monument ID: DA R 0042

Locality-Project : MIAMI BEACH  
Latitude : 0° 0' 0.00000"  
X (E) : 789483.440  
Zone : FLE  
Horizontal Datum : NAD27  
Order : THIRD  
State : FL  
Monument Set By : DNR

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y (N) : 553928.020  
Elevation : 12.3900  
Vertical Datum : NGVD 29  
Linear Units : FEET  
Date Set : 1974  
County : DADE

Date Added : 871216

Date Changed : 000526

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

LOCATED 2.8 MILES SOUTH OF BAKERS HAULOVER BRIDGE.

TO REACH FROM INTERSECTION OF COLLINS AVE. AND 96TH STREET, GO EAST ON 96TH APPROXIMATELY 400' TO BEACH, THEN GO SOUTH ALONG BEACH 1.97 MILES TO STATION LOCATION.

STATION IS LOCATED AT THE NORTHEAST CORNER OF PARKING LOT AT THE VICTORIAN PLAZA CONDO, 5.7' WEST OF SEAWALL, 6.4' SOUTH CORNER BLOCKWALL AND PROPERTY LINE.

MARK IS A DNR BRONZE DISK, SET FLUSH IN CORNER PARKING LOT, STAMPED: DADE COUNTY R-42, 1974.

Monument ID: DA R 0042A

Locality-Project : MIAMI BEACH  
Latitude : 0° 0' 0.00000"  
X(E) : 789606.874  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : GPS  
State : FL  
Monument Set By : SEASYSTEM

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 553276.889  
Elevation : 12.0463  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1998  
County : DADE

Date Added : 990120  
Date Changed : 990120

Recovered By :  
Company (1) SEASYSTEM (2)  
Person (1) UPHOFF (2)  
Date (1) 08/98 (2)  
Condition (1) GOOD (NEW) (2)

STATION IS LOCATED AT MIAMI BEACH, FLORIDA IN DADE COUNTY.

TO REACH STATION TRAVEL TO 67TH STREET OFF OF COLLINS AVE. STATION IS ON THE TOP OF THE BEACH DUNE APPROX. 278 FEET SOUTH OF THE EASTERLY EXTENSION OF THE CENTERLINE OF 67TH STREET (BEACH ACCESS) AND NORTHEAST OF THE "OLD CARILLON CONDO".

STATION IS LOCATED 46.5 FEET EAST OF EAST SIDE OF A 28 INCH WIDE CONCRETE BULKHEAD WHICH IS EIGHT FEET WEST OF ACCESS ROAD, 72 FEET NORTHEAST OF THE NORTHEAST CORNER OF A 16 STORY ABANDONED BUILDING, 17.0 FEET EAST OF THE WEST EDGE OF VEGETATION OF SAND DUNE, 1.0 FEET EAST OF AN ORANGE CARSONITE WITNESS POST.

MARK IS A STANDARD COE DISK SET IN A 6 INCH PVC PIPE FILLED WITH CONCRETE AND REBAR AND STAMPED R-42A, 98, JAX. FL.

Monument ID: DA R 0043

Locality-Project : MIAMI BCH.  
Latitude : 0° 0' 0.00000"  
X(E) : 789548.370  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : THIRD  
State : FL  
Monument Set By : FDNR

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 552785.510  
Elevation : 7.6100  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1980  
County : DADE

Date Added : 871216

Date Changed : 990927

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

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

LOCATION: 3.05 MILES SOUTH OF BAKERS HAULOVER BRIDGE, MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH: FROM THE INTERSECTION OF COLLINS AVENUE AND NORTHEAST 41ST STREET, GO NORTH ON COLLINS AVENUE TO NORTHEAST 42ND STREET AND TURN RIGHT AND GO TO THE BEACH, THEN GO NORTH ALONG THE BEACH 2.45 MILES TO THE SOUTH END OF THE CARILLON HOTEL AND STATION LOCATION.

OR TO REACH: FROM THE INTERSECTION OF COLLINS AVENUE AND 96TH STREET, GO EAST ON 96TH STREET APPROXIMATELY 400' TO THE BEACH; THEN GO SOUTH ALONG THE BEACH 2.22 MILES TO THE SOUTHEAST CORNER OF THE CARILLON HOTEL AND STATION LOCATION

STATION IS LOCATED 23.6', S 72 DEGREES 04' 00"W), OF THE SOUTHEAST CORNER OF THE SOUTH CARILLON CABANAS, AND 36.4', N 2 DEGREES 39' 15"W, OF THE NORTHEAST CORNER OF THE STERL

Monument ID: DA R 0043A

Locality-Project : MIAMI BEACH  
Latitude : 0° 0' 0.00000"  
X (E) : 789642.053  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : GPS  
State : FL  
Monument Set By : SEA SYST.

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y (N) : 552298.368  
Elevation : 11.1178  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1998  
County : DADE

Date Added : 990120

Date Changed : 990927

Recovered By :  
Company (1) SEASYSTEM (2)  
Person (1) UPHOFF (2)  
Date (1) 08/98 (2)  
Condition (1) GOOD (NEW) (2)

STATION IS LOCATED IN MIAMI BEACH, DADE COUNTY, FLORIDA.

TO REACH FROM THE INTERSECTION OF 67TH STREET AND COLLINS AVE. GO NORTH ON COLLINS AVE. FOR 100 FEET TO THE "COLLINS THEATRE" AND HOTEL NO. 6705. STATION IS LOCATED ON TOP OF BEACH DUNE EAST OF HOTEL.

STATION IS LOCATED 59.1 FEET EAST OF EAST FACE OF SAID CONDO (MEAS. 90 DEGREES), 97.0 FEET NORTH NORTHEAST OF THE NORTHEAST CORNER OF THE POOL DECK, 25.8 FEET EAST OF THE SAND FENCE LOCATED AT THE WEST EDGE OF VEGETATION OF SAID DUNE, 1.0 FEET EAST OF AN ORANGE CARSONITE WITNESS POST.

MARK IS A STANDARD USACOE DISK SET IN A 6 INCH DIAMETER PVC PIPE FILLED WITH CONCRETE WITH NO. 5 REBAR AND STAMPED "R-43A 98 JAX. FLA."

Monument ID: DA R 0044

Locality-Project : MIAMI BEACH  
Latitude : 0° 0' 0.00000"  
X(E) : 789599.800  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : THIRD  
State : FL  
Monument Set By : USACOE

Date Added : 871214

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

Monument Type : S.M.  
Longitude : 0° 0' 0.00000"  
Y(N) : 551889.800  
Elevation : 8.6300  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1974  
County : DADE

Date Changed : 990927

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

LOCATED 3.7 MILES SOUTH OF HAULOVER BRIDGE.

TO REACH FROM INTERSECTION OF COLLINS AVE. AND NE 41ST STREET, GO NORTH ON COLLINS AVE TO NE 42ND STREET AND TURN RIGHT AND GO TO BEACH. THEN GO NORTH ALONG THE BEACH 2.35 MILES TO SHERR FRONTENAC HOTEL AND VILLAS.

STATION IS LOCATED 61.2' SOUTH OF THE NORTHEAST CORNER PROPERTY LINE, ON THE EDGE OF SEAWALL, 1' EAST OF 5' HIGH CHAIN LINK FENCE.

MARK IS A SURVEY MARKER DRIVEN FLUSH IN EAST EDGE OF SEAWALL AND STAMPED: "R-44 ".



Monument ID: DA R 0044A

Locality-Project : MIAMI BEACH  
Latitude : 0° 0' 0.00000"  
X (E) : 789666.205  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : GPS  
State : FL  
Monument Set By : SEASYSTEM

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y (N) : 551412.459  
Elevation : 11.3363  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1998  
County : DADE

Date Added : 990120  
Date Changed : 990927

Recovered By :  
Company (1) SEASYSTEM (2)  
Person (1) UPHOFF (2)  
Date (1) 08/98 (2)  
Condition (1) GOOD (NEW) (2)

STATION IS LOCATED IN MIAMI BEACH, FLORIDA IN DADE COUNTY.  
TO REACH STATION TRAVEL TO THE INTERSECTION OF COLLINS AVE. AND 65TH STREET. STATION IS LOCATED AT THE TOP OF BEACH DUNE EAST OF 6515 COLLINS AVE. "THE BEL AIRE".  
STATION IS 24.5 FEET EAST OF A SAND FENCE LOCATED AT THE WEST EDGE OF VEG-ETATION OF SAID DUNE, 65.7 FEET SOUTHEAST OF THE NORTHEAST CORNER OF A ONE STORY POOL CABANA BUILDING, 109.5 FEET SOUTH OF THE SOUTH SIDE OF A WOODEN DUNE WALKOVER, 1.0 FEET EAST OF A ORANGE CARSONITE WITNESS POST.  
MARK IS A STANDARD USACOE BRONZE DISK SET IN A 6" BY 30" MASS OF CONCRETE IN A 6" PVC PIPE WITH NO. 5 REBAR AND STAMPED "R-44A 98 JAX. FLA."

Monument ID: DA R 0045

Locality-Project :  
Latitude : 0° 0' 0.00000"  
X(E) : 789469.120  
Zone : FLE  
Horizontal Datum : NAD27  
Order : THIRD  
State : FL  
Monument Set By : DNR

Date Added : 871216

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

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 550930.230  
Elevation : 8.7500  
Vertical Datum : NGVD 29  
Linear Units : FEET  
Date Set : 1980  
County : DADE

Date Changed : 000526

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

LOCATION: 3.35 MILES SOUTH OF BAKERS HAULOVERBRIDGE. TO REACH: FROM THE INTERSECTION OF COLLINS AVENUE AND NORTHEAST 41ST STREET, GO NORTH ON COLLINS AVENUE TO NORTHEAST 42ND STREET AND TURN RIGHT AND GO TO THE BEACH; THEN GO NORTH ALONG THE BEACH 2.15 MILES TO THE SOUTH END OF PARKING AREA 18-1 AND STATION LOCATION. STATION: IS LOCATED 37.2', S 36 DEGREES 10' 15"E, FROM A METAL LIGHT POLE, N 52 DEGREES 37' 30" E, FROM THE SOUTHEAST CORNER OF ASPHALT PARKING AREA, AND 32.6' NORTH OF AN 8' CBS WALL. MARK: IS A DNR BRONZE DISK, SET FLUSH IN THE CONCRETE SIDEWALK, STAMPED R-45.

Monument ID: DA R 0045A

Locality-Project : MIAMI BEACH  
Latitude : 0° 0' 0.00000"  
X (E) : 789673.259  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : GPS  
State : FL  
Monument Set By : SEASYSTEM

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y (N) : 550470.818  
Elevation : 11.2831  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1998  
County : DADE

Date Added : 990120  
Date Changed : 990120

Recovered By :  
Company (1) SEASYSTEM (2)  
Person (1) UPHOFF (2)  
Date (1) 08/98 (2)  
Condition (1) GOOD (NEW) (2)

STATION IS LOCATED @ MIAMI BEACH, FLORIDA IN DADE COUNTY.  
TO REACH STATION FROM THE INTERSECTION OF COLLINS AVE. AND 63RD STREET  
GO NORTH ON COLLINS AVE. .07 MILES TO 6365 COLLINS AVE. AND CONDO "WHITE  
DIAMOND" (UNDER CONSTRUCTION). STATION IS ON TOP OF BEACH DUNE EAST OF  
BUILDING.

STATION IS LOCATED 22.3 FEET EAST OF THE WEST EDGE OF VEGETATION OF SAID  
DUNE, 42.9 FEET NORTH OF NORTH-EAST CORNER OF A WOODEN DUNE WALKOVER, 157.1  
FEET SOUTH OF DNR MONUMENT "87-91-DA-17" SECOND ORDER CONTROL STATION.

MARK IS A STANDARD COE DISK SET IN A 8" BY 30" DIAMETER DEEP MASS OF  
CONCRETE WITH NO. 5 REBAR AND STAMPED R-45A, 98, JAX. FLA.

NOTE: STATION IS GOOD FOR GPS OBSERVATION.

Monument ID: DA R 0046

Locality-Project : MIAMI BEACH  
Latitude : 0° 0' 0.00000"  
X(E) : 789604.150  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : GPS  
State : FL  
Monument Set By : DNR

Date Added : 990122

Recovered By :  
Company (1) SEASYSTEM  
Person (1) LEWIS  
Date (1) 08/98  
Condition (1) GOOD

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 549994.860  
Elevation : 11.8000  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1997  
County : DADE

Date Changed : 990122

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

STATION IS LOCATED IN MIAMI BEACH, FLORIDA IN DADE COUNTY.

TO REACH STATION TRAVEL IN THE VICINITY OF COLLINS AVE. AND 63RD STREET  
BEHIND "LA GORCE PALACE" BUILDING NO. 6301.

STATION IS LOCATED IN BEACH DUNE, 47 FEET NORTH OF PROPERTY LINE OF  
RESIDENCE NO. 6301, 45.3 FEET EAST OF METAL FENCE, 14 FEET EAST OF WIRE  
AND LATHE FENCE, AND 31 FEET SOUTH OF SOUTH EDGE OF DUNE WALKOVER.

MARK IS A BERNSTEIN MONUMENT WITH DNR BRONZE DISK AND STAMPED R-46 DA 97.

Monument ID: DA R 0046A

Locality-Project : MIAMI BEACH  
Latitude : 0° 0' 0.00000"  
X(E) : 789532.759  
Zone : FLE  
Horizontal Datum : NAD-27  
Order : GPS  
State : FL  
Monument Set By : SEA

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 549477.885  
Elevation : 10.5831  
Vertical Datum : NGVD-29  
Linear Units : FEET  
Date Set : 1998  
County : DADE

Date Added : 990120  
Date Changed : 990120

Recovered By :  
Company (1) SEASYSTEM (2)  
Person (1) UPHOFF (2)  
Date (1) 08/98 (2)  
Condition (1) GOOD (NEW) (2)

STATION IS LOCATED AT MIAMI BEACH, FLORIDA IN DADE COUNTY.  
TO REACH STATION TRAVEL TO 6039 COLLINS AVE. TO THE MASA GRAND CONDO.  
STATION IS LOCATED ON TOP OF THE DUNE EAST OF CONDO MASA GRAND @ 6039 COLLINS AVE. STATION IS 74 FEET EAST AND 90 DEGREES TO CONCRETE WALL THAT IS APPROX. 15 FEET HIGH, 28.6 FEET SOUTH OF THE SOUTH SIDE OF A DUNE WALKOVER (WOOD), 19.0 FEET EAST OF THE WEST EDGE OF VEGETATION OF SAND DUNE, 1.0 FEET EAST OF AN ORANGE CARSONITE WITNESS POST.

MARK IS A STANDARD COE DISK SET IN 8" X 30" DEEP MASS OF CONCRETE WITH NO. 5 REBAR AND STAMPED R-46A, 98, JAX.FLA.

NOTE: STATION IS GOOD FOR GPS OBSERVATION.

Monument ID: DA R 0047

Locality-Project : MIAMI BEACH  
Latitude : 0° 0' 0.00000"  
X(E) : 789254.990  
Zone : FLE  
Horizontal Datum : NAD27  
Order : DNR  
State : FL  
Monument Set By : DNR

Monument Type : DISK  
Longitude : 0° 0' 0.00000"  
Y(N) : 548903.340  
Elevation : 8.2600  
Vertical Datum : NGVD 29  
Linear Units : FEET  
Date Set : 1974  
County : DADE

Date Added : 871217

Date Changed : 961011

Recovered By :

Company (1)  
Person (1)  
Date (1)  
Condition (1)

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

THIS MONUMENT SERVES AS DADE CO. BEACH PL-9.

LOCATED 3.35 MILES SOUTH OF BAKERS HAULOVER BRIDGE.

TO REACH FROM THE INTERSECTION OF COLLINS AVENUE AND NORTHEAST 41ST STREET, GO NORTH ON COLLINS TO NORTHEAST 42ND STREET; TURN RIGHT AND GO TO THE BEACH; THEN GO NORTH ALONG THE BEACH 1.85 MILES TO THE BATH CLUB AND STATION LOCATION.

STATION IS LOCATED 17.5', N 59 DEGREES 43' 00"E, FROM THE NORTHEAST CORNER OF THE EAST CABANA BUILDING, AND 63.2', S 88 DEGREES 28' 05", FROM THE SOUTHWEST CORNER OF THE NORTH CABANA BUILDING.

MARK IS A DEPARTMENT OF NATURAL RESOURCES BRONZE DISK, SET FLUSH IN THE CONCRETE WALL, STAMPED: R-47.

APPENDIX G

CORE BORING LOGS AND LABORATORY DATA

CORE BORING NOTES

1. BORING LOCATIONS ARE SHOWN ON DRAWING NOS. 4/1, 4/2 AND 5/1.
2. ELEVATIONS ARE IN FEET AND TENTHS OF FEET AND REFER TO MEAN LOW WATER WHICH IS 1.3 FEET BELOW MEAN SEA LEVEL (NGVD 1929).
3. BLS/FT. REFER TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2-1/2" O.D.) ONE FOOT. THE SAMPLER IS 5 FEET LONG AND DRIVEN CONTINUOUSLY WHERE POSSIBLE.

BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN CORRELATED WITH STANDARD SPLIT-SPOON TESTS AS DESIGNATED IN ASTM D 1586. THE CONTRACTOR IS CAUTIONED TO USE JUDGEMENT IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER.

4. BLS/0.5 FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A SPLIT-SPOON (1-3/8" I.D. X 2" O.D.) ONE-HALF FOOT. THE SPOON IS 2.0 FEET LONG AND DRIVEN CONTINUOUSLY ONE AND ONE-HALF FEET WHERE POSSIBLE.
5. (SP) AND (SP-SM), ETC., REFERS TO THE UNIFIED SOILS CLASSIFICATION SYSTEM AS ADOPTED BY THE CORPS OF ENGINEERS. MATERIALS ARE CLASSIFIED ON THE BASIS OF VISUAL EXAMINATION AND LABORATORY ANALYSIS. LABORATORY CLASSIFICATION TAKES PRECEDENCE OVER VISUAL FIELD CLASSIFICATION.
6. ROCK HARDNESS IS DEFINED BY THE FOLLOWING:
  - SOFT - CAN BE SCRATCHED WITH FINGERNAIL.
  - MODERATELY HARD - CAN BE SCRATCHED WITH KNIFE; CANNOT BE SCRATCHED WITH FINGERNAIL.
  - HARD - DIFFICULT TO SCRATCH WITH KNIFE.
  - VERY HARD - CANNOT BE SCRATCHED WITH KNIFE.
7. CORE SAMPLES TAKEN DURING THE BORING OPERATIONS ARE AVAILABLE FOR INSPECTION AT THE CORPS OF ENGINEERS DISTRICT WAREHOUSE IN JACKSONVILLE, FLORIDA.
8. ORIGINAL FIELD LOGS ARE AVAILABLE FOR INSPECTION AT THE JACKSONVILLE DISTRICT OFFICE.

**Core Boring Logs and Laboratory Data  
Borrow Area SGC-2**

**01000-G1**



# Hole No. CB-DAC-168

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1			
1. PROJECT Dade County Shore Protection Project		10. SIZE AND TYPE OF BIT See Remarks					
2. LOCATION (Coordinates or Station) X=797,992 Y=503,101		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) Mean Low Water, 1.31 ft. below NGVD					
3. DRILLING AGENCY Corps of Engineers		12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500					
4. HOLE NO. (As shown on drawing title and file number) CB-DAC-168		13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN disturbed: 4 undisturbed: 0					
5. NAME OF DRILLER R. Gordon		14. TOTAL NUMBER OF CORE BOXES 1					
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		15. ELEVATION GROUND WATER Tide +2.0					
7. THICKNESS OF BURDEN 0 Ft.		16. DATE HOLE STARTED COMPLETED 4/28/93 4/28/93					
8. DEPTH DRILLED INTO ROCK 0 Ft.		17. ELEVATION TOP OF HOLE -36.7 Ft.					
9. TOTAL DEPTH OF HOLE 22.4 Ft.		18. TOTAL CORE RECOVERY FOR BORING 36 %					
		19. SIGNATURE OF GEOLOGIST J. Gentile					
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS Bit or Barrel	BLOWS/FT
-36.7	0.0					-36.7	0
		●●●●●	SAND, Carbonate, fine to coarse, sand size shell and limestone fragments, Trace shell (Gravel size shell fragments), Trace silt, Tan, (SW)	54	1	2 inch Sampler 3 inch Casing	2 8 14 19 30
						-41.7	5
		●●●●●	SAND, Carbonate, fine to coarse, sand size shell and limestone fragments, Trace to little calcareous silt, little shell (Gravel size fragments), Tan-gray, (SW-SM)	36	3	2 inch Sampler 3 inch Casing	13 9 7 7 7
						-43.7	7.5
-44.7	8.0	●●●●●					9
		●●●●●					7
						-48.7	10
		●●●●●					6
							7
		●●●●●					12
							5
-50.7	14.0	●●●●●	SAND, Carbonate, fine to coarse, sand size shell and limestone fragments, seems partly cemented shell, isolated limestone lenses, little calcareous silt, bed medium hard limestone from -50-7 to -50.9, (SM)	14	4	2 inch Sampler 3 inch Casing	1 2
							15
		●●●●●					3
-53.7	17.0	●●●●●				-53.7	17
			No sample taken				Washed
			No sample taken				Washed
				No Rec.		Washed rods down to rock	20
							22
-59.1	22.4		LIMESTONE, Hard 01000-G2			-59.1	

<b>DRILLING LOG</b>	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2
1. PROJECT Dade County Shore Protection Project	10. SIZE AND TYPE OF BIT See Remarks		
2. LOCATION (Coordinates or Station) X=797,994 Y=502,099	11. DATE FOR ELEVATION SHOWN (TBM or MSL) Mean Low Water, 1.31 ft. below NGVD		
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500		
4. HOLE NO. (As shown on drawing title and file number) CB-DAC-171	13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN disturbed: 4     undisturbed: 0		
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER OF CORE BOXES 1		
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED	15. ELEVATION GROUND WATER Tide +0.9		
7. THICKNESS OF BURDEN 0 Ft.	16. DATE HOLE STARTED COMPLETED 3/11/93    3/11/93		
8. DEPTH DRILLED INTO ROCK 0 Ft.	17. ELEVATION TOP OF HOLE -35.1 Ft.		
9. TOTAL DEPTH OF HOLE 22.5 Ft.	18. TOTAL CORE RECOVERY FOR BORING 55 %		
	19. SIGNATURE OF GEOLOGIST J. Gentile		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS Bit or Barrel	BLOWS/ft
-35.1	0.0		SAND, Carbonate, fine to coarse, sand size shell and limestone fragments, Trace silt, Trace shell (Gravel size fragments), Tan, (SW)	80	1	2 inch Sampler 3 inch Casing	-35.1
							8
							9
							11
							14
							14
							-40.1
				60	2	2 inch Sampler 3 inch Casing	11
			9				
			12				
			10				
							12
							14
							-45.1
-46.1	11.0		SAND, Carbonate, fine to medium, sand size shell and limestone fragments, Trace shell (Gravel size), Tan, Trace to little silt, (SP-SM)	40	3	2 inch Sampler 3 inch Casing	9
							12
							6
							8
							14
							9
							-50.1
-50.1	15.0		SAND, Carbonate, fine to medium, sand size shell and limestone fragments, little calcareous silt, Tan, (SM)	40	4	2 inch Sampler 3 inch Casing	8
							4
							4
							4
							-53.1

01000-G3

(continued)

DRILLING LOG (Cont. Sheet)		ELEVATION TOP OF HOLE		SHEET 2 OF 2			
PROJECT			INSTALLATION				
Dade County Shore Protection Project			Jacksonville District				
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS Bit or Barrel	BLOWS/ft
-53.1	18.0		SAND, as above			-53.1	18
						2 inch Sampler 3 inch Casing	4 5
				No Rec.		-55.1	20
						Washed rods down to rock	Washed .
-57.6	22.5		LIMESTONE, Hard, below -57.6			-57.6	22
-58.6	23.5					300# Hammer With 18" Drop Used On 2" x 5' Sampler	
			Soils are field visually classified in accordance with the Unified Soils Classification System.			Laboratory Classification Sample No.      Classification 1                      (SP-SM) 3                      (SP-SM)	24
							26
							28
							30
							32
							34
							36
							38
							40

01000-C4

<b>DRILLING LOG</b>	<b>DIVISION</b> South Atlantic	<b>INSTALLATION</b> Jacksonville District	<b>SHEET 1</b> OF 2
	<b>1. PROJECT</b> Dade County Shore Protection Project	<b>10. SIZE AND TYPE OF BIT</b> See Remarks	
<b>2. LOCATION (Coordinates or Station)</b> X=797,391 Y=501,095	<b>11. DATUM FOR ELEVATION SHOWN (TBM or NSL)</b> Mean Low Water, 1.31 ft. below NGVD		
<b>3. DRILLING AGENCY</b> Corps of Engineers	<b>12. MANUFACTURER'S DESIGNATION OF DRILL</b> Failing 1500		
<b>4. HOLE NO. (As shown on drawing title and file number)</b> CB-DAC-174	<b>13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN</b> disturbed: 5 undisturbed: 0		
<b>5. NAME OF DRILLER</b> R. Gordon	<b>14. TOTAL NUMBER OF CORE BOXES</b> 1		
<b>6. DIRECTION OF HOLE</b> <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED	<b>15. ELEVATION GROUND WATER</b> Tide +1.4		
<b>7. THICKNESS OF BURDEN</b> 0 Ft.	<b>16. DATE HOLE STARTED COMPLETED</b> 4/27/93 4/27/93		
<b>8. DEPTH DRILLED INTO ROCK</b> 0 Ft.	<b>17. ELEVATION TOP OF HOLE</b> -36.8 Ft.		
<b>9. TOTAL DEPTH OF HOLE</b> 24.3 Ft.	<b>18. TOTAL CORE RECOVERY FOR BORING</b> 47 %		
	<b>19. SIGNATURE OF GEOLOGIST</b> J. Gentile		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS Bit or Barrel	BLOWS/ft
-36.8	0.0					-36.8	0
			SAND, Carbonate, fine to coarse, sand size shell and limestone fragments, Trace silt, Trace shell (Gravel size fragments), Tan, (SW)	36	1	2 inch Sampler 3 inch Casing	4 9 11 13 14
						-41.8	2
					2		8
-43.8	7.0		SAND, Carbonate, fine to medium, sand size shell and limestone fragments, Trace to little silt, Trace shell (Gravel size), Tan-gray, (SP-SM)	60	3	2 inch Sampler 3 inch Casing	15 12
						-46.8	4
					4	2 inch Sampler 3 inch Casing	11 11 5 5
						-51.8	10
-51.8	15.0		SAND, Carbonate, fine to medium, sand size shell and rock fragments, little to some calcareous silt, Light-gray, Trace shell (Gravel size), (SM)	60	5	2 inch Sampler 3 inch Casing	6 6 9
						-54.8	12
							9
							8
							7
						-54.8	18

01000-05

(continued)

DRILLING LOG (Cont. Sheet)		ELEVATION TOP OF HOLE		SHEET 2 OF 2			
PROJECT Dade County Shore Protection Project			INSTALLATION Jacksonville District				
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC x	SAMPLE NUMBER	REMARKS Bit or Barrel	BLOWS/ f
-54.8	18.0		SAND, as above			-54.8	8
-56.8	20.0		No sample recovered			-56.8	10
				No Rec.		Washed rods down to rock @ -61.8	Washed
-61.1	24.3		LIMESTONE, Hard, bounce, below -61.8			-61.1	
-62.1	25.3		Soils are field visually classified in accordance with the Unified Soils Classification System.			300# Hammer With 18" Drop Used On 2" x 5" Sampler	
						<u>Laboratory Classification</u> Sample No.      Classification 1                    (SP) 3                    (SM) 4                    (SM) 5                    (SM)	

01000-G6

<b>DRILLING LOG</b>	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2
	1. PROJECT Dade County Shore Protection Project		10. SIZE AND TYPE OF BIT See Remarks
2. LOCATION (Coordinates or Station) X=797,999 Y=501,098		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) Mean Low Water, 1.31 ft. below NGVD	
3. DRILLING AGENCY Corps of Engineers		12. MANUFACTURER'S DESIGNATION OF DRILL Falling 1500	
4. HOLE NO. (As shown on drawing title and file number) CB-DAC-175		13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN disturbed: 4 undisturbed: 0	
5. NAME OF DRILLER R. Gordon		14. TOTAL NUMBER OF CORE BOXES 1	
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		15. ELEVATION GROUND WATER Tide +0.1	
7. THICKNESS OF BURDEN 0 Ft.		16. DATE HOLE STARTED COMPLETED 4/02/93 4/02/93	
8. DEPTH DRILLED INTO ROCK 0 Ft.		17. ELEVATION TOP OF HOLE -35.1 Ft.	
9. TOTAL DEPTH OF HOLE 21.3 Ft.		18. TOTAL CORE RECOVERY FOR BORING 52 %	
		19. SIGNATURE OF GEOLOGIST J. Gentile	

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS Bit or Barrel	BLOWS/ft
-35.1	0.0					-35.1	0
			SAND, Carbonate, fine to coarse, sand size shell and limestone fragments, Trace silt, Tan, Trace shell (Gravel size fragments), (SW)	60	1	2 inch Sampler 3 inch Casing	2
							9
							2
							11
							15
							4
							15
							-40.1
							7
							6
							14
							8
							16
							14
							7
-45.1	10.0		SAND, Carbonate, fine to coarse, sand size shell and limestone fragments, little shell (Gravel size), Tan-gray, Trace to little calcareous silt, (SW-SM)			-45.1	10
							6
							8
							12
				42	3	2 inch Sampler 3 inch Casing	5
							6
							14
							9
-50.1	15.0		SAND, Carbonate, fine, shell and limestone fragments (Sand size), Off-white, little calcareous silt, (SM)			-50.1	16
							2
				52	4	2 inch Sampler 3 inch Casing	3
							6
							18
						-53.1	18

01000-GA (continued)

DRILLING LOG (Cont. Sheet)		ELEVATION TOP OF HOLE		SHEET 2 OF 2			
PROJECT Dade County Shore Protection Project			INSTALLATION Jacksonville District				
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS Bit or Barrel	BLOWS/ft
-53.1	18.0		SAND, as above			-53.1	18
						2 inch Sampler 3 inch Casing	5 8
						-55.1	20
						Washed rods down to rock @ -56.4	Washed
-56.4	21.3		LIMESTONE, Hard			-56.4	22
						Refusal	
-57.4	22.3		Soils are field visually classified in accordance with the Unified Soils Classification System.			300# Hammer With 18" Drop Used On 2" x 5' Sampler	22
						Laboratory Classification	
						Sample No.      Classification	
						1                      (SP-SM)	
						3                      (SM)	
						4                      (SM)	24
							26
							28
							30
							32
							34
							36
							38
							40

01000-C8

<b>DRILLING LOG</b>	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1
	1. PROJECT DADE COUNTY SPP	10. SIZE AND TYPE OF BIT 3 1/2" Drive Shoe	
	2. LOCATION (Coordinates or Station) X=79757.16 Y=50050.60	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW	
	3. DRILLING AGENCY ALPINE OCEAN SURVEY, INC.	12. MANUFACTURER'S DESIGNATION OF DRILL VIBRACORE	
	4. HOLE NO. (As shown on drawing title and file number) CB-DAC-177	13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN disturbed: 0 undisturbed: 0	
	5. NAME OF DRILLER NICK PRICE	14. TOTAL NUMBER OF CORE BOXES 2	
	6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED	15. ELEVATION GROUND WATER Tide = +1.9	
	7. THICKNESS OF BURDEN 0 Ft.	16. DATE HOLE STARTED COMPLETED 7/4/96 0859/0901	
	8. DEPTH DRILLED INTO ROCK 0 Ft.	17. ELEVATION TOP OF HOLE -32.6 Ft.	
9. TOTAL DEPTH OF HOLE 19.9 Ft.	18. TOTAL CORE RECOVERY FOR BORING 89 %		
	19. SIGNATURE OF GEOLOGIST ROCKLAND BURR		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-32.6	.0					-32.6
			Sand, fine to medium grained, light brown, a little shell fragments (SP)			Lat-Lon 25 42 28.3N 80 05 47.0W  Laboratory Data Depth USCS SpG. 3.5 SP 8.5 SP-SM 10.5 SP-SM 12.0 SM
-40.6	8.0		Sand, fine grained, light brown, trace of shell fragments (SP-SM)			
-42.6	10.0		Sand, fine to medium grained, light brown, some shell fragments (SP-SM)			
-43.5	10.9		Silty sand, fine grained, light brown, few shell fragments (SM)			
-52.5	19.9		End of Boring			
			Soils are field visually classified in accordance with the Unified Soils Classification System.			



Hole No. CB-DAC-178

<b>DRILLING LOG</b>	<b>DIVISION</b> South Atlantic	<b>INSTALLATION</b> Jacksonville District	<b>SHEET 1</b> OF 1
<b>1. PROJECT</b> DADE COUNTY SPP		<b>10. SIZE AND TYPE OF BIT</b> 3 1/2" Drive Shoe	
<b>2. LOCATION (Coordinates or Station)</b> X=79811,8.2 Y=50049,0.4		<b>11. DATUM FOR ELEVATION SHOWN (TBM or MSL)</b> MLW	
<b>3. DRILLING AGENCY</b> ALPINE OCEAN SURVEY, INC.		<b>12. MANUFACTURER'S DESIGNATION OF DRILL</b> VIBRACORE	
<b>4. HOLE NO. (As shown on drawing title and file number)</b> CB-DAC-178		<b>13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN</b> disturbed: 0 undisturbed: 0	
<b>5. NAME OF DRILLER</b> NICK PRICE		<b>14. TOTAL NUMBER OF CORE BOXES</b> 2	
<b>6. DIRECTION OF HOLE</b> <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		<b>15. ELEVATION GROUND WATER</b> Tide = +2.8	
<b>7. THICKNESS OF BURDEN</b> 0 Ft.		<b>16. DATE HOLE STARTED COMPLETED</b> 7/21/96 1029/1031	
<b>8. DEPTH DRILLED INTO ROCK</b> 0 Ft.		<b>17. ELEVATION TOP OF HOLE</b> -33.8 Ft.	
<b>9. TOTAL DEPTH OF HOLE</b> 19.8 Ft.		<b>18. TOTAL CORE RECOVERY FOR BORING</b> 86 %	
<b>19. SIGNATURE OF GEOLOGIST</b> ROCKLAND BURR			

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-33.8	0		Sand, fine to medium grained, light brown, some shell fragments (SP)			-33.8
						Lat-Lon 25 42 28.08N 80 05 40.62W  Laboratory Data  Depth USCS SpG. 3.5 SP 7.5 SP-SM 11.0 SM 16.5 SM
-39.4	5.6		Sand, fine grained, light brown, a little shell fragments (SP-SM)			
-43.0	9.2		Silty sand, fine to coarse grained, light brown, some shell fragments (SM)			
-45.9	12.1		Silty sand, fine grained, light brown, a little shell fragments (SM)			
-53.8	19.8		End of Boring			
			Soils are field visually classified in accordance with the Unified Soils Classification System.			

<b>DRILLING LOG</b>	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1
	1. PROJECT DADE COUNTY SPP	10. SIZE AND TYPE OF BIT 3 1/2" Drive Shoe	
2. LOCATION (Coordinates or Station) X=79769,9.4 Y=49986,2.9	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW	12. MANUFACTURER'S DESIGNATION OF DRILL VIBRACORE	
3. DRILLING AGENCY ALPINE OCEAN SURVEY, INC.	13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN disturbed: 0 undisturbed: 0	14. TOTAL NUMBER OF CORE BOXES 2	
4. HOLE NO. (As shown on drawing title and file number) CB-DAC-179	15. ELEVATION GROUND WATER Tide = +3.3	16. DATE HOLE STARTED COMPLETED 7/4/96 1104	
5. NAME OF DRILLER NICK PRICE	17. ELEVATION TOP OF HOLE -32.9 Ft.	18. TOTAL CORE RECOVERY FOR BORING 98 %	
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED	19. SIGNATURE OF GEOLOGIST ROCKLAND BURR		
7. THICKNESS OF BURDEN 0 Ft.			
8. DEPTH DRILLED INTO ROCK 0 Ft.			
9. TOTAL DEPTH OF HOLE 19.9 Ft.			

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-32.9	.0					-32.9
			Sand, fine grained, light brown, a little shell fragments (SP)			Lat-Lon 25 42 21.9N 80 05 45.2W  Laboratory Data Depth USCS SpG. 3.5 SP 6.0 SP-SM 7.0 SP-SM 13.5 SM 18.0 SM
-38.9	6.0		Sand, fine to coarse grained, light brown (SP-SM)			
-40.9	8.0		Sand, fine to medium grained, some shell fragments, a little shell gravel (SP-SM)			
-44.5	11.6		Silty sand, fine grained, light brown, trace of shell fragments (SM)			
-52.8	19.9		End of Boring			
			Soils are field visually classified in accordance with the Unified Soils Classification System.			

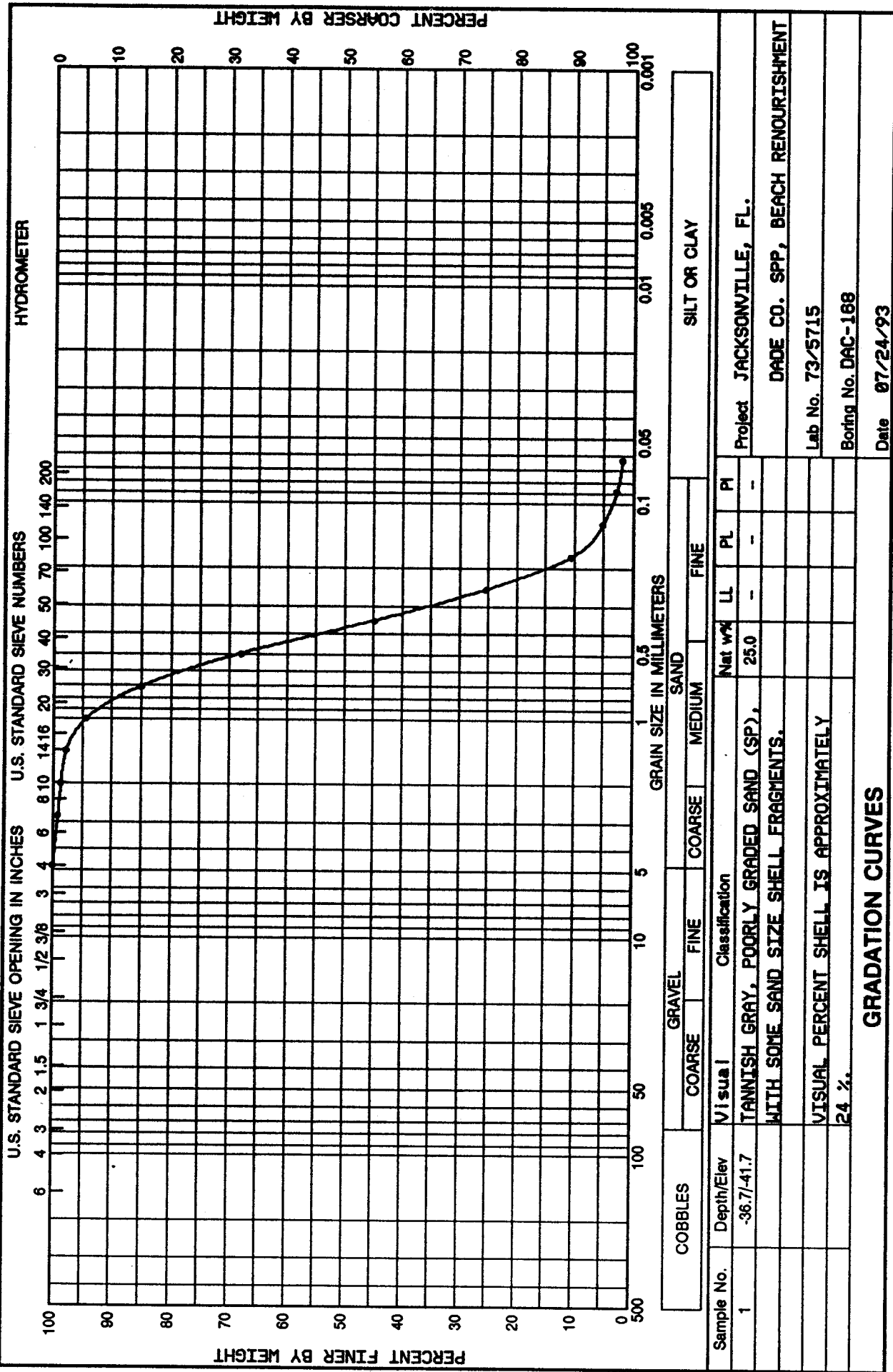
<b>DRILLING LOG</b>	<b>DIVISION</b> South Atlantic	<b>INSTALLATION</b> Jacksonville District	<b>SHEET 1</b> OF 1
<b>1. PROJECT</b> DADE COUNTY SPP		<b>10. SIZE AND TYPE OF BIT</b> 3 1/2" Drive Shoe	
<b>2. LOCATION (Coordinates or Station)</b> X=79811,3.9 Y=49985,6.3		<b>11. DATUM FOR ELEVATION SHOWN (TBM or MSL)</b> MLW	
<b>3. DRILLING AGENCY</b> ALPINE OCEAN SURVEY, INC.		<b>12. MANUFACTURER'S DESIGNATION OF DRILL</b> VIBRACORE	
<b>4. HOLE NO. (As shown on drawing title and file number)</b> CB-DAC-180		<b>13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN</b> disturbed: 0 undisturbed: 0	
<b>5. NAME OF DRILLER</b> NICK PRICE		<b>14. TOTAL NUMBER OF CORE BOXES</b> 2	
<b>6. DIRECTION OF HOLE</b> <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		<b>15. ELEVATION GROUND WATER</b> Tide = +3.7	
<b>7. THICKNESS OF BURDEN</b> 0 Ft.		<b>16. DATE HOLE STARTED COMPLETED</b> 7/4/96 1125	
<b>8. DEPTH DRILLED INTO ROCK</b> 0 Ft.		<b>17. ELEVATION TOP OF HOLE</b> -31.8 Ft.	
<b>9. TOTAL DEPTH OF HOLE</b> 19.6 Ft.		<b>18. TOTAL CORE RECOVERY FOR BORING</b> 89 %	
<b>19. SIGNATURE OF GEOLOGIST</b> ROCKLAND BURR			

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-31.8	0		Sand, fine to coarse grained, light brown, some shell fragments (SP)			-31.8  Lat-Lon 25 42 21.8N 80 05 40.7W  Laboratory Data Depth USCS SpG. 1.0 SP 8.5 SP 12.0 SP-SM 16.5 SM
-40.3	8.5		Sand, fine to medium grained, light brown, mostly shell fragments (SP-SM)			
-45.4	13.6		Silty sand, fine grained, light brown, some shell fragments (SM)			
-51.4	19.6		End of Boring			
			Soils are field visually classified in accordance with the Unified Soils Classification System.			

## Borrow Area Laboratory Data

DEPARTMENT OF THE ARMY, SOUTH ATLANTIC DIVISION LABORATORY  
 CORPS OF ENGINEERS, 611 SOUTH COBB DRIVE, MARIETTA, GA. 30060

WORK ORDER: 7021  
 REQUISITION: RM-CW-0333



01000-G14



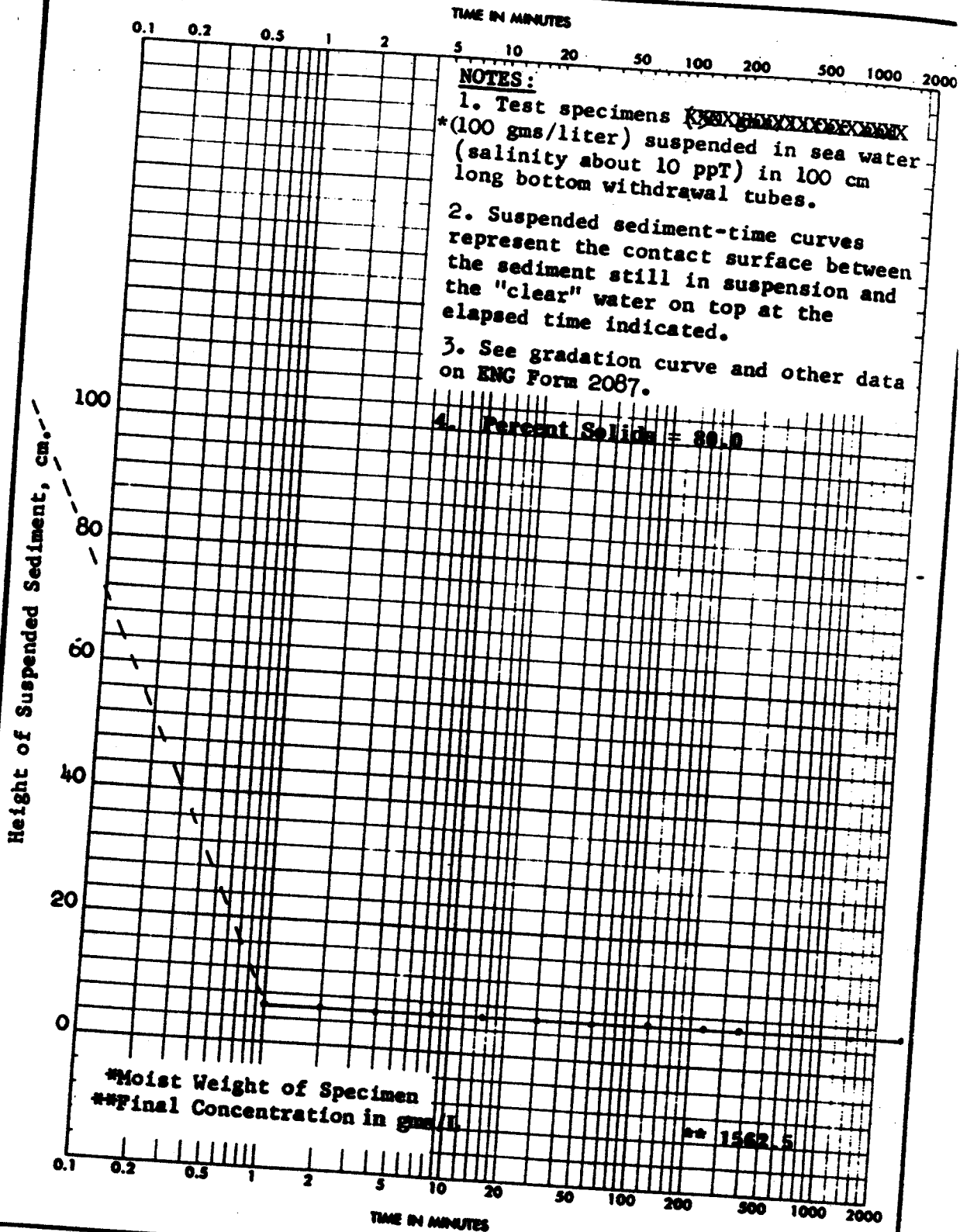
GRADATION CURVES

Sample No.	Depth/Elev	Visual Classification	Nat w%	LL	PL	PI
1	-36.7/-41.7	TANNISH GRAY, POORLY GRADED SAND (SP), WITH SOME SAND SIZE SHELL FRAGMENTS.	25.0	-	-	-
		VISUAL PERCENT SHELL IS APPROXIMATELY 24 %.				

Project JACKSONVILLE, FL.  
 DADE CO. SPP, BEACH RENOURISHMENT  
 Lab No. 73/5715  
 Boring No. DAC-168  
 Date 07/24/93

DEPARTMENT OF THE ARMY, SOUTH ATLANTIC DIVISION LABORATORY,  
 CORPS OF ENGINEERS, 611 SOUTH COBB DRIVE, MARIETTA, GEORGIA 30061

Reqn. No. RM-CW-0333  
 Work Order No. 7021



PROJECT Jacksonville, FL		Lab. No. 73/5715	
AREA Dade Co. SPP Beach Renourishment			
BORING NO. DAC-168	SAMPLE NO. 1	GENERIC SL -36.7/-41.7	DATE 22 Jul 93
SUSPENDED SEDIMENT-TIME CURVES			(TRANSLUCENT)

SAD Form 3023  
 26 Oct 72

01000-G15

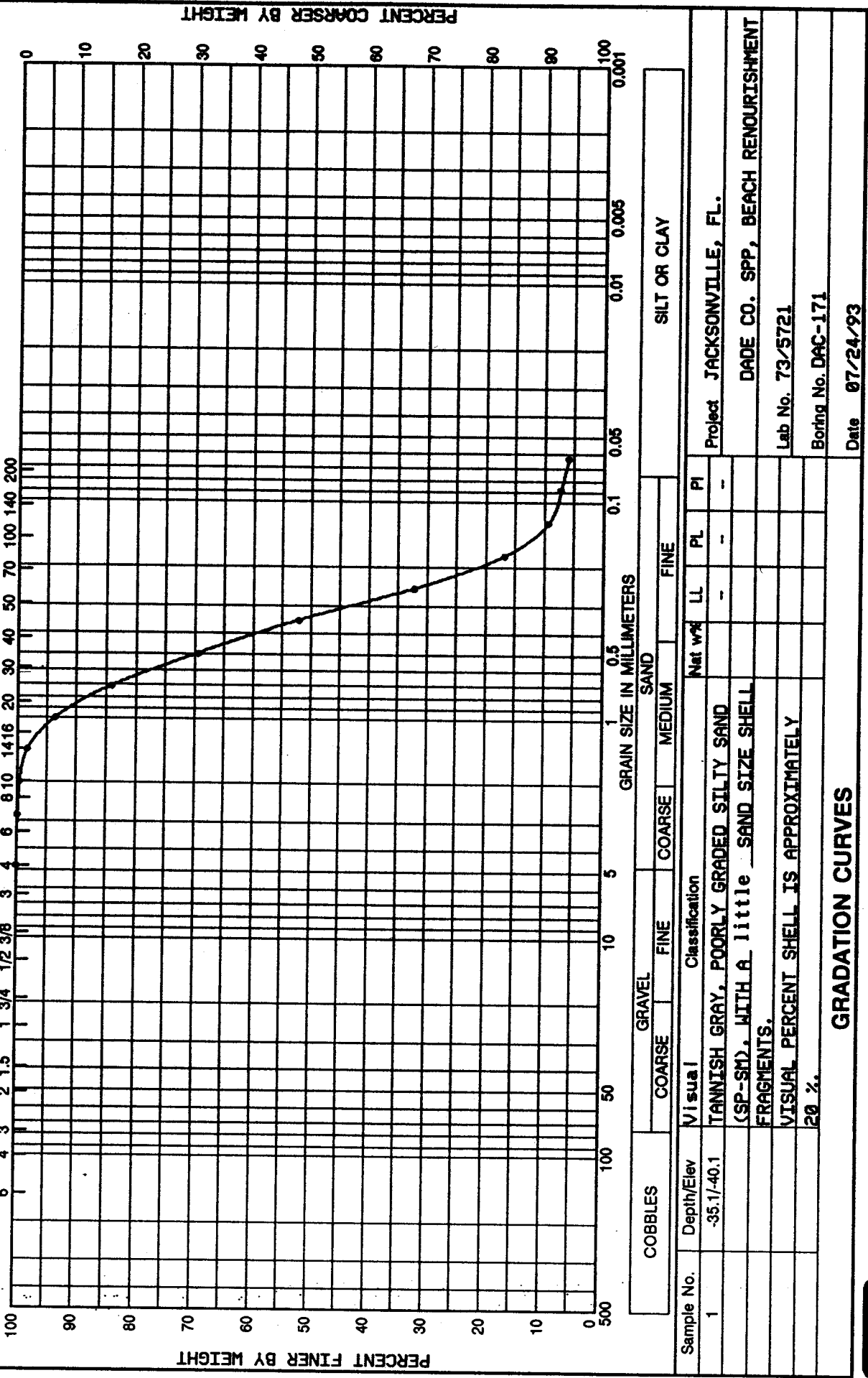
DEPARTMENT OF THE ARMY, SOUTH ATLANTIC DIVISION LABORATORY  
 CORPS OF ENGINEERS, 611 SOUTH COBB DRIVE, MARIETTA, GA. 30060

WORK ORDER: 7021  
 REQUISITION: RM-CJ-0333

HYDROMETER

U.S. STANDARD SIEVE NUMBERS

U.S. STANDARD SIEVE OPENING IN INCHES



Sample No.	Depth/Elev	Visual Classification	GRAVEL			SAND			SILT OR CLAY												
			COARSE	FINE		COARSE	MEDIUM	FINE													
1	-35.1/-40.1	TANNISH GRAY, POORLY GRADED SILTY SAND (SP-SM), WITH A little SAND SIZE SHELL FRAGMENTS.																			
VISUAL PERCENT SHELL IS APPROXIMATELY 20 %.																					
		Project JACKSONVILLE, FL.																			
		DADE CO. SPP, BEACH RENOURISHMENT																			
		Lab No. 73/5721																			
		Boring No. DAC-171																			
		Date 07/24/93																			

GRADATION CURVES

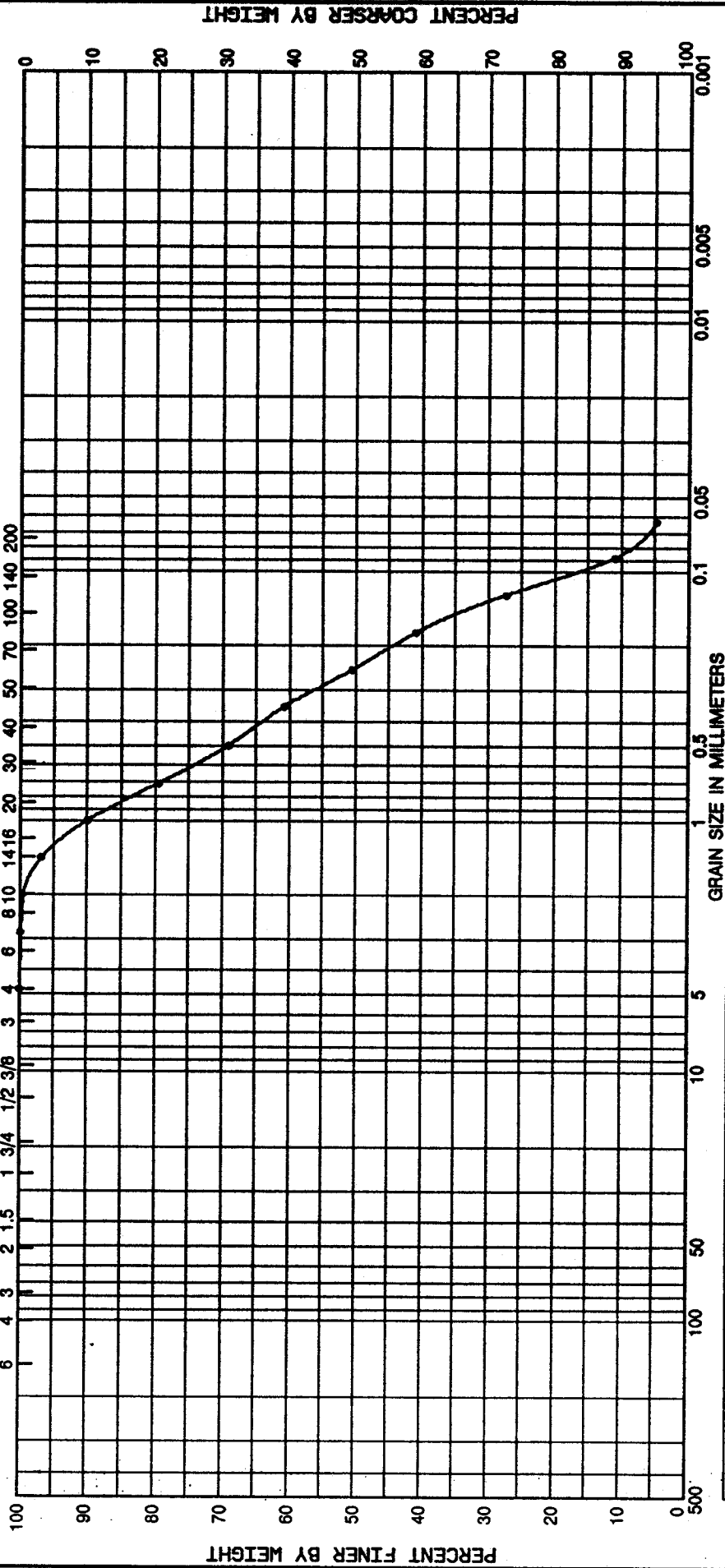


DEPARTMENT OF THE ARMY, SOUTH ATLANTIC DIVISION LABORATORY  
CORPS OF ENGINEERS, 611 SOUTH COBB DRIVE, MARIETTA, GA. 30060

WORK ORDER: 7021  
REQUISITION: RM-CH-0333

HYDROMETER

U.S. STANDARD SIEVE NUMBERS



Sample No.	Depth/Elev	Visual Classification	GRAVEL			SAND			SILT OR CLAY										
			COARSE	FINE	COARSE	MEDIUM	FINE	LL	PL	PI									
3	-46.1/-50.1	TANNISH GRAY, POORLY GRADED SILTY SAND (SP-SM). WITH SOME SAND SIZE SHELL FRAGMENTS.																	
		VISUAL PERCENT SHELL IS APPROXIMATELY 22 %.										Project	JACKSONVILLE, FL.						
												Lab No.	73/5722						
												Boring No.	DAC-171						
												Date	07/24/93						

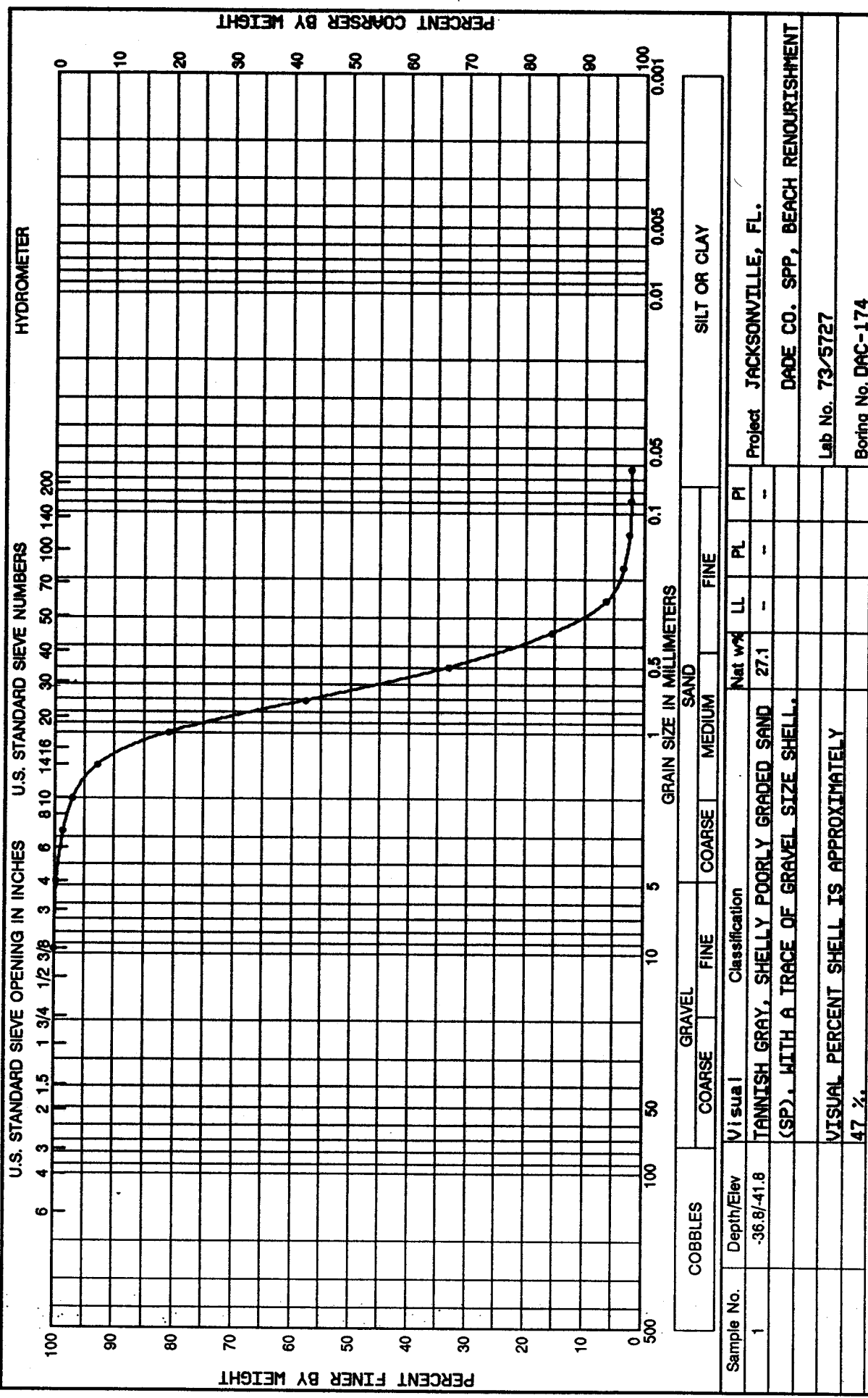
GRADATION CURVES





DEPARTMENT OF THE ARMY, SOUTH ATLANTIC DIVISION LABORATORY  
 CORPS OF ENGINEERS, 611 SOUTH COBB DRIVE, MARIETTA, GA. 30060

WORK ORDER: 7021  
 REQUISITION: RM-CA-0333

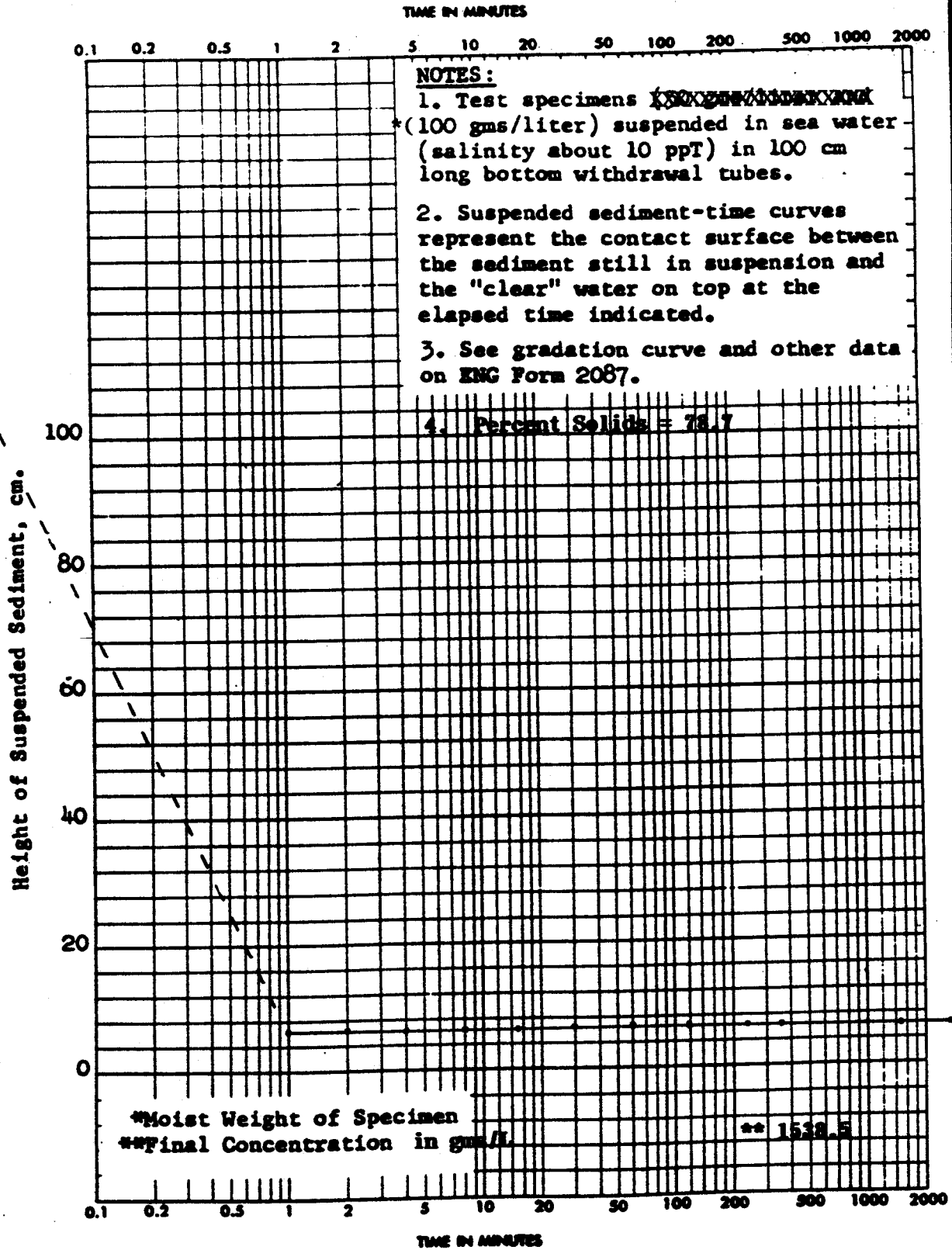


GRADATION CURVES



Reqn. No. RM-CW-0333  
Work Order No. 7021

DEPARTMENT OF THE ARMY, SOUTH ATLANTIC DIVISION LABORATORY,  
CORPS OF ENGINEERS, 611 SOUTH COBB DRIVE, MARIETTA, GEORGIA 30060



PROJECT Jacksonville, FL

Lab. No. 73/5727

AREA Dade Co. SPP Beach Renourishment

BORING NO. DAC-174

SAMPLE NO. 1

MARK

EL -36.8/-41.8

DATE 22 Jul 93

SUSPENDED SEDIMENT-TIME CURVES

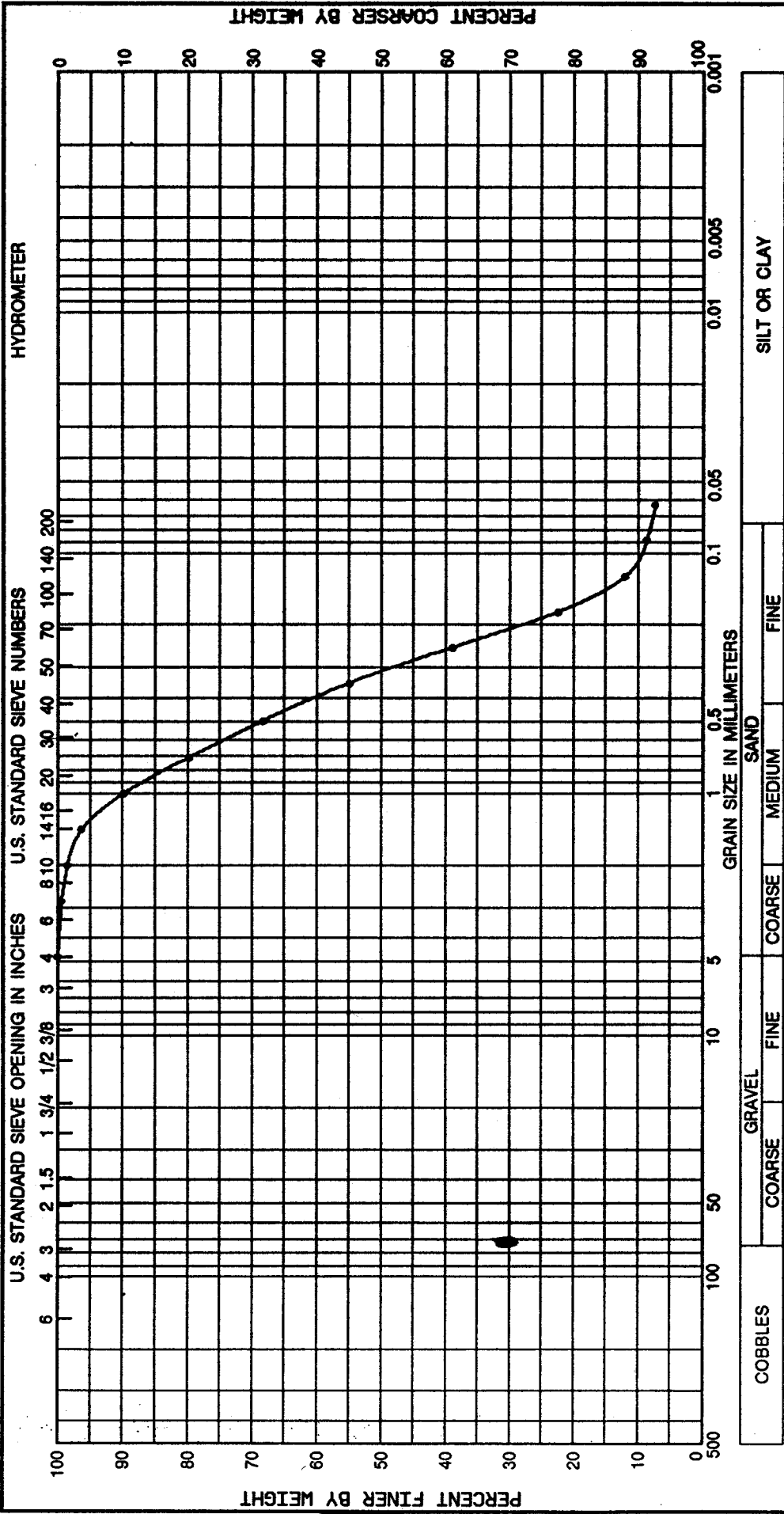
SAD Form 3023

01000-G19

26 Oct 72

DEPARTMENT OF THE ARMY, SOUTH ATLANTIC DIVISION LABORATORY  
 CORPS OF ENGINEERS, 611 SOUTH COBB DRIVE, MARIETTA, GA. 30060

WORK ORDER: 7021  
 REQUISITION: RM-CW-0333

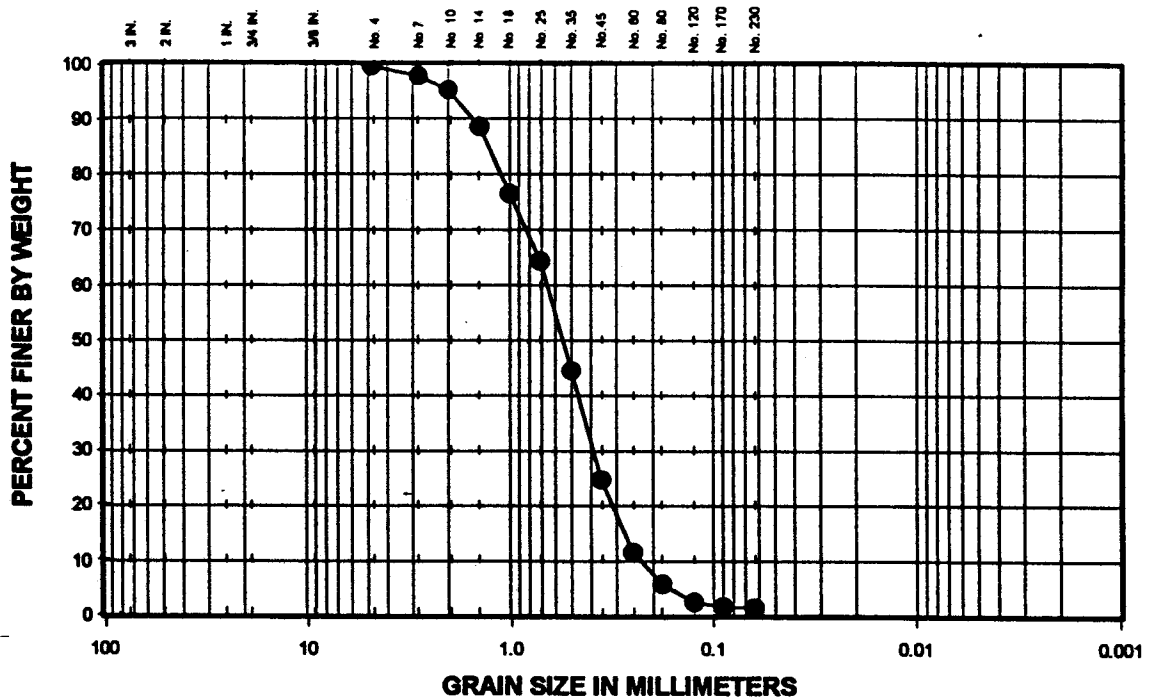


Sample No.	Depth/Elev	Visual	Classification				PI
			Nat w%	LL	PL	PI	
1	-35.1/-40.1	TANNISH GRAY POORLY GRADED SILTY SAND (SP-SM), WITH SOME SAND SIZE SHELL FRAGMENTS.					
		VISUAL PERCENT SHELL IS APPROXIMATELY 25 %.					
<b>GRADATION CURVES</b>							

Project JACKSONVILLE, FL.  
 DADE CO. SPP, BEACH RENOURISHMENT  
 Lab No. 73/5731  
 Boring No. DAC-175  
 Date 07/24/93



U.S. STANDARD SIEVE SIZE



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-177	3.5	●	SP

GRAIN-SIZE DISTRIBUTION

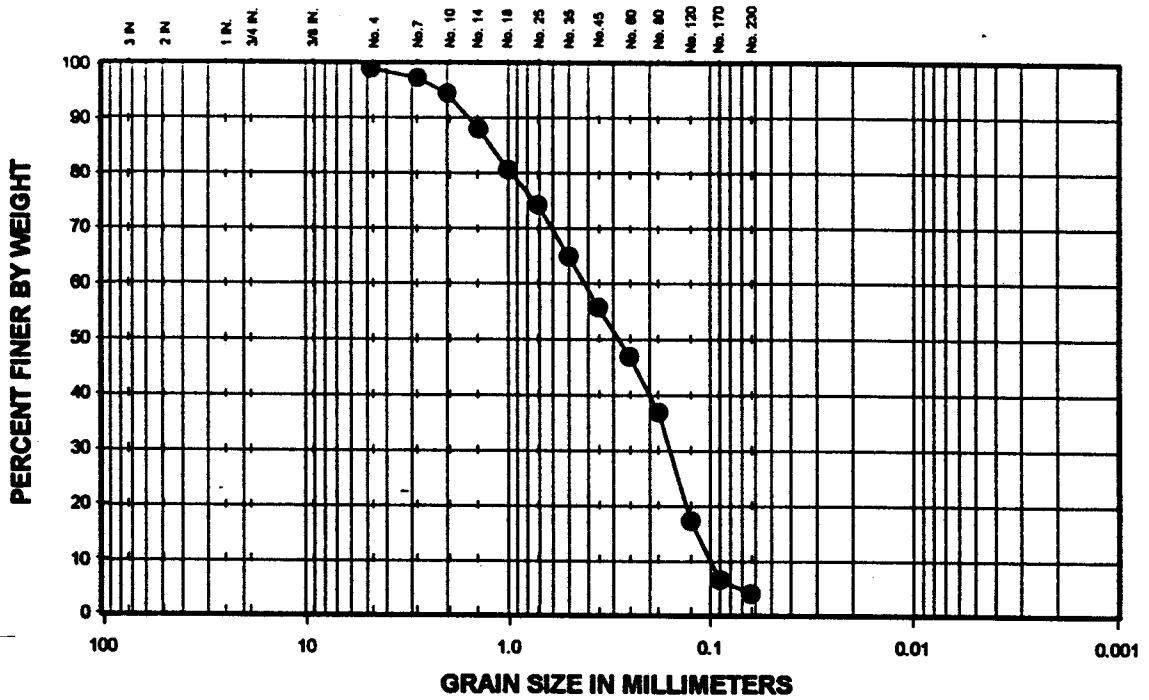
**Ardaman & Associates, Inc.**  
 Geotechnical, Environmental and  
 Materials Consultants

Dade County SSP

DRAWN BY: GDS	CHECKED BY:	DATE: August, 1986
FILE NO. 86-026	APPROVED BY:	FIGURE:

FILE # dade1.ppt2

**U.S. STANDARD SIEVE SIZE**



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-177	8.5	●	SP-SM

**GRAIN-SIZE DISTRIBUTION**

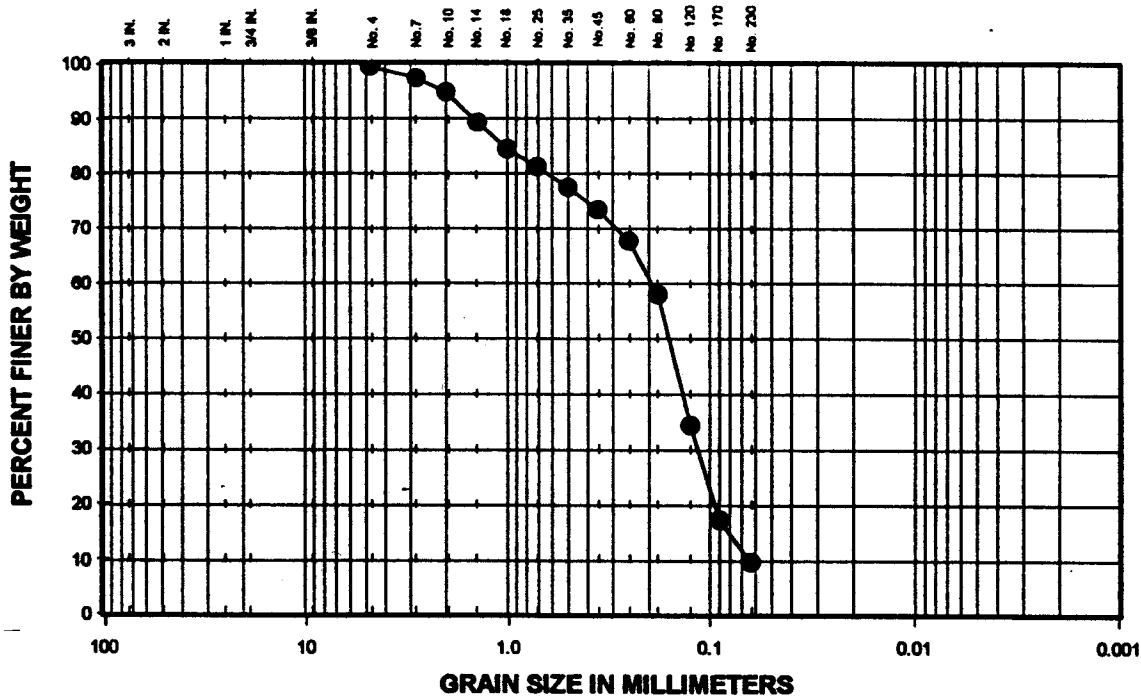
**Ardaman & Associates, Inc.**  
 Geotechnical, Environmental and  
 Materials Consultants

Dade County SSP

DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

FILE # cads1.prc2

**U.S. STANDARD SIEVE SIZE**



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-177	10.5	●	SP-SM

**GRAIN-SIZE DISTRIBUTION**

**Ardaman & Associates, Inc.**  
 Geotechnical, Environmental and  
 Materials Consultants

Dade County SSP

DRAWN BY: GOS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

# SETTLING TEST

Project Dade County SSP

DATE 8/16/96

File Number 96-026

Sample CB-DAC-177

Column # 1

Depth 10.5

Wgt of Wet Soil (gms) 50.00

Moisture Content (%)

Tare # 22F

WWS+ Tare 86.68

WDS+ Tare 76.06

Final Concentration (gm/liter)

WW 10.62

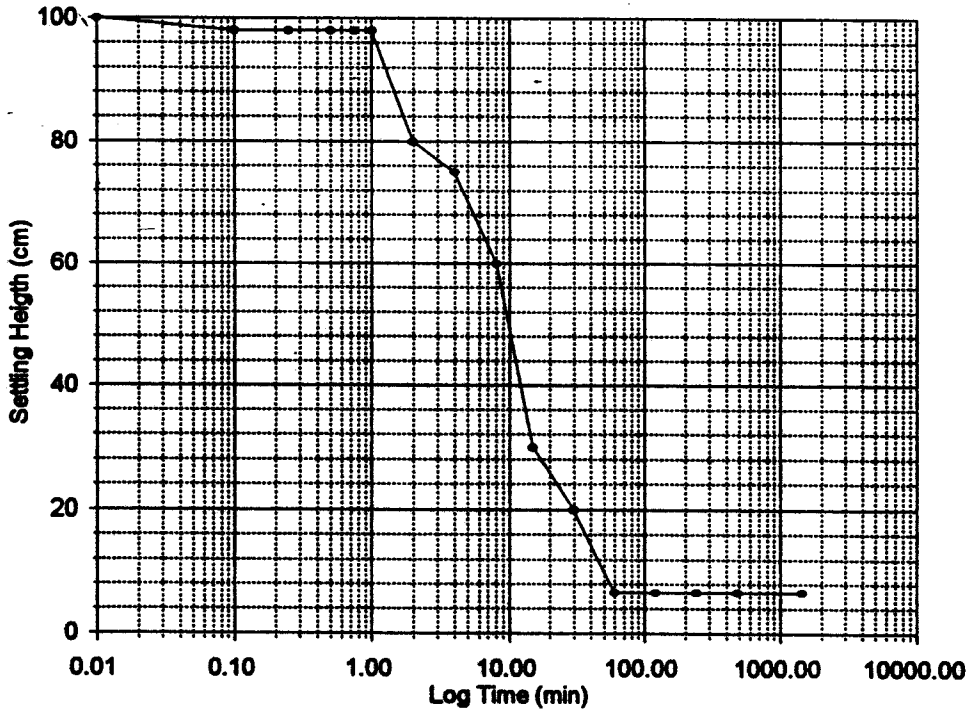
Wet 746.3

Wgt Tare 31.41

Dry 602.9

WDS 44.65

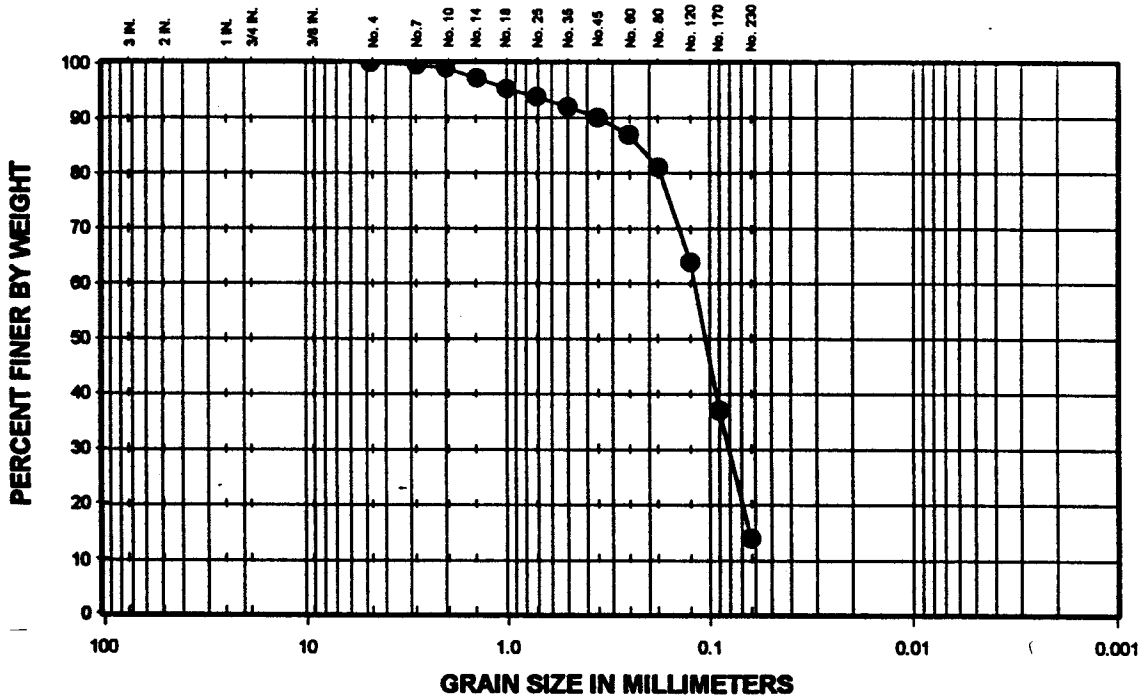
MC % 23.8



Time (min)	Settling Ht. (cm)
0.01	100.0
0.1	98.0
0.25	98.0
0.5	98.0
0.75	98.0
1	98.0
2	80.0
4	75.0
8	60.0
15	30.0
30	20.0
60	6.7
120	6.7
240	6.7
480	6.7
1440	6.7

File: dsepp6.tbl2

**U.S. STANDARD SIEVE SIZE**



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-177	12.0	●	SM

**GRAIN-SIZE DISTRIBUTION**

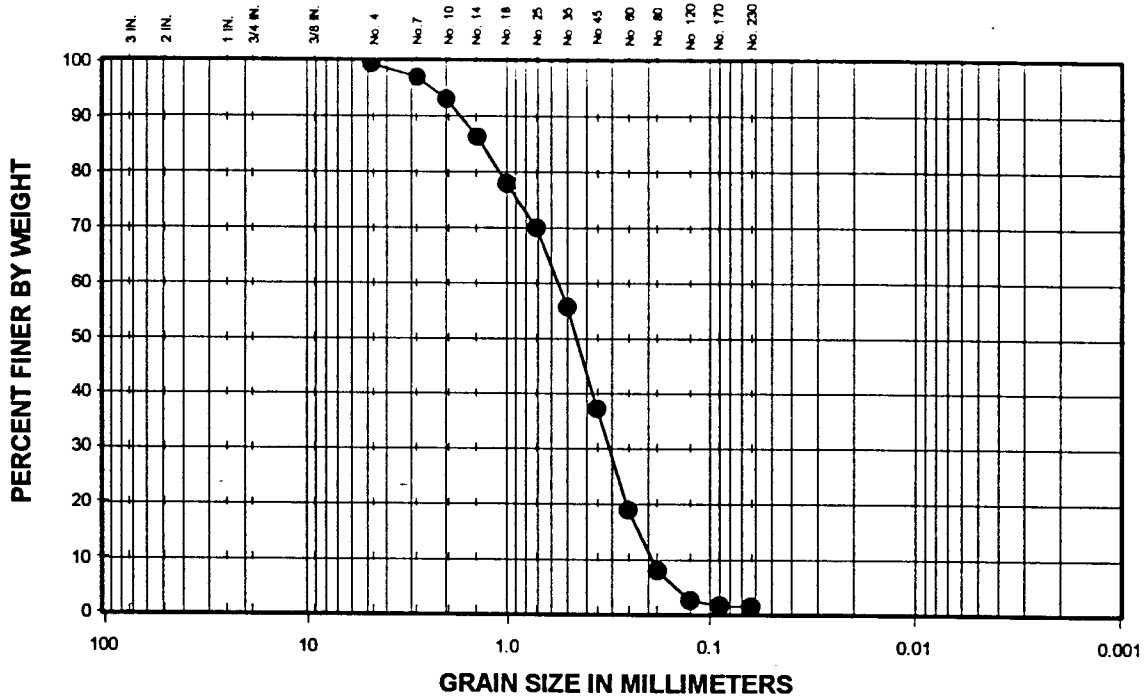
**Ardaman & Associates, Inc.**  
 Geotechnical, Environmental and  
 Materials Consultants

Dade County SSP

DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 98-026	APPROVED BY:	FIGURE:



U.S. STANDARD SIEVE SIZE



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-178	3.5	●	SP

GRAIN-SIZE DISTRIBUTION

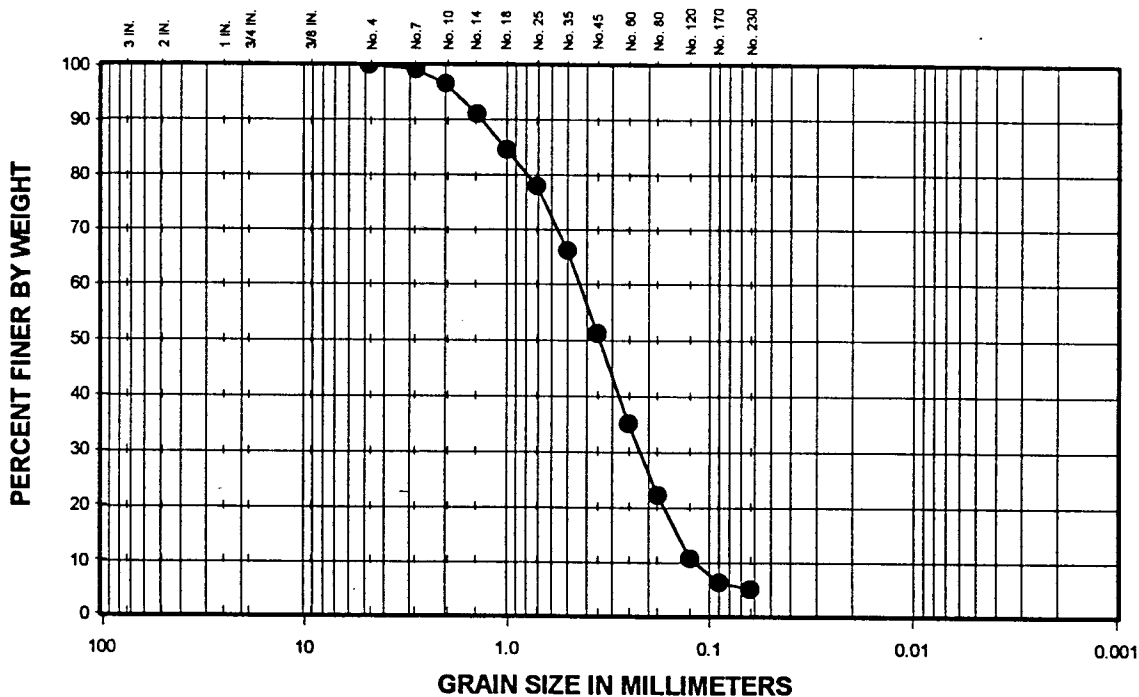
**Ardaman & Associates, Inc.**  
Geotechnical, Environmental and Materials Consultants

Dade County SSP

DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

01000-G26

**U.S. STANDARD SIEVE SIZE**




GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-178	7.5	●	SP-SM

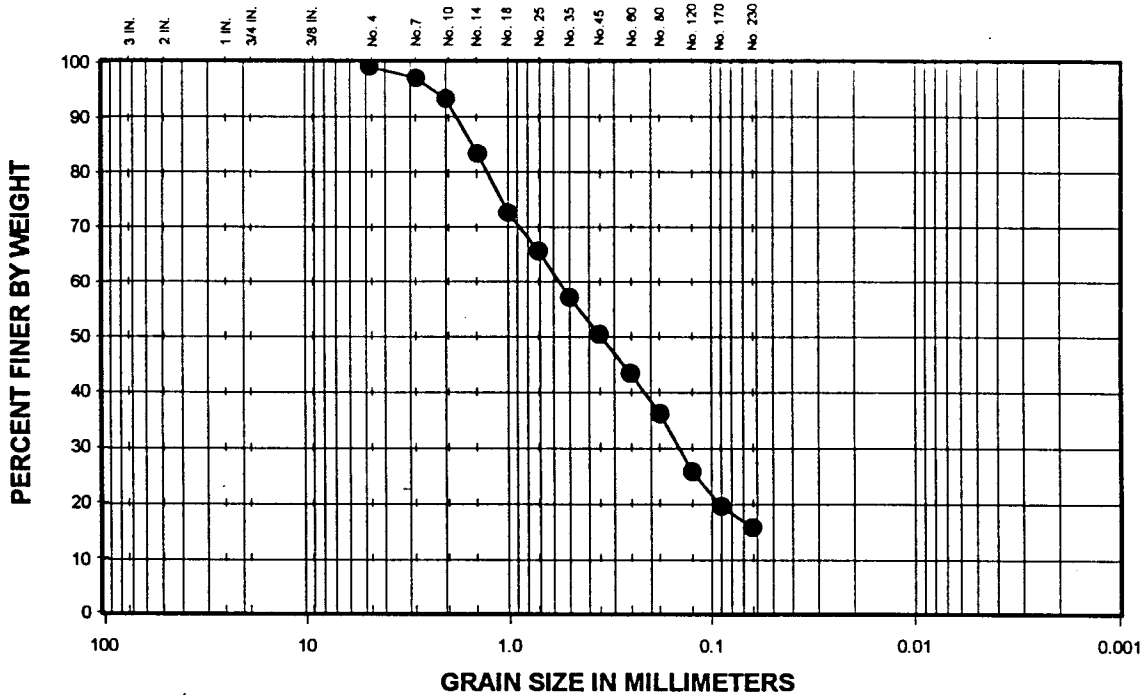
**GRAIN-SIZE DISTRIBUTION**

01000-G27

 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants			
Dade County SSP			
DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996	
FILE NO. 96-026	APPROVED BY:	FIGURE:	

FILE # dade1.pre2


U.S. STANDARD SIEVE SIZE



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

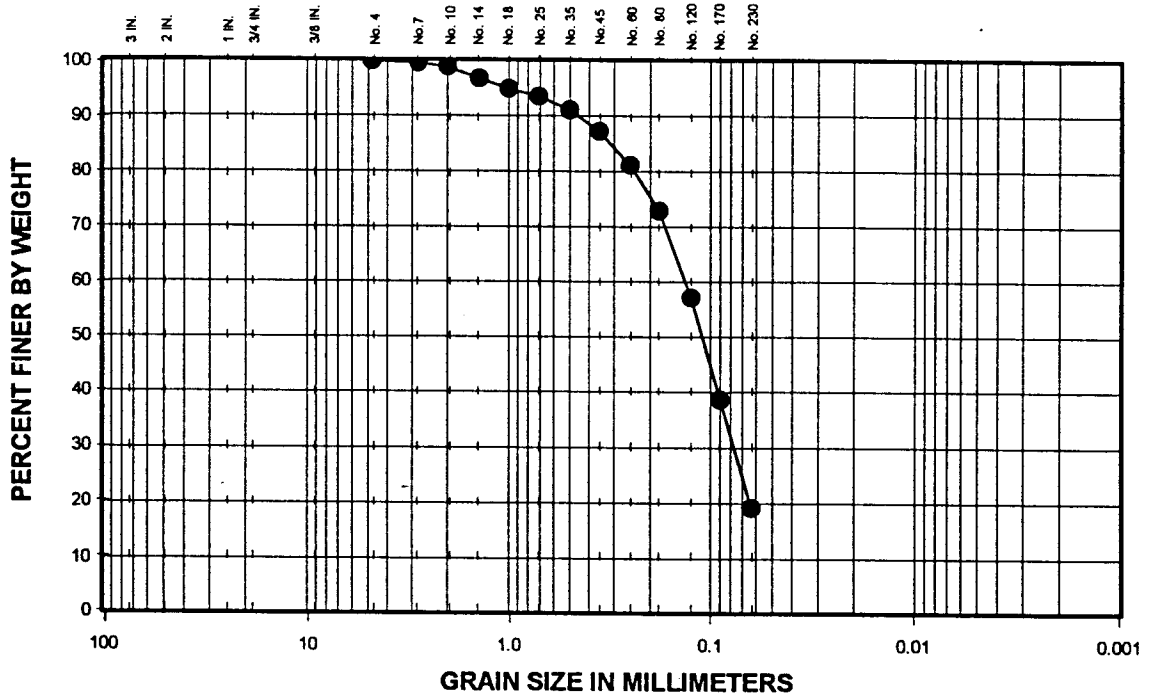
SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-178	11.0	●	SM

GRAIN-SIZE DISTRIBUTION

 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants			
Dade County SSP			
DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996	
FILE NO. 96-026	APPROVED BY:	FIGURE:	

FILE # dade1.pre2


**U.S. STANDARD SIEVE SIZE**



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

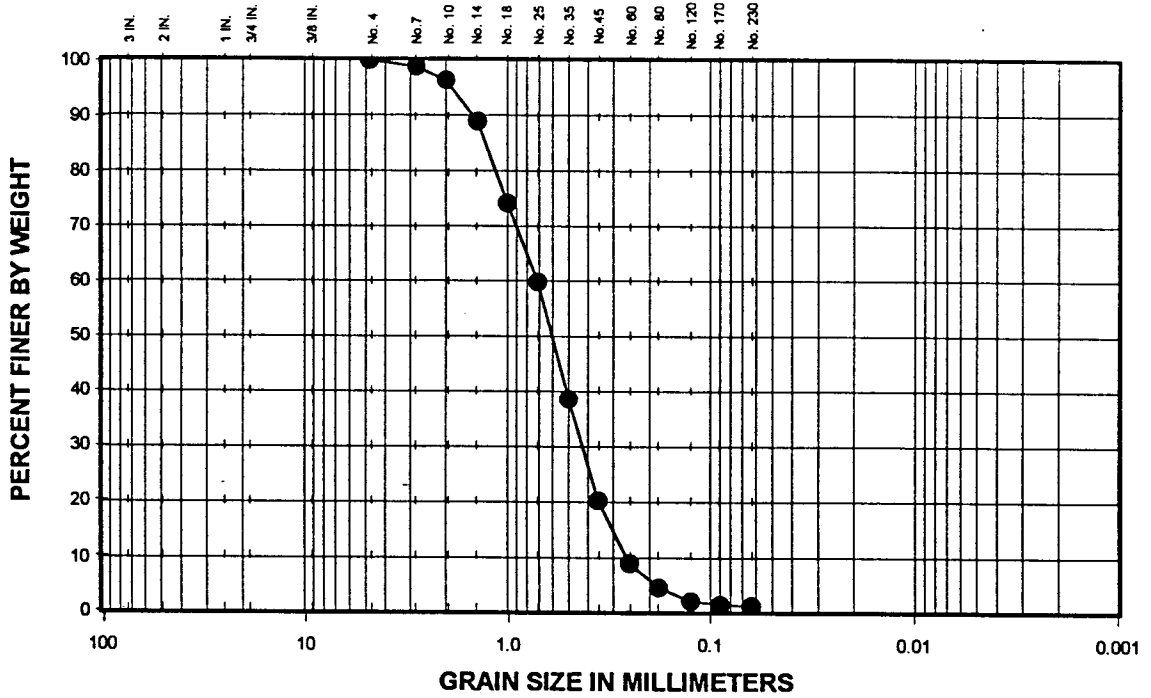
SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-178	16.5	●	SM

**GRAIN-SIZE DISTRIBUTION**

 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants			
Dade County SSP			
DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996	
FILE NO. 96-026	APPROVED BY:	FIGURE:	

FILE # dade1.pre2


**U.S. STANDARD SIEVE SIZE**



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

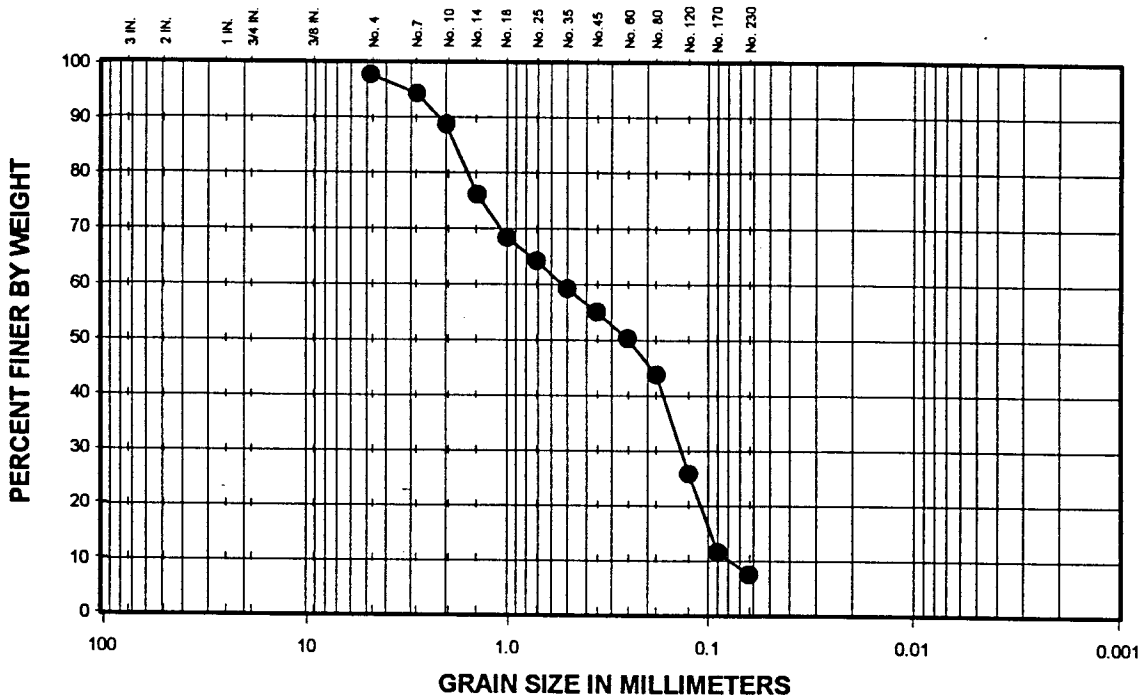
SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-179	3.5	●	SP

**GRAIN-SIZE DISTRIBUTION**

 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants			
Dade County SSP			
DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996	
FILE NO. 96-026	APPROVED BY:	FIGURE:	

FILE # dade1.pno2

**U.S. STANDARD SIEVE SIZE**



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-179	6.0	●	SP-SM

**GRAIN-SIZE DISTRIBUTION**

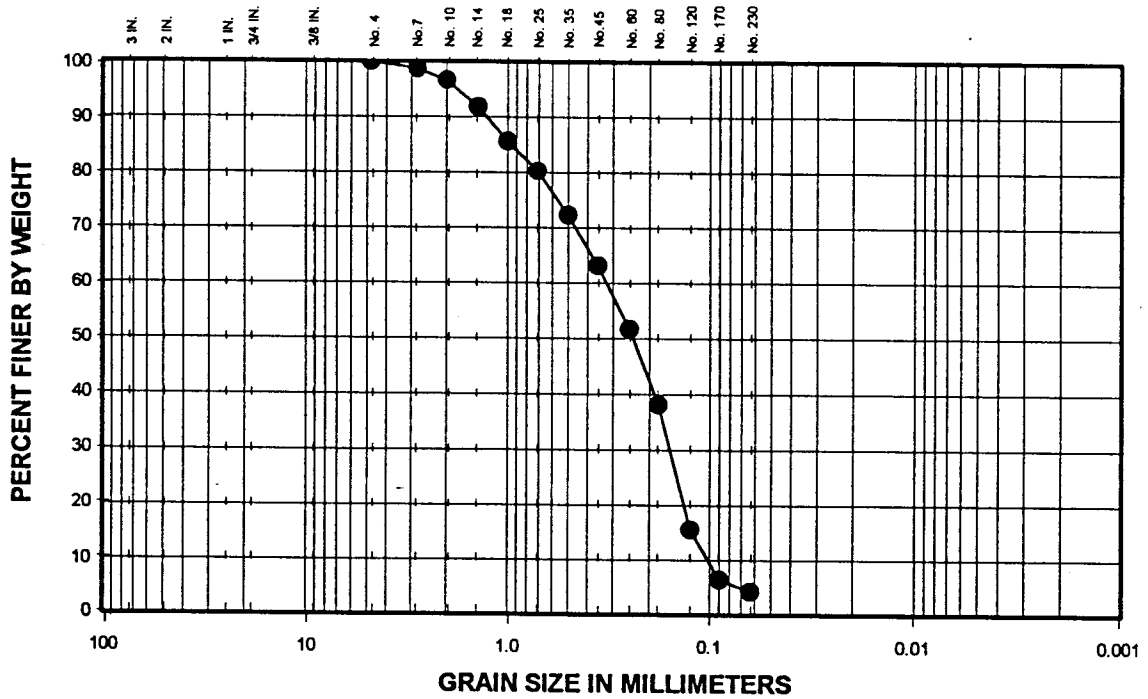
**Ardaman & Associates, Inc.**  
 Geotechnical, Environmental and  
 Materials Consultants

**Dade County SSP**

DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

FILE # dade1.pre2


**U.S. STANDARD SIEVE SIZE**



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

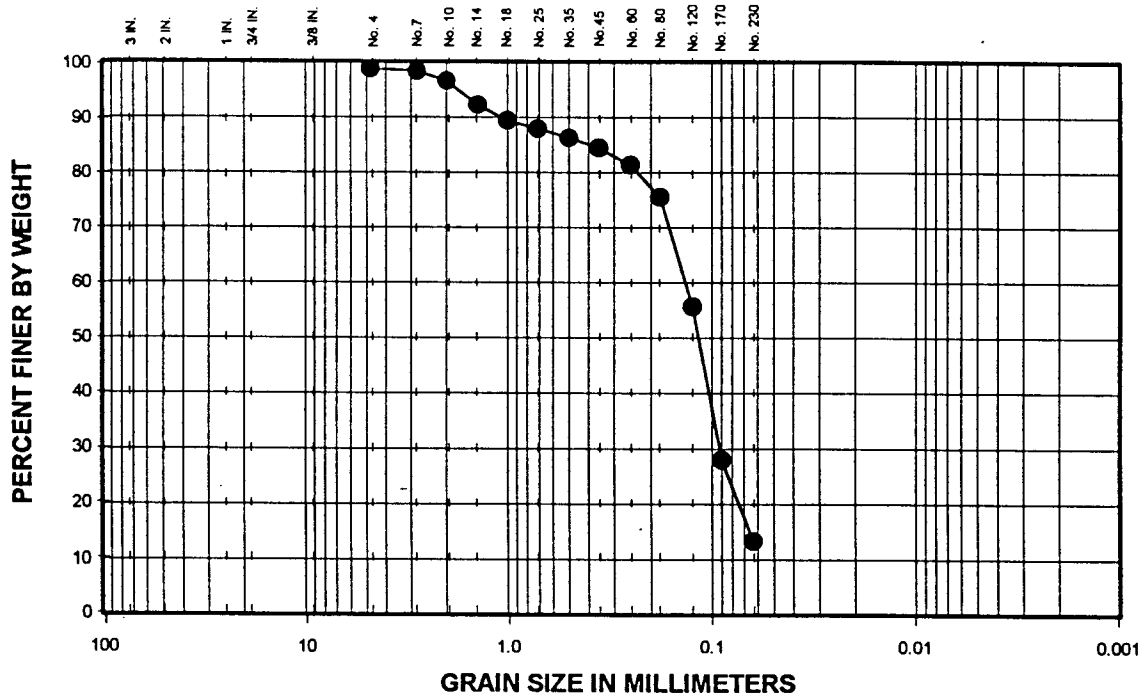
SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-179	7.0	●	SP-SM

**GRAIN-SIZE DISTRIBUTION**

 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants			
Dade County SSP			
DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996	
FILE NO. 96-026	APPROVED BY:	FIGURE:	

FILE # dade1.prc2


**U.S. STANDARD SIEVE SIZE**



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-179	13.5	●	SM

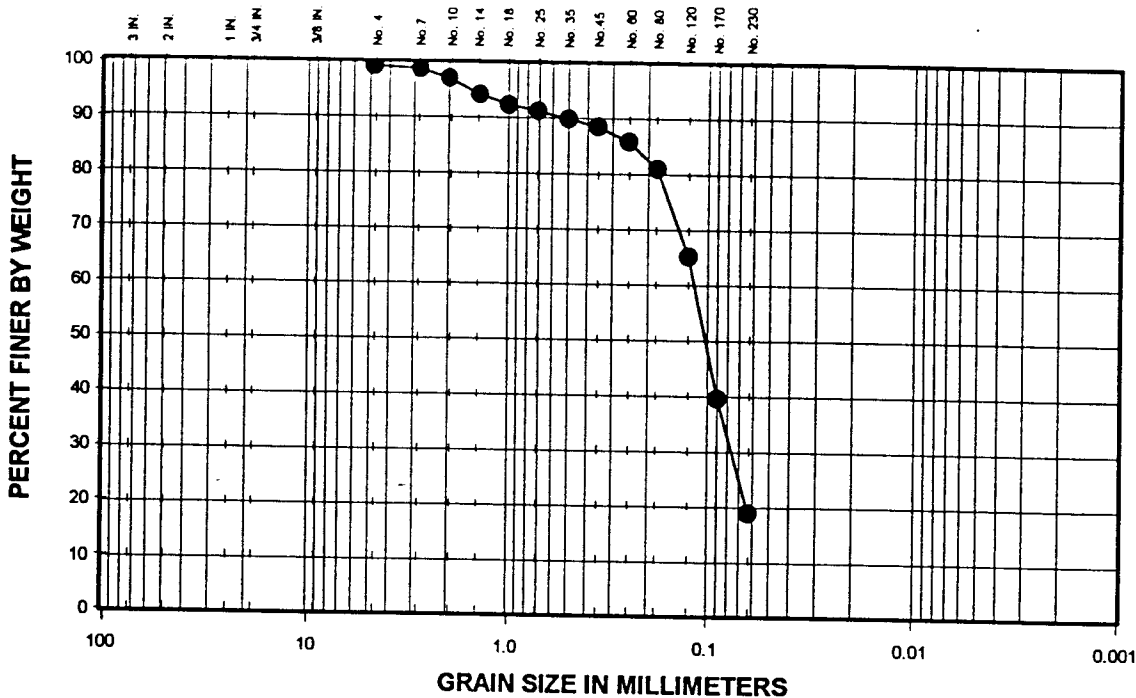
**GRAIN-SIZE DISTRIBUTION**

 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants			
Dade County SSP			
DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996	
FILE NO. 96-026	APPROVED BY:	FIGURE:	

FILE # dade1.pre2



U.S. STANDARD SIEVE SIZE



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-179	18.0	●	SM

GRAIN-SIZE DISTRIBUTION

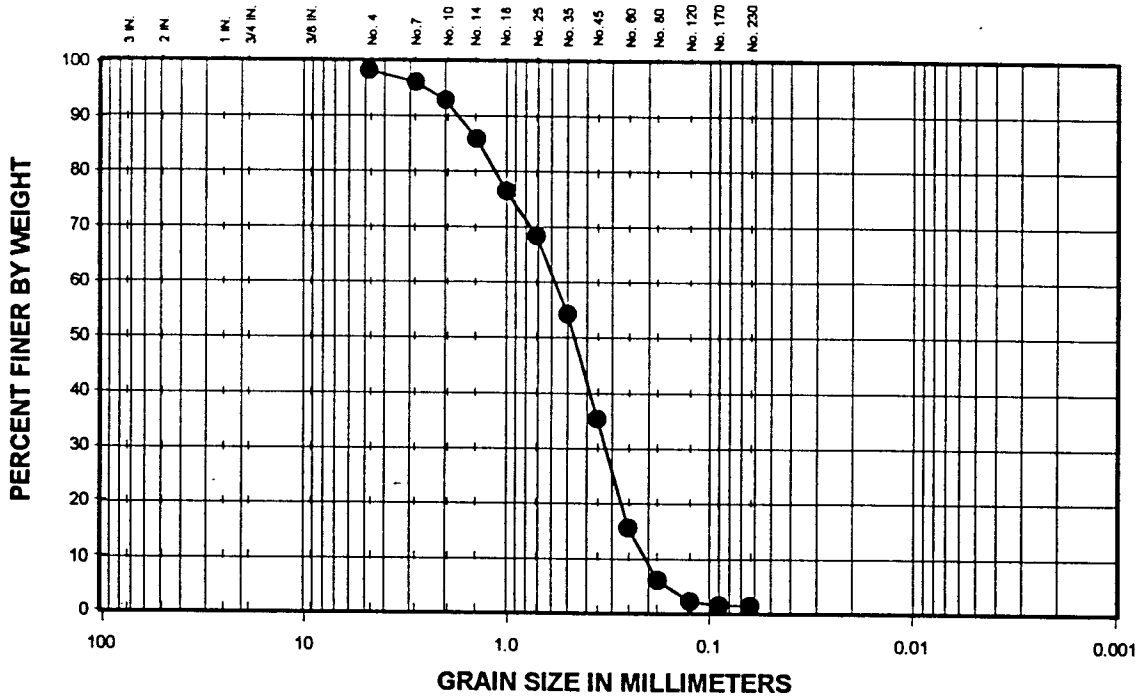
**Ardaman & Associates, Inc.**  
 Geotechnical, Environmental and  
 Materials Consultants

Dade County SSP

DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

FILE # dade01.pre2

**U.S. STANDARD SIEVE SIZE**



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-180	1.0	●	SP

**GRAIN-SIZE DISTRIBUTION**

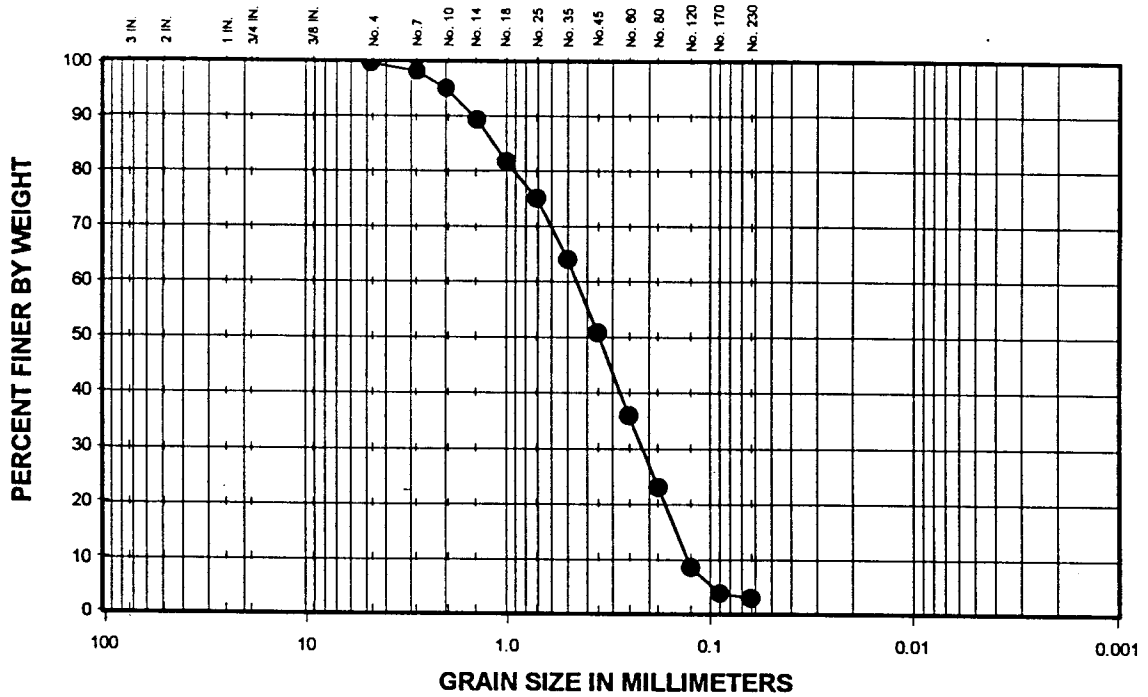
**Ardaman & Associates, Inc.**  
 Geotechnical, Environmental and  
 Materials Consultants

Dade County SSP

DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

FILE # dade1.pro2

U.S. STANDARD SIEVE SIZE



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-180	8.5	●	SP

GRAIN-SIZE DISTRIBUTION

**Ardaman & Associates, Inc.**  
 Geotechnical, Environmental and  
 Materials Consultants

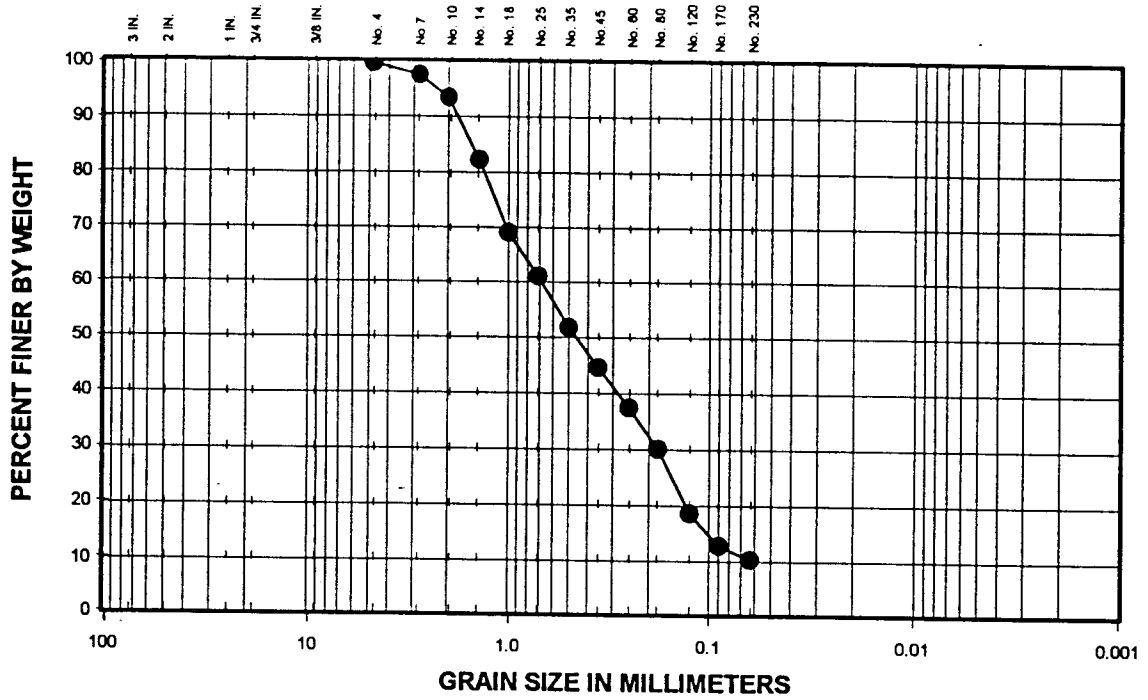
Dade County SSP

DRAWN BY: GDS    CHECKED BY:    DATE: August, 1996

FILE NO. 96-026    APPROVED BY:    FIGURE:

FILE # dade1.pre2

U.S. STANDARD SIEVE SIZE



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-180	12.0	●	SP-SM

GRAIN-SIZE DISTRIBUTION

**Ardaman & Associates, Inc.**  
Geotechnical, Environmental and Materials Consultants

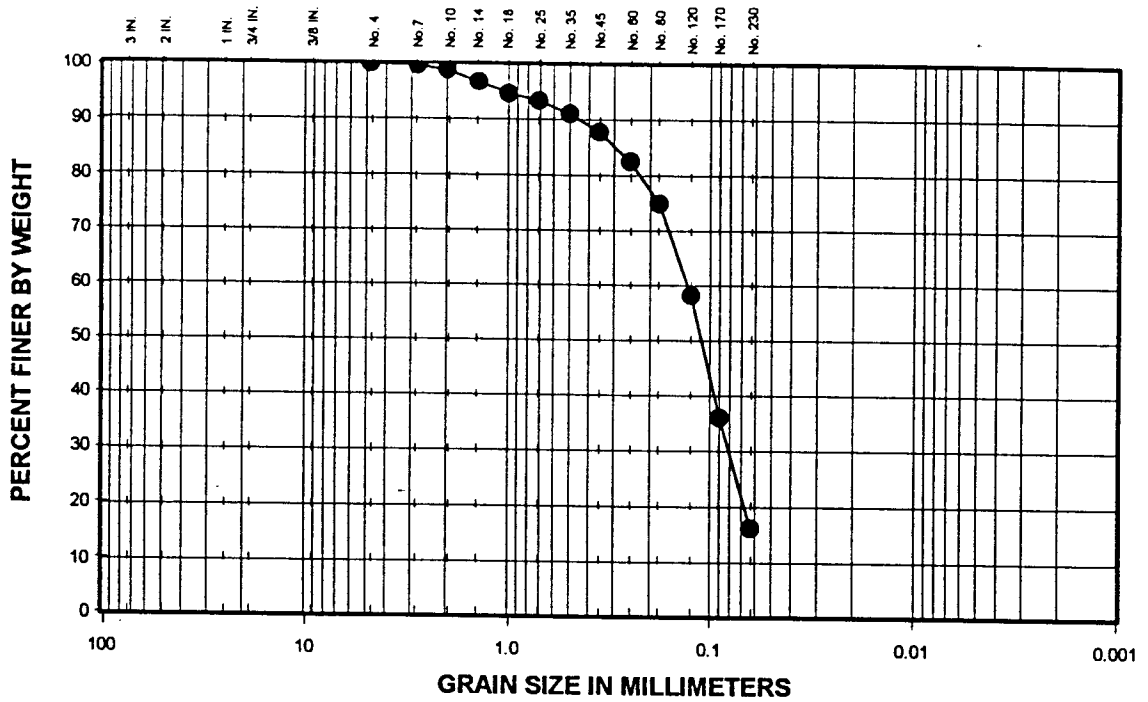
Dade County SSP

DRAWN BY: GDS    CHECKED BY:    DATE: August, 1996

FILE NO. 96-026    APPROVED BY:    FIGURE:

FILE # dade1.pse2


**U.S. STANDARD SIEVE SIZE**



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-180	16.5	●	SM

**GRAIN-SIZE DISTRIBUTION**

 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants		
Dade County SSP		
DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

**Core Boring Logs and Laboratory Data  
Borrow Area SGC-EXT**

## Hole No. CB-DAC-181

<b>DRILLING LOG</b>	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1
	1. PROJECT DADE COUNTY SPP		10. SIZE AND TYPE OF BIT 3 1/2" Drive Shoe
2. LOCATION (Coordinates or Station) X=79802,4.5 Y=49606,9.7		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW	
3. DRILLING AGENCY ALPINE OCEAN SURVEY, INC.		12. MANUFACTURER'S DESIGNATION OF DRILL VIBRACORE	
4. HOLE NO. (As shown on drawing title and file number) CB-DAC-181		13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN disturbed: 0 undisturbed: 0	
5. NAME OF DRILLER NICK PRICE		14. TOTAL NUMBER OF CORE BOXES 2	
6. DIRECTION OF HOLE <input checked="checked" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		15. ELEVATION GROUND WATER Tide = +0.9	
7. THICKNESS OF BURDEN 0 Ft.		16. DATE HOLE STARTED COMPLETED 7/5/96 1550	
8. DEPTH DRILLED INTO ROCK 0 Ft.		17. ELEVATION TOP OF HOLE -38.7 Ft.	
9. TOTAL DEPTH OF HOLE 19.9 Ft.		18. TOTAL CORE RECOVERY FOR BORING 81 %	
		19. SIGNATURE OF GEOLOGIST ROCKLAND BURR	

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS																					
-38.7	.0					-38.7																					
		[Dotted Pattern]	Sand, fine grained, light brown, some shell fragments (SP)			<p style="margin: 0;">Lat-Lon</p> <table style="margin: 0; font-size: small;"> <tr><td>25</td><td>41</td><td>44.3N</td></tr> <tr><td>80</td><td>05</td><td>42.0W</td></tr> </table> <p style="margin: 5px 0 0 0;">Laboratory Data</p> <table style="margin: 0; font-size: small;"> <tr><td>Depth</td><td>USCS</td><td>SpG.</td></tr> <tr><td>1.5</td><td>SP</td><td></td></tr> <tr><td>3.5</td><td>SP-SM</td><td></td></tr> <tr><td>8.0</td><td>SM</td><td></td></tr> <tr><td>14.0</td><td>SM</td><td></td></tr> </table>	25	41	44.3N	80	05	42.0W	Depth	USCS	SpG.	1.5	SP		3.5	SP-SM		8.0	SM		14.0	SM	
25	41	44.3N																									
80	05	42.0W																									
Depth	USCS	SpG.																									
1.5	SP																										
3.5	SP-SM																										
8.0	SM																										
14.0	SM																										
-41.3	2.6		Sand, fine to medium grained, light brown, mostly shell fragments (SP-SM)			2.5																					
-44.4	5.7		Silty sand, fine grained, light brown, trace of shell fragments (SM)			5																					
		[Dotted Pattern]				7.5																					
		[Dotted Pattern]				10																					
		[Dotted Pattern]				12.5																					
		[Dotted Pattern]				15																					
		[Dotted Pattern]				17.5																					
-58.6	19.9		End of Boring			20																					
			Soils are field visually classified in accordance with the Unified Soils Classification System.			22.5																					

<b>DRILLING LOG</b>	<b>DIVISION</b> South Atlantic	<b>INSTALLATION</b> Jacksonville District	<b>SHEET 1</b> OF 1
1. PROJECT DADE COUNTY SPP		10. SIZE AND TYPE OF BIT 3 1/2" Core Shoe	
2. LOCATION (Coordinates or Station) X=79841,0.5 Y=49591,1.2		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW	
3. DRILLING AGENCY ALPINE OCEAN SURVEY, INC.		12. MANUFACTURER'S DESIGNATION OF DRILL VIBRACORE	
4. HOLE NO. (As shown on drawing title and file number) CB-DAC-182		13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN disturbed: 0 undisturbed: 1	
5. NAME OF DRILLER NICK PRICE		14. TOTAL NUMBER OF CORE BOXES 2	
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		15. ELEVATION GROUND WATER Tide = +2.8	
7. THICKNESS OF BURDEN 0 Ft.		16. DATE HOLE STARTED COMPLETED 7/5/96 1525	
8. DEPTH DRILLED INTO ROCK 0 Ft.		17. ELEVATION TOP OF HOLE -36.2 Ft.	
9. TOTAL DEPTH OF HOLE 19.9 Ft.		18. TOTAL CORE RECOVERY FOR BORING 82 %	
		19. SIGNATURE OF GEOLOGIST ROCKLAND BURR	

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-36.2	.0					-36.2
			Sand, fine to medium grained, light brown, trace of shell fragments (SP)			Lat-Lon 25 41 42.7N 80 05 37.8W  Laboratory Data Depth USCS SpG. 3.5 SP 7.0 SM 11.0 SM 15.5 SM
-41.1	4.9		Sand, fine grained, light brown, trace of shell fragments (SP-SM)			
-43.2	7.0		Silty sand, fine grained, light brown, trace of shell fragments (SM)			
-56.1	19.9		End of Boring			
			Soils are field visually classified in accordance with the Unified Soils Classification System.			





<b>DRILLING LOG</b>	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1
1. PROJECT DADE COUNTY SPP		10. SIZE AND TYPE OF BIT 3 1/2" Drive Shoe	
2. LOCATION (Coordinates or Station) X=79884,8.3 Y=49535,4.5		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW	
3. DRILLING AGENCY ALPINE OCEAN SURVEY, INC.		12. MANUFACTURER'S DESIGNATION OF DRILL VIBRACORE	
4. HOLE NO. (As shown on drawing title and file number) CB-DAC-184		13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN disturbed: 0 undisturbed: 0	
5. NAME OF DRILLER NICK PRICE		14. TOTAL NUMBER OF CORE BOXES 1	
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		15. ELEVATION GROUND WATER Tide = +2.9	
7. THICKNESS OF BURDEN 0 Ft.		16. DATE HOLE STARTED COMPLETED 7/5/96 1428	
8. DEPTH DRILLED INTO ROCK 0 Ft.		17. ELEVATION TOP OF HOLE -37.5 Ft.	
9. TOTAL DEPTH OF HOLE 8.6 Ft.		18. TOTAL CORE RECOVERY FOR BORING 81 %	
19. SIGNATURE OF GEOLOGIST ROCKLAND BURR			

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-37.5	.0					-37.5
			Sand, fine to coarse grained, light brown, some shell fragments, a little coral gravel (SP)			Lat-Lon 25 41 37.2N 80 05 33.0W  Laboratory Data Depth USCS SpG. 4.0 SP 7.5 SM
-45.5	8.0					7.5
-46.1	8.6	I	Limestone, gray, vuggy (LM)			
			End of Boring			10
			Soils are field visually classified in accordance with the Unified Soils Classification System.			12.5
						15
						17.5
						20
						22.5

# Hole No. CB-DAC-185

<b>DRILLING LOG</b>	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1
1. PROJECT DADE COUNTY SPP		10. SIZE AND TYPE OF BIT 3 1/2" Drive Shoe	
2. LOCATION (Coordinates or Station) X=79821,7.4 Y=49497,5.8		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW	
3. DRILLING AGENCY ALPINE OCEAN SURVEY, INC.		12. MANUFACTURER'S DESIGNATION OF DRILL VIBRACORE	
4. HOLE NO. (As shown on drawing title and file number) CB-DAC-185		13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN disturbed: 0 undisturbed: 0	
5. NAME OF DRILLER NICK PRICE		14. TOTAL NUMBER OF CORE BOXES 2	
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		15. ELEVATION GROUND WATER Tide = +0.9	
7. THICKNESS OF BURDEN 0 Ft.		16. DATE HOLE STARTED COMPLETED 7/21/96 1549	
8. DEPTH DRILLED INTO ROCK 0 Ft.		17. ELEVATION TOP OF HOLE -36.4 Ft.	
9. TOTAL DEPTH OF HOLE 19.9 Ft.		18. TOTAL CORE RECOVERY FOR BORING 83 %	
19. SIGNATURE OF GEOLOGIST ROCKLAND BURR			

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-36.4	.0		Sand, fine to medium grained, light brown, a few shell fragments (SP)			-36.4
						Lat-Lon 25 41 33.4N 80 05 40.0W  Laboratory Data Depth USCS SpG. 2.0 SP 7.5 SM 13.0 SM
-41.2	4.8		Sand, fine grained, light brown, trace of shell fragments (SP-SM)			
-43.9	7.5		Silty sand, fine grained, light brown, trace of shell fragments (SM)			
-56.3	19.9		End of Boring			
			Soils are field visually classified in accordance with the Unified Soils Classification System.			

<b>DRILLING LOG</b>	<b>DIVISION</b> South Atlantic	<b>INSTALLATION</b> Jacksonville District	SHEET 1 OF 1
	<b>1. PROJECT</b> DADE COUNTY SPP	<b>10. SIZE AND TYPE OF BIT</b> 3 1/2" Drive Shoe	
<b>2. LOCATION (Coordinates or Station)</b> X=79889,8.9 Y=49454,6.1	<b>11. DATUM FOR ELEVATION SHOWN (TBM or MSL)</b> MLW		
<b>3. DRILLING AGENCY</b> ALPINE OCEAN SURVEY, INC.	<b>12. MANUFACTURER'S DESIGNATION OF DRILL</b> VIBRACORE		
<b>4. HOLE NO. (As shown on drawing title and file number)</b> CB-DAC-186	<b>13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN</b> disturbed: 0 undisturbed: 0		
<b>5. NAME OF DRILLER</b> NICK PRICE	<b>14. TOTAL NUMBER OF CORE BOXES</b> 2		
<b>6. DIRECTION OF HOLE</b> <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED	<b>15. ELEVATION GROUND WATER</b> Tide = +1.0		
<b>7. THICKNESS OF BURDEN</b> 0 Ft.	<b>16. DATE HOLE STARTED COMPLETED</b> 7/4/96 1531		
<b>8. DEPTH DRILLED INTO ROCK</b> 0 Ft.	<b>17. ELEVATION TOP OF HOLE</b> -38.5 Ft.		
<b>9. TOTAL DEPTH OF HOLE</b> 19.9 Ft.	<b>18. TOTAL CORE RECOVERY FOR BORING</b> 91 %		
		<b>19. SIGNATURE OF GEOLOGIST</b> ROCKLAND BURR	

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-38.5	.0					-38.5
			Sand, fine grained, light brown, trace of shell fragments (SP)			Lat-Lon 25 41 29.1N 80 05 32.5W
-41.0	2.5		Sand, fine to medium grained, light brown, trace of shell fragments (SP-SM)			Laboratory Data Depth USCS SpG. 2.0 SP 4.0 SP-SM 11.0 SP-SM 12.5 SM 17.5 SM
-46.5	8.0		Sand, fine to medium grained, light brown (SP)			
-47.2	8.7		Sand, fine to medium grained, light brown (SP-SM)			
			Silty sand, light brown, trace of shell fragments, trace of coral (SM)			
-51.0	12.5					
-58.4	19.9		End of Boring			
			Soils are field visually classified in accordance with the Unified Soils Classification System.			

Hole No. CB-DAC-187

<b>DRILLING LOG</b>	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1
1. PROJECT DADE COUNTY SPP		10. SIZE AND TYPE OF BIT 3 1/2" Drive Shoe	
2. LOCATION (Coordinates or Station) X=79803,7.4 Y=49436,0.9		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW	
3. DRILLING AGENCY ALPINE OCEAN SURVEY, INC.		12. MANUFACTURER'S DESIGNATION OF DRILL VIBRACORE	
4. HOLE NO. (As shown on drawing title and file number) CB-DAC-187		13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN disturbed: 0 undisturbed: 0	
5. NAME OF DRILLER NICK PRICE		14. TOTAL NUMBER OF CORE BOXES 2	
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		15. ELEVATION GROUND WATER Tide = +2.0	
7. THICKNESS OF BURDEN 0 Ft.		16. DATE HOLE STARTED COMPLETED 7/4/96 1424	
8. DEPTH DRILLED INTO ROCK 0 Ft.		17. ELEVATION TOP OF HOLE -31.4 Ft.	
9. TOTAL DEPTH OF HOLE 19.1 Ft.		18. TOTAL CORE RECOVERY FOR BORING 92.5 %	
19. SIGNATURE OF GEOLOGIST ROCKLAND BURR			

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-31.4	.0					-31.4
			Sand, fine to medium grained, light brown, a little shell fragments (SP)			Lat-Lon 25 41 27.3N 80 05 42.6W  Laboratory Data  Depth USCS SpG. 4.0 SP 7.5 SP 14.0 SM 16.0 SP-SM
-36.8	5.4		Sand, fine to medium grained, light brown, mostly shell fragments (SP)			
-42.9	11.5		Silty sand, fine grained, light brown, a little shell fragments (SM)			
-46.4	15.0		Sand, fine to medium grained, light brown, some shell fragments (SP-SM)			
-47.9	16.5		Silty sand, fine grained, light brown, trace of shell fragments (SM)			
-50.5	19.1		End of Boring			
			Soils are field visually classified in accordance with the Unified Soils Classification System.			

<b>DRILLING LOG</b>	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1
	1. PROJECT DADE COUNTY SPP		10. SIZE AND TYPE OF BIT 3 1/2" Drive Shoe
	2. LOCATION (Coordinates or Station) X=79879,7.9 Y=49380,3.2		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
	3. DRILLING AGENCY ALPINE OCEAN SURVEY, INC.		12. MANUFACTURER'S DESIGNATION OF DRILL VIBRACORE
	4. HOLE NO. (As shown on drawing title and file number) CB-DAC-188		13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN disturbed: 0 undisturbed: 0
	5. NAME OF DRILLER NICK PRICE		14. TOTAL NUMBER OF CORE BOXES 1
	6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		15. ELEVATION GROUND WATER Tide = +?
	7. THICKNESS OF BURDEN 0 Ft.		16. DATE HOLE STARTED COMPLETED 7/4/96 1354
	8. DEPTH DRILLED INTO ROCK 0 Ft.		17. ELEVATION TOP OF HOLE -33.2 Ft.
9. TOTAL DEPTH OF HOLE 11.5 Ft.		18. TOTAL CORE RECOVERY FOR BORING 96 %	
		19. SIGNATURE OF GEOLOGIST ROCKLAND BURR	

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-33.2	.0					-33.2
			Sand, fine to medium grained, light brown, a little shell fragments (SP)			Lat-Lon 25 41 21.8N 80 05 33.7W  Laboratory Data Depth USGS SpG. 2.0 SP 8.0 SP-SM
-38.0	4.8		Sand, fine to medium grained, light brown, with shell fragments, pieces of coral (SP-SM)			
-44.2	11.0		Limestone, tan (LM)			
-44.7	11.5	I	End of Boring			
			Soils are field visually classified in accordance with the Unified Soils Classification System.			

# SETTLING TEST

Project Dade County SSP

DATE 8/16/96

File Number 96-026

Sample CB-DAC-182

Column # 3

Depth 3.5

Wgt of Wet Soil (gms) 50.00

Moisture Content (%)

Tare # 609

WWS+ Tare 65.74

WDS+ Tare 62.64

WW 3.10

Wgt Tare 31.99

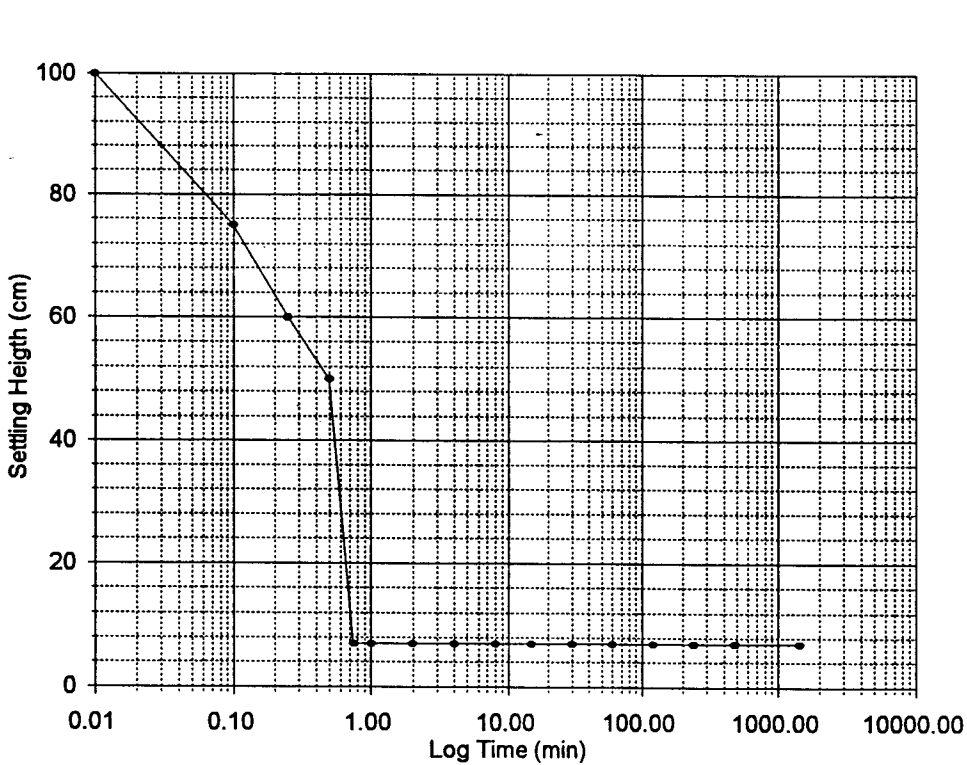
WDS 30.65

MC % 10.1

Final Concentration (gm/liter)

Wet 714.3

Dry 648.7



Time (min)	Settling Ht. (cm)
0.01	100.0
0.1	75.0
0.25	60.0
0.5	50.0
0.75	7.0
1	7.0
2	7.0
4	7.0
8	7.0
15	7.0
30	7.0
60	7.0
120	7.0
240	7.0
480	7.0
1440	7.0

File# dcsap8.wb2

# SETTLING TEST

Project Dade County SSP

DATE 8/16/96

File Number 96-026

Sample CB-DAC-186

Column # 2

Depth 4

Wgt of Wet Soil (gms) 50.00

Moisture Content (%)

Tare # 34

WWS+ Tare 86.51

Final Concentration (gm/liter)

WDS+ Tare 75.54

Wet 735.3

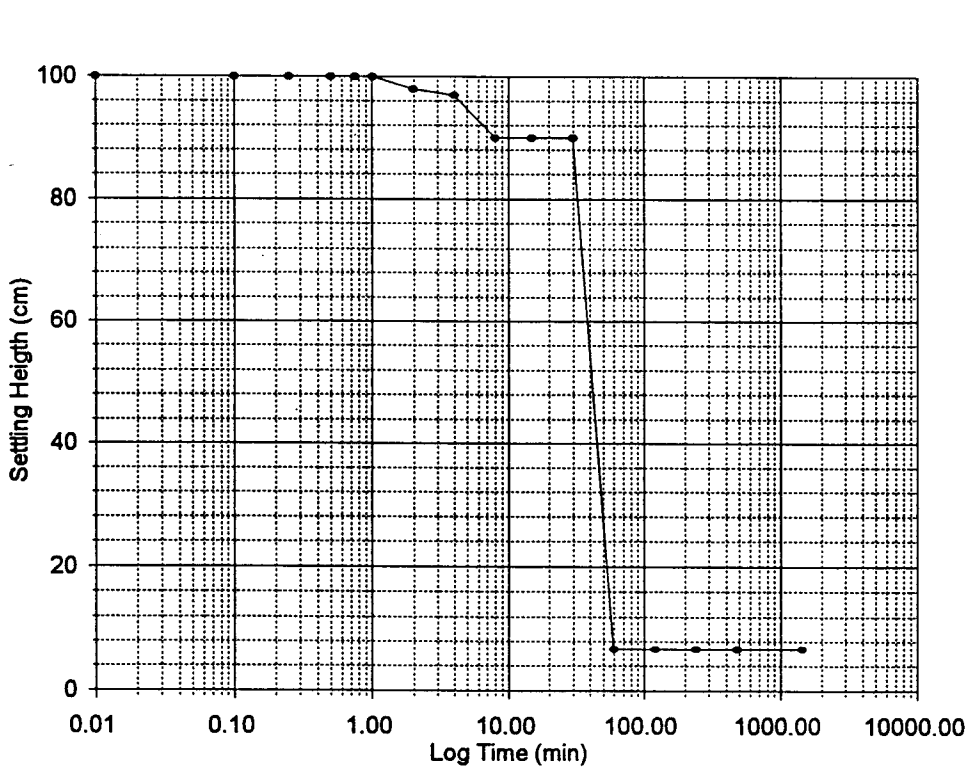
WW 10.97

Dry 585.5

Wgt Tare 32.65

WDS 42.89

MC % 25.6



Time (min)	Settling Ht. (cm)
0.01	100.0
0.1	100.0
0.25	100.0
0.5	100.0
0.75	100.0
1	100.0
2	98.0
4	97.0
8	90.0
15	90.0
30	90.0
60	6.8
120	6.8
240	6.8
480	6.8
1440	6.8

File# dceep10.wb2



# SETTLING TEST

Project Dade County SSP

DATE 8/16/96

File Number 96-026

Sample CB-DAC-188

Column # 5

Depth ' 8

Wgt of Wet Soil (gms) 50.00

Moisture Content (%)

Tare # P-14

WWS+ Tare 75.46

WDS+ Tare 68.33

WW 7.13

Wgt Tare 32.58

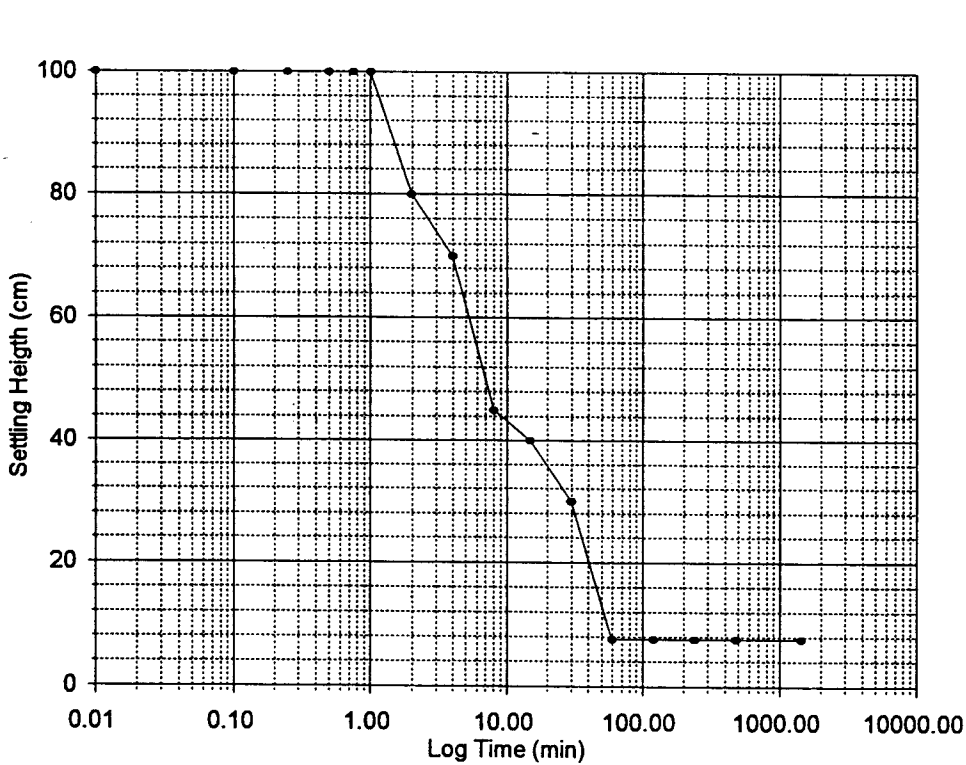
WDS 35.75

MC % 19.9

Final Concentration (gm/liter)

Wet 657.9

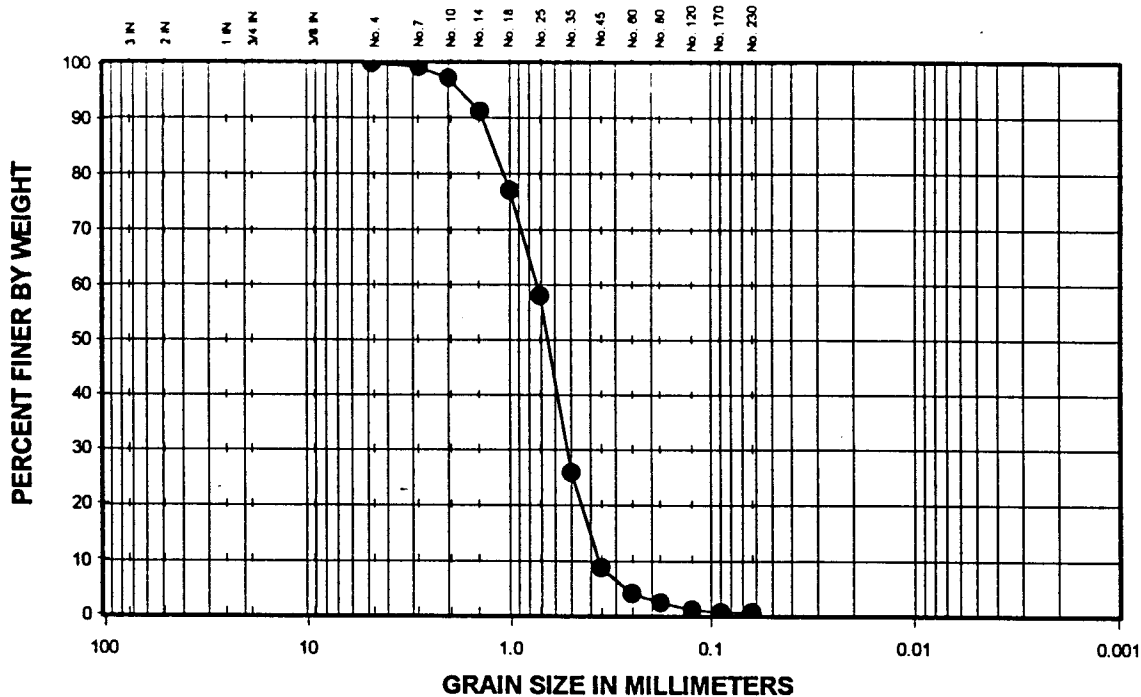
Dry 548.5



Time (min)	Settling Ht. (cm)
0.01	100.0
0.1	100.0
0.25	100.0
0.5	100.0
0.75	100.0
1	100.0
2	80.0
4	70.0
8	45.0
15	40.0
30	30.0
60	7.6
120	7.6
240	7.6
480	7.6
1440	7.6

File# dcasp7.wb2

U.S. STANDARD SIEVE SIZE



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC181	1.5	●	SP

GRAIN-SIZE DISTRIBUTION

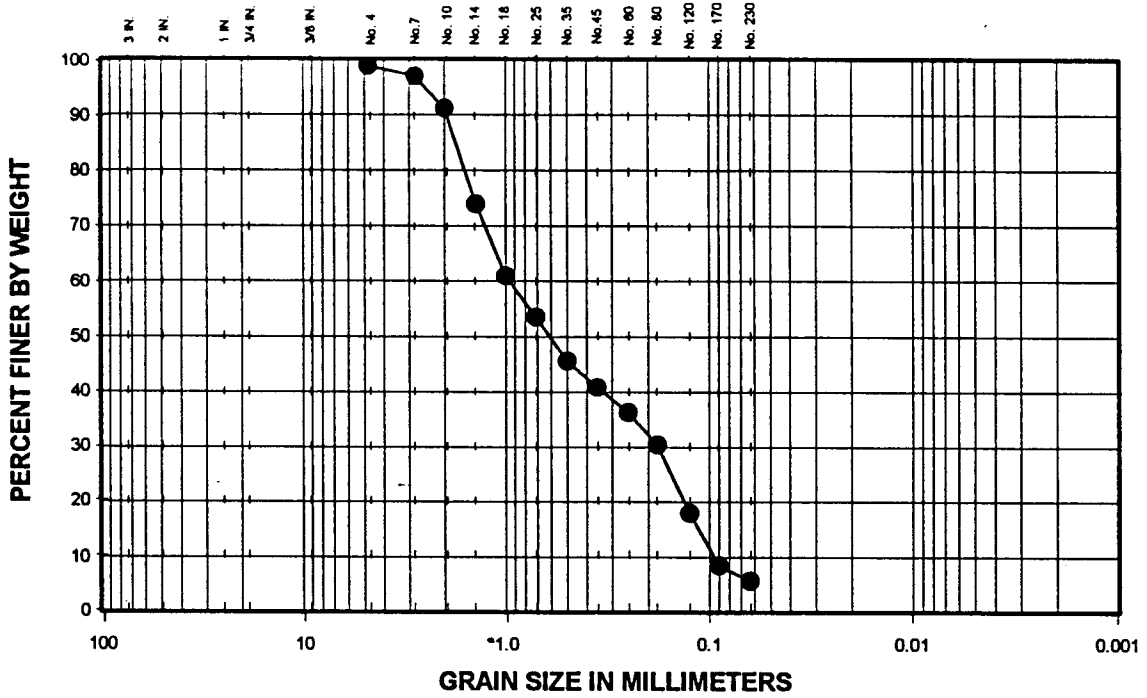
**Ardaman & Associates, Inc.**  
 Geotechnical, Environmental and  
 Materials Consultants

Dade County SSP

DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

01000-G51

**U.S. STANDARD SIEVE SIZE**



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-181	3.5	●	SP-SM

**GRAIN-SIZE DISTRIBUTION**

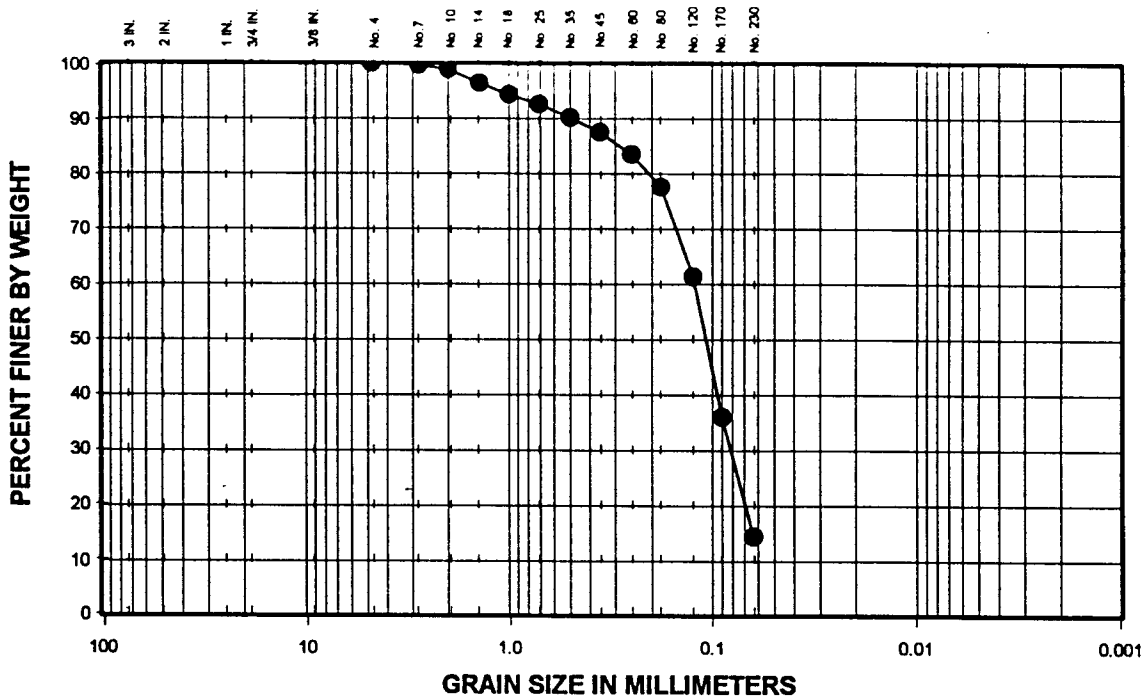
**Ardaman & Associates, Inc.**  
 Geotechnical, Environmental and  
 Materials Consultants

Dade County SSP

DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

01000-G52

U.S. STANDARD SIEVE SIZE



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-181	8.0	●	SM

GRAIN-SIZE DISTRIBUTION

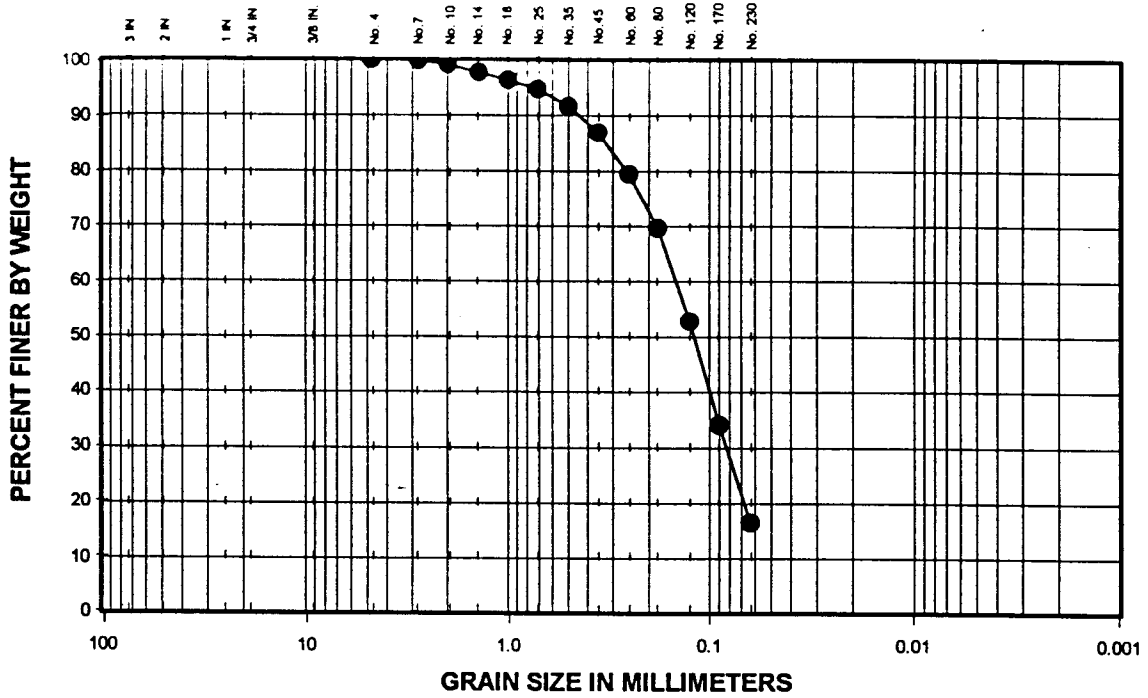
**Ardaman & Associates, Inc.**  
 Geotechnical, Environmental and  
 Materials Consultants

Dade County SSP

DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

01000-G53

U.S. STANDARD SIEVE SIZE



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-181	14.0	●	SM

GRAIN-SIZE DISTRIBUTION

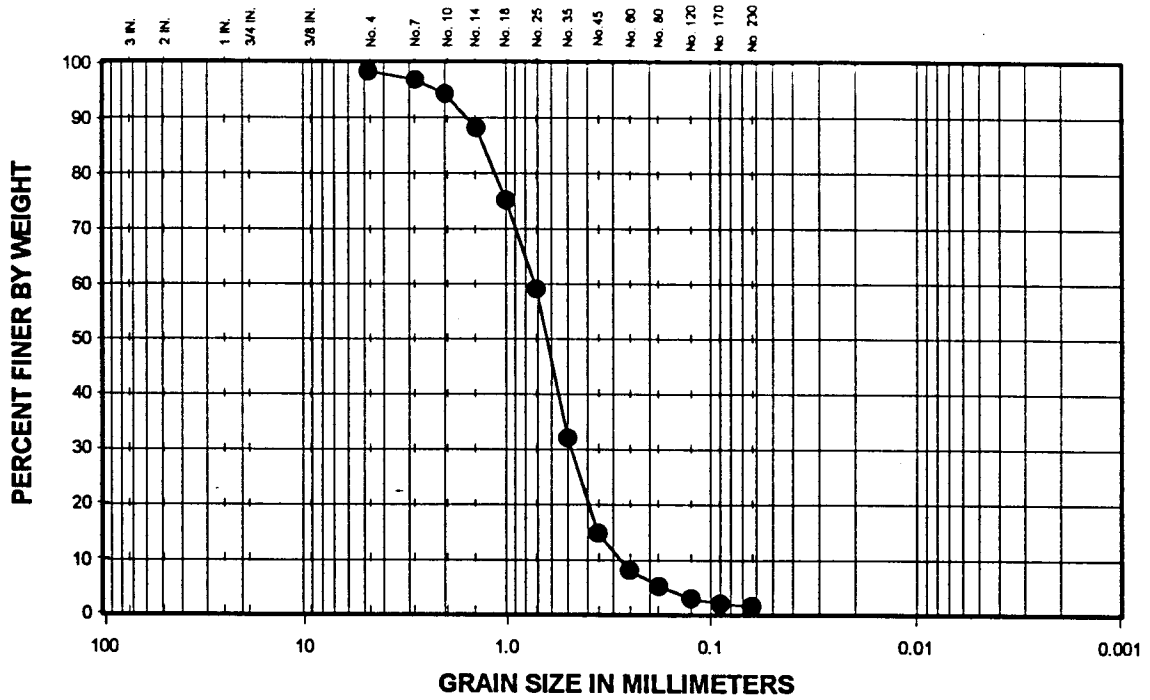
**Ardaman & Associates, Inc.**  
 Geotechnical, Environmental and  
 Materials Consultants

Dade County SSP

DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

01000-G54

**U.S. STANDARD SIEVE SIZE**




GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

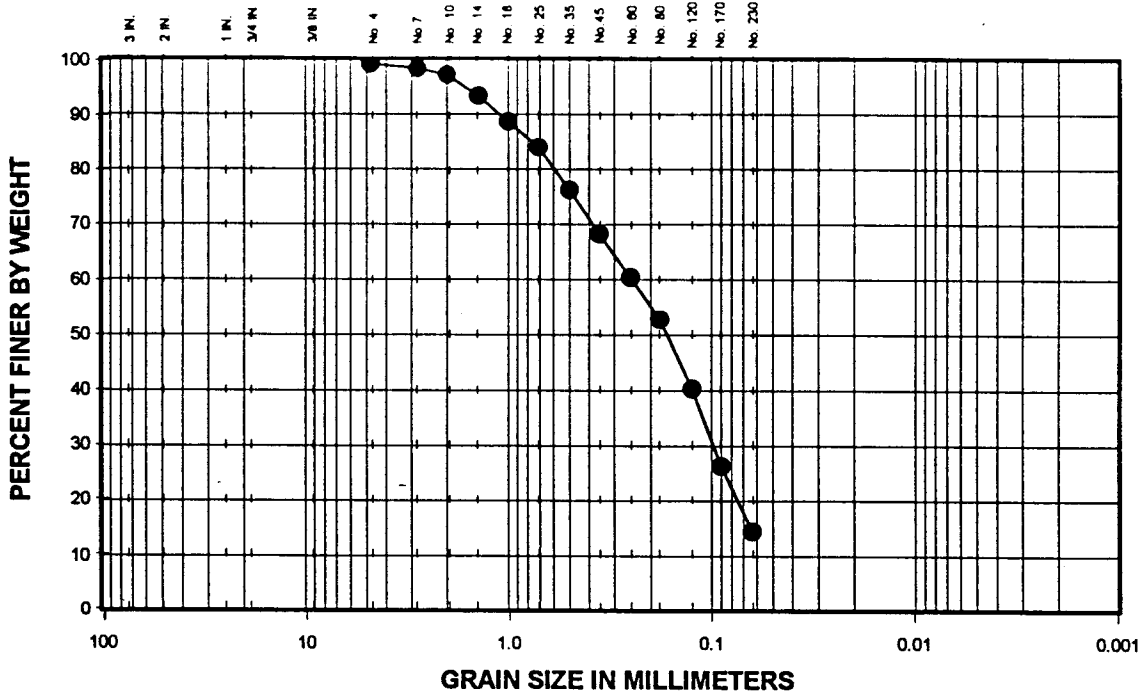
SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-182	3.5	●	SP

**GRAIN-SIZE DISTRIBUTION**

01000-G55

 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants			
Dade County SSP			
DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996	
FILE NO. 96-026	APPROVED BY:	FIGURE:	

U.S. STANDARD SIEVE SIZE



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-182	7.0	●	SM

GRAIN-SIZE DISTRIBUTION

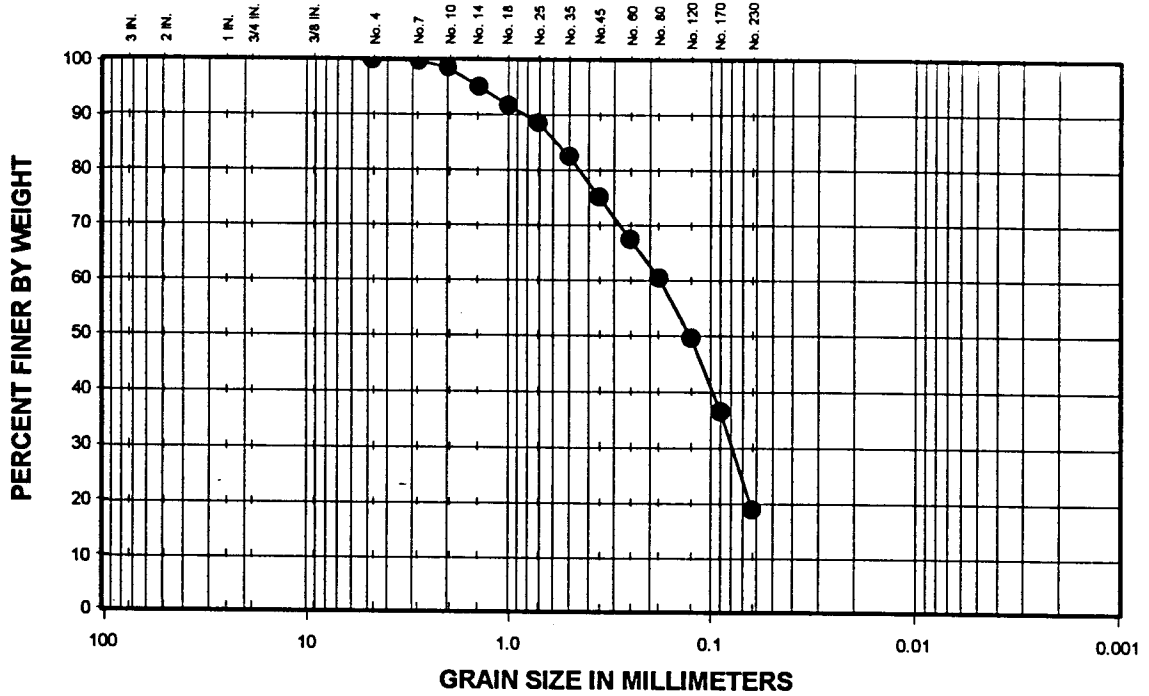
**Ardaman & Associates, Inc.**  
Geotechnical, Environmental and  
Materials Consultants

Dade County SSP

DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

01000-G56

U.S. STANDARD SIEVE SIZE




GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-182	11.0	●	SM

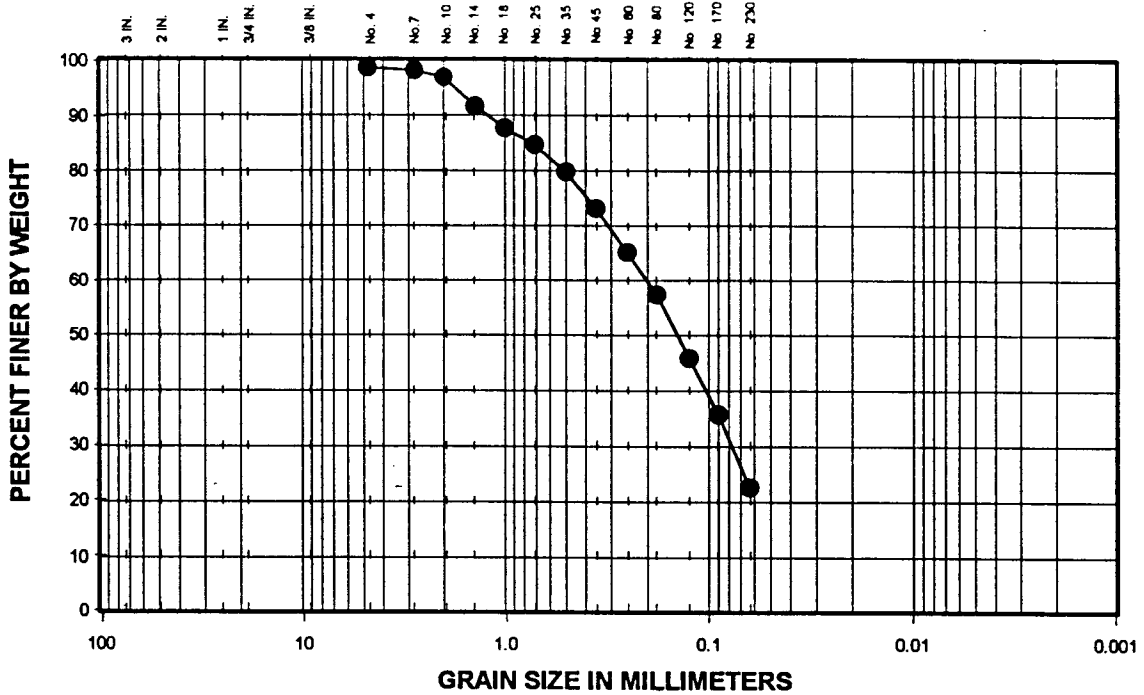
GRAIN-SIZE DISTRIBUTION

01000-G57

 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants			
Dade County SSP			
DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996	
FILE NO. 96-026	APPROVED BY:	FIGURE:	



U.S. STANDARD SIEVE SIZE



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-182	15.5	●	SM

GRAIN-SIZE DISTRIBUTION

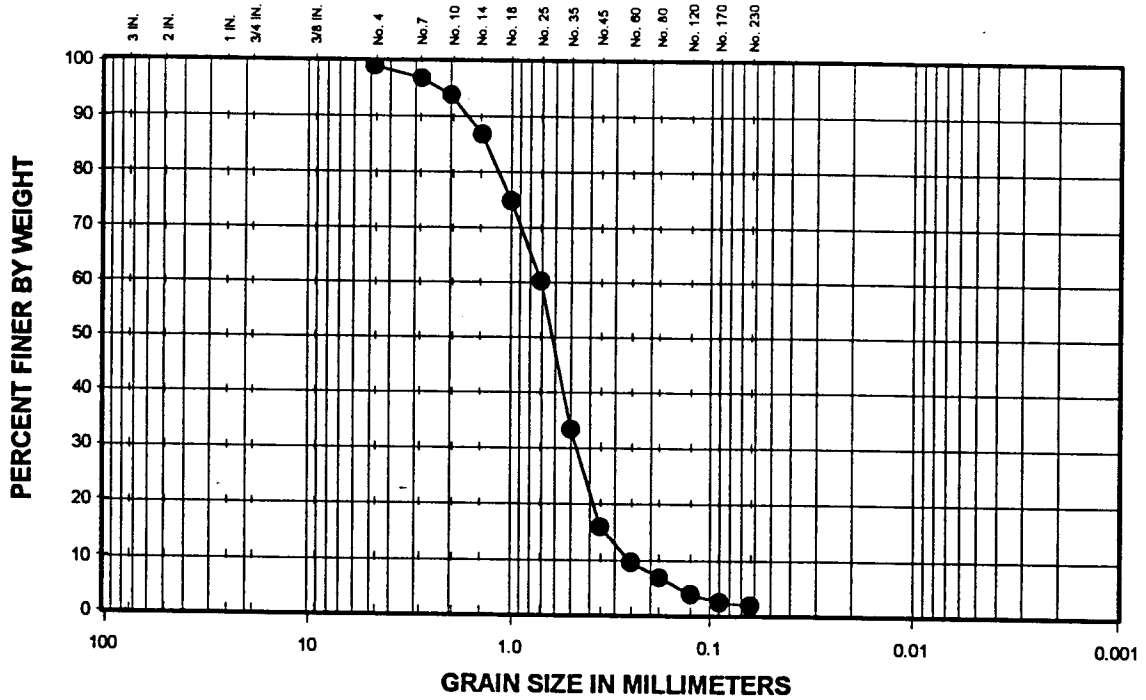
**Ardaman & Associates, Inc.**  
 Geotechnical, Environmental and  
 Materials Consultants

Dade County SSP

DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

01000-G58

**U.S. STANDARD SIEVE SIZE**



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-183	2.5	●	SP

**GRAIN-SIZE DISTRIBUTION**

**Ardaman & Associates, Inc.**  
 Geotechnical, Environmental and  
 Materials Consultants

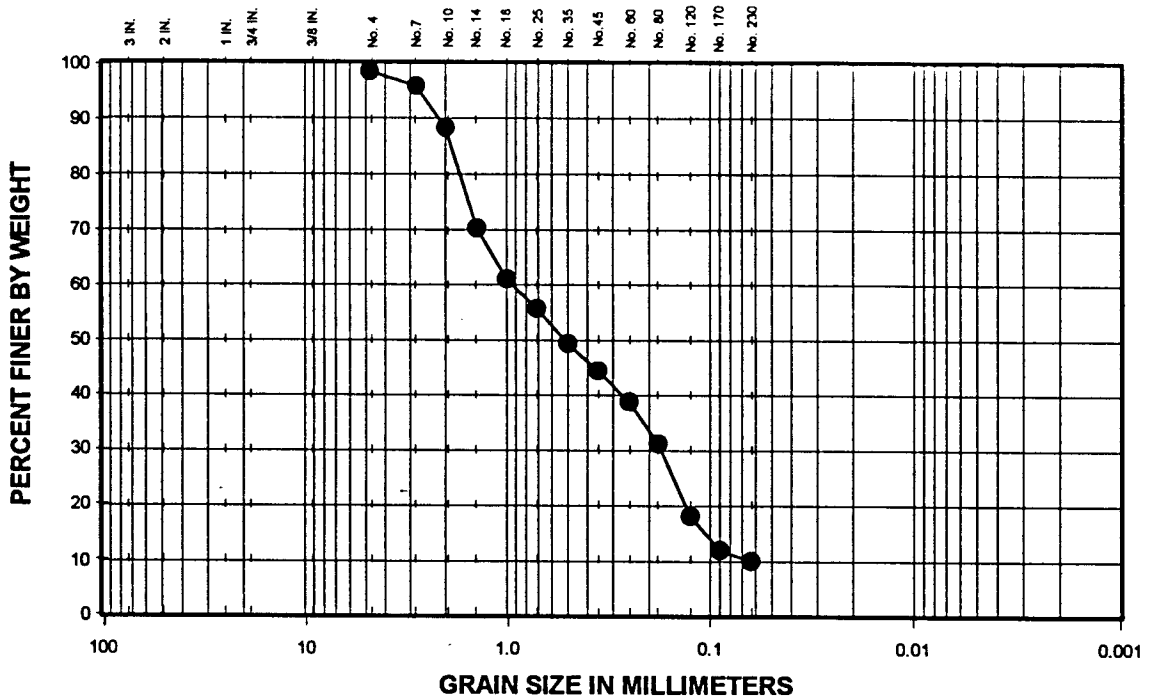
Dade County SSP

DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

01000-G59

FILE # dade1.pre2

**U.S. STANDARD SIEVE SIZE**




GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

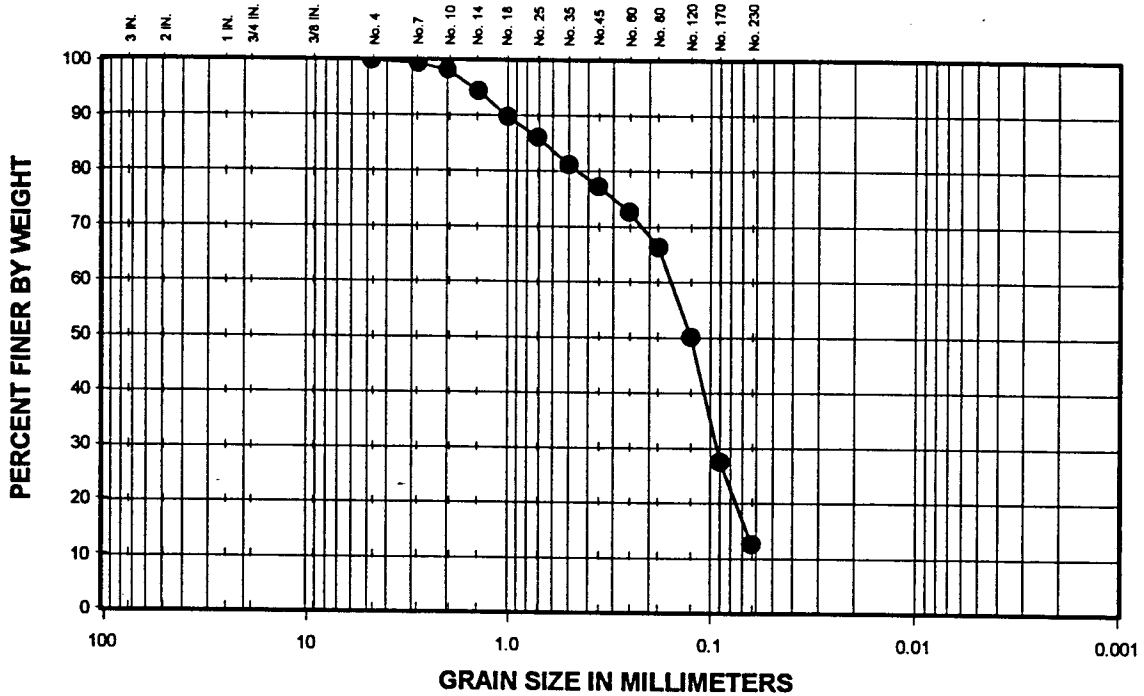
SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-183	4.0	●	SP-SM

**GRAIN-SIZE DISTRIBUTION**

01000-G60

 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants		
Dade County SSP		
DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

**U.S. STANDARD SIEVE SIZE**




GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

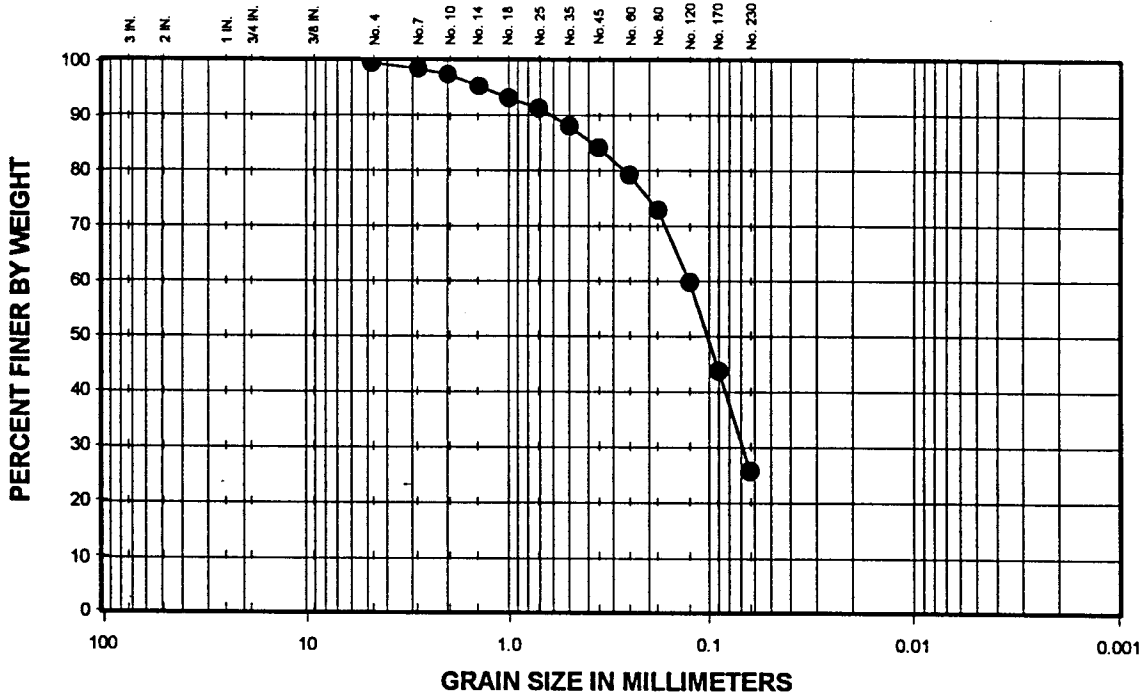
SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-183	8.0	●	SM

**GRAIN-SIZE DISTRIBUTION**

01000-G61

 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants		
Dade County SSP		
DRAWN BY: GDS FILE NO: 96-026	CHECKED BY: APPROVED BY:	DATE: August, 1996 FIGURE:

**U.S. STANDARD SIEVE SIZE**



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-183	16.0	●	SM

**GRAIN-SIZE DISTRIBUTION**

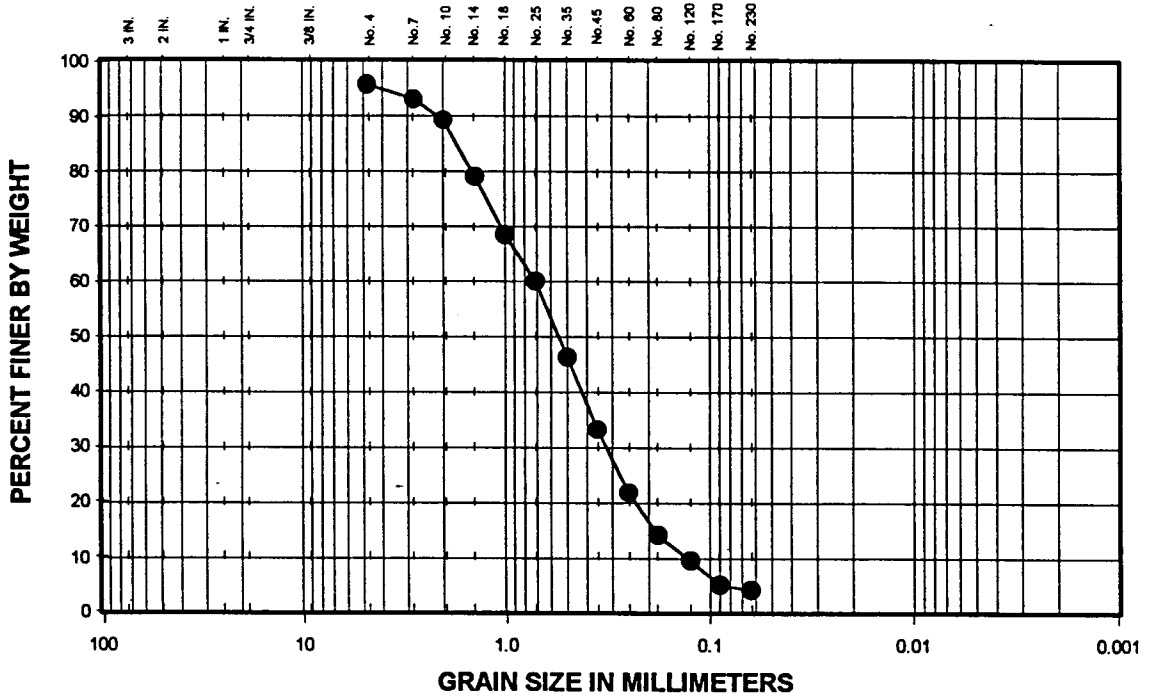


Dade County SSP

DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

01000-G62

**U.S. STANDARD SIEVE SIZE**




GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

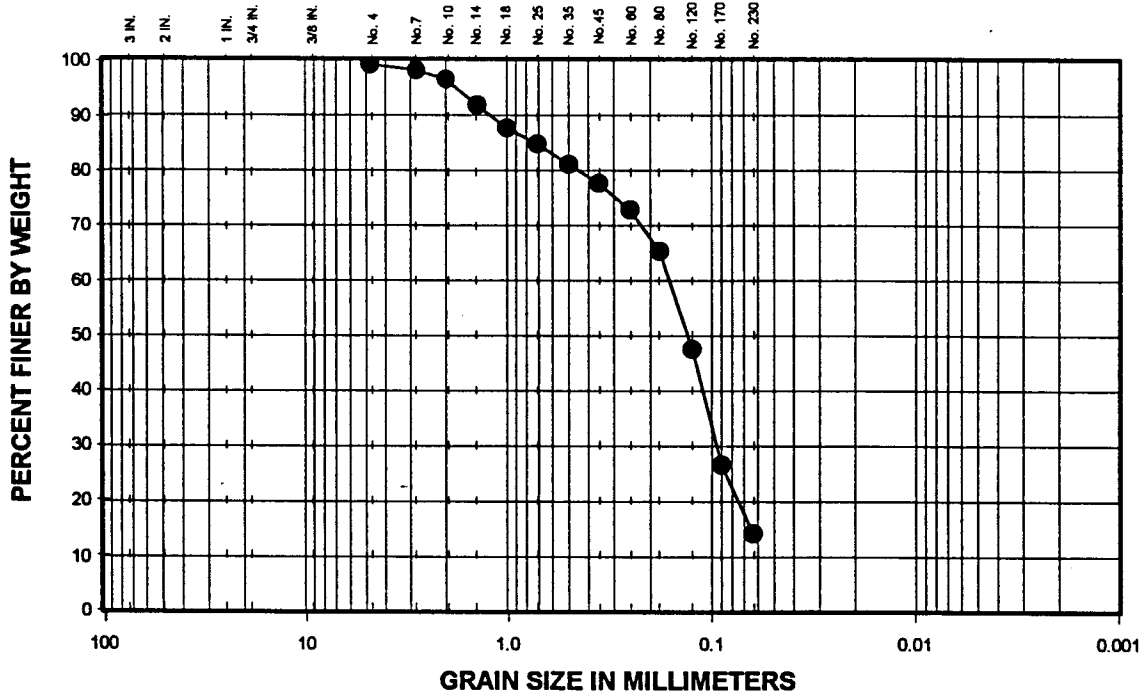
SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-184	4.0	●	SP

**GRAIN-SIZE DISTRIBUTION**

01000-G63

 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants			
Dade County SSP			
DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996	
FILE NO. 96-026	APPROVED BY:	FIGURE:	

**U.S. STANDARD SIEVE SIZE**




GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

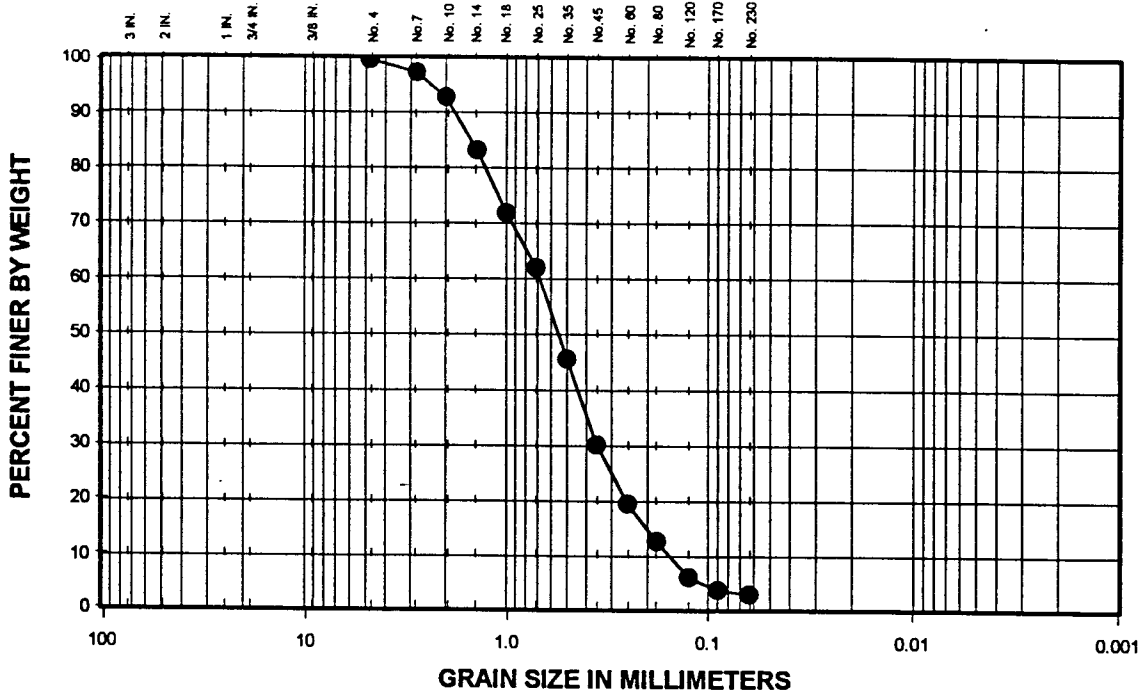
SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-184	7.5	●	SM

**GRAIN-SIZE DISTRIBUTION**

01000-G64

 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants			
Dade County SSP			
DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996	
FILE NO. 96-026	APPROVED BY:	FIGURE:	

**U.S. STANDARD SIEVE SIZE**




GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-185	2.0	●	SP

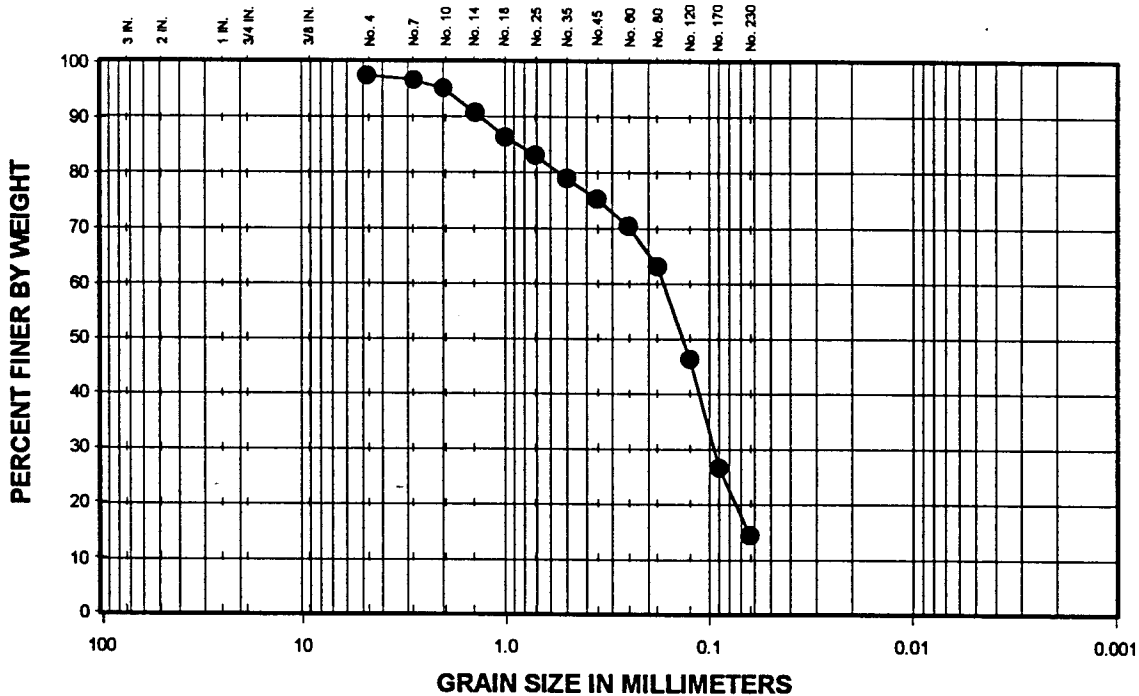
**GRAIN-SIZE DISTRIBUTION**

01000-G65

 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants			
Dade County SSP			
DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996	
FILE NO. 96-026	APPROVED BY:	FIGURE:	



**U.S. STANDARD SIEVE SIZE**




GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

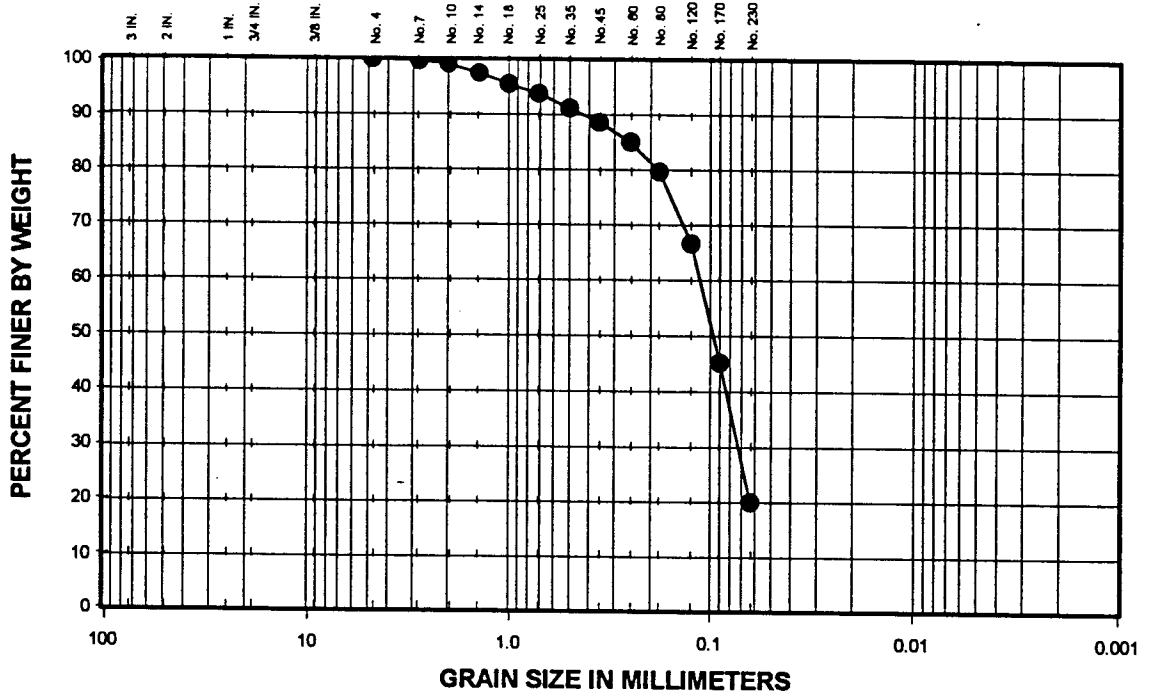
SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-185	7.5	●	SM

**GRAIN-SIZE DISTRIBUTION**

01000-G66

 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants			
Dade County SSP			
DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996	
FILE NO. 96-026	APPROVED BY:	FIGURE:	

**U.S. STANDARD SIEVE SIZE**



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-185	13.0	●	SM

**GRAIN-SIZE DISTRIBUTION**

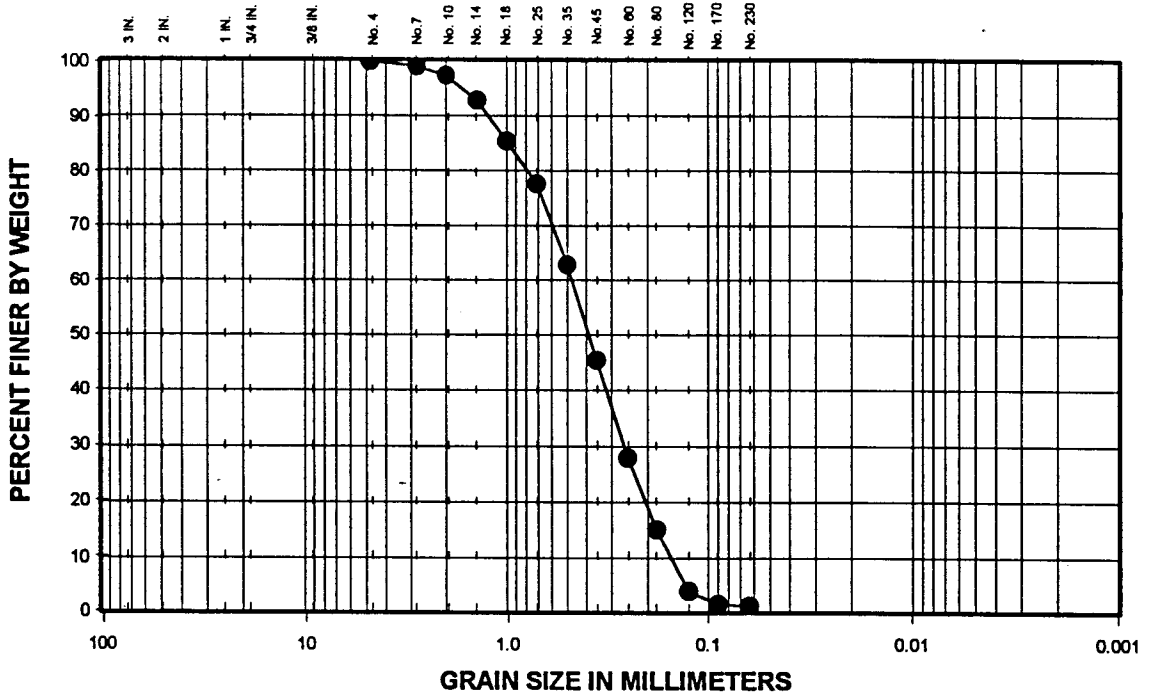
**Ardaman & Associates, Inc.**  
 Geotechnical, Environmental and  
 Materials Consultants

Dade County SSP

DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

01000-G67

**U.S. STANDARD SIEVE SIZE**




GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

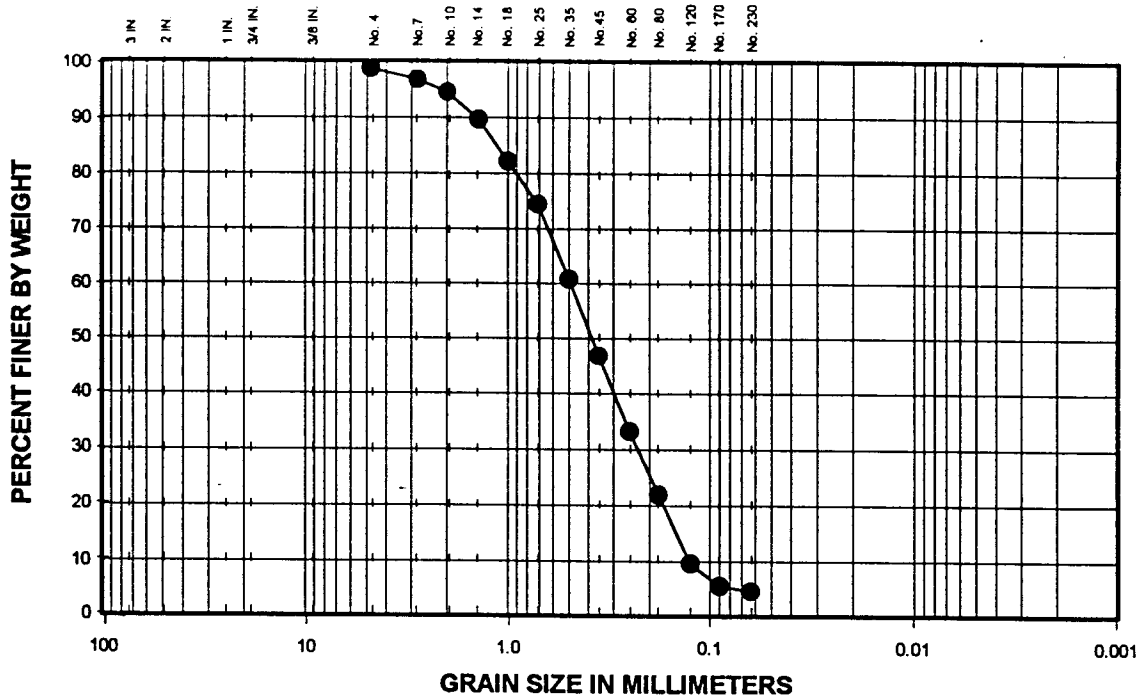
SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-186	2.0	●	SP

**GRAIN-SIZE DISTRIBUTION**

01000-G68

 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants			
Dade County SSP			
DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996	
FILE NO. 96-026	APPROVED BY:	FIGURE:	

**U.S. STANDARD SIEVE SIZE**




GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

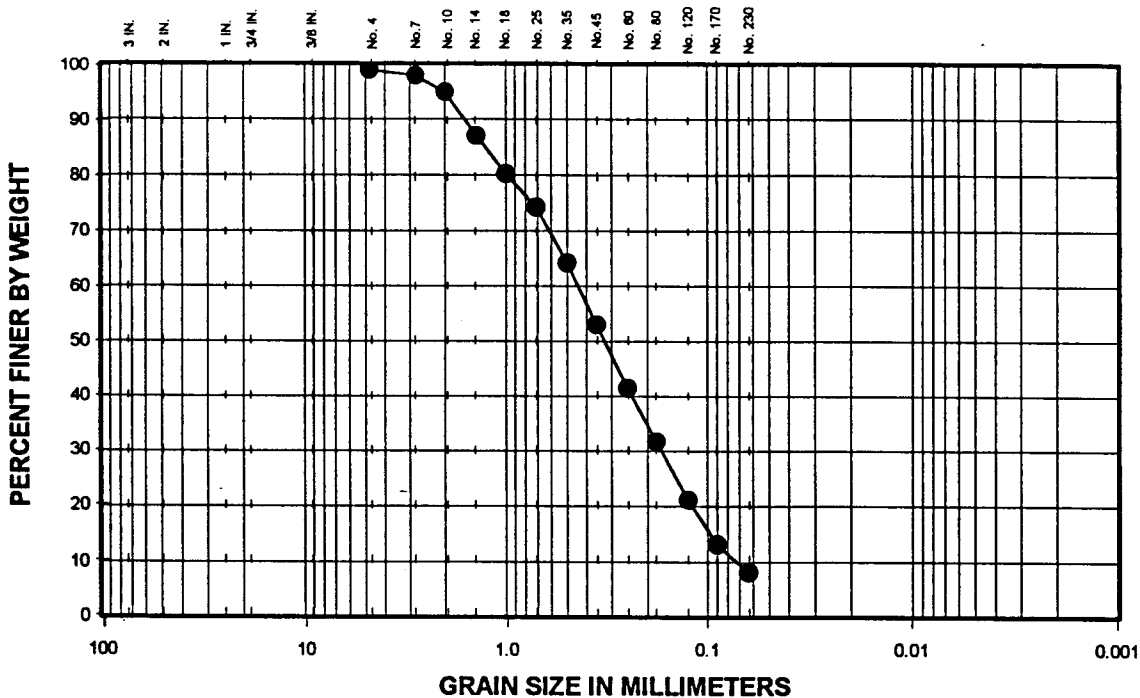
SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-186	4.0	●	SP-SM

**GRAIN-SIZE DISTRIBUTION**

01000-G69

 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants			
Dade County SSP			
DRAWN BY:	GDS	CHECKED BY:	DATE: August, 1996
FILE NO.	96-026	APPROVED BY:	FIGURE:

**U.S. STANDARD SIEVE SIZE**



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-186	11.0	●	SP-SM

**GRAIN-SIZE DISTRIBUTION**

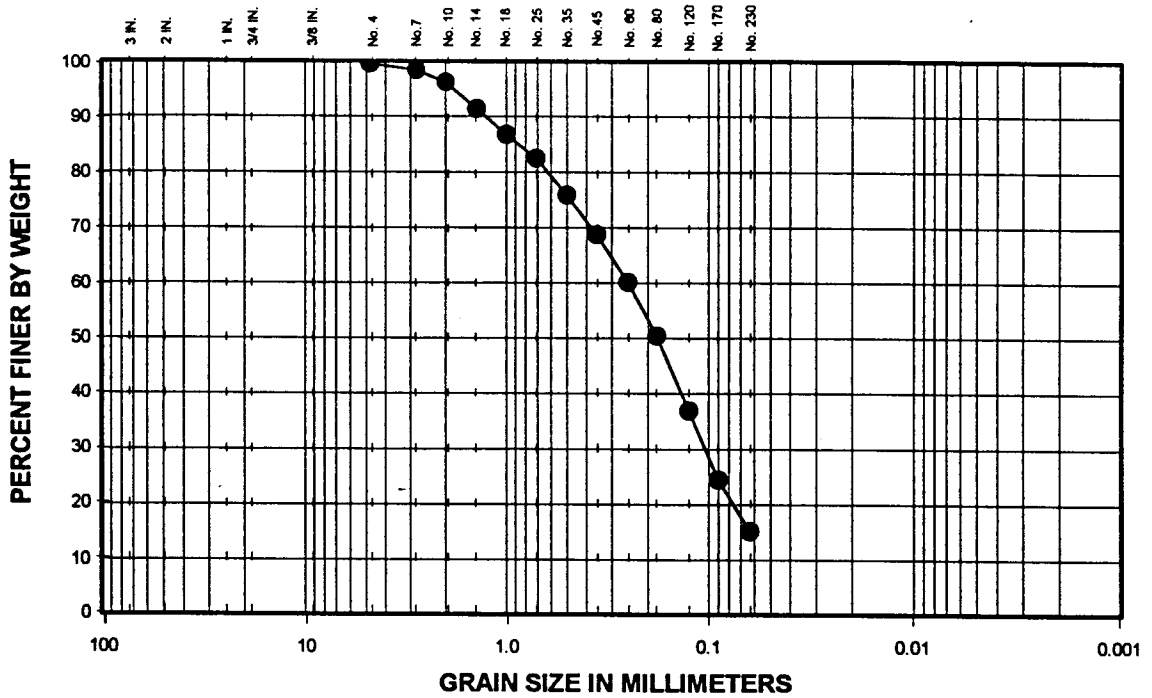
**Ardaman & Associates, Inc.**  
Geotechnical, Environmental and  
Materials Consultants

Dade County SSP

DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

01000-G70

**U.S. STANDARD SIEVE SIZE**




GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

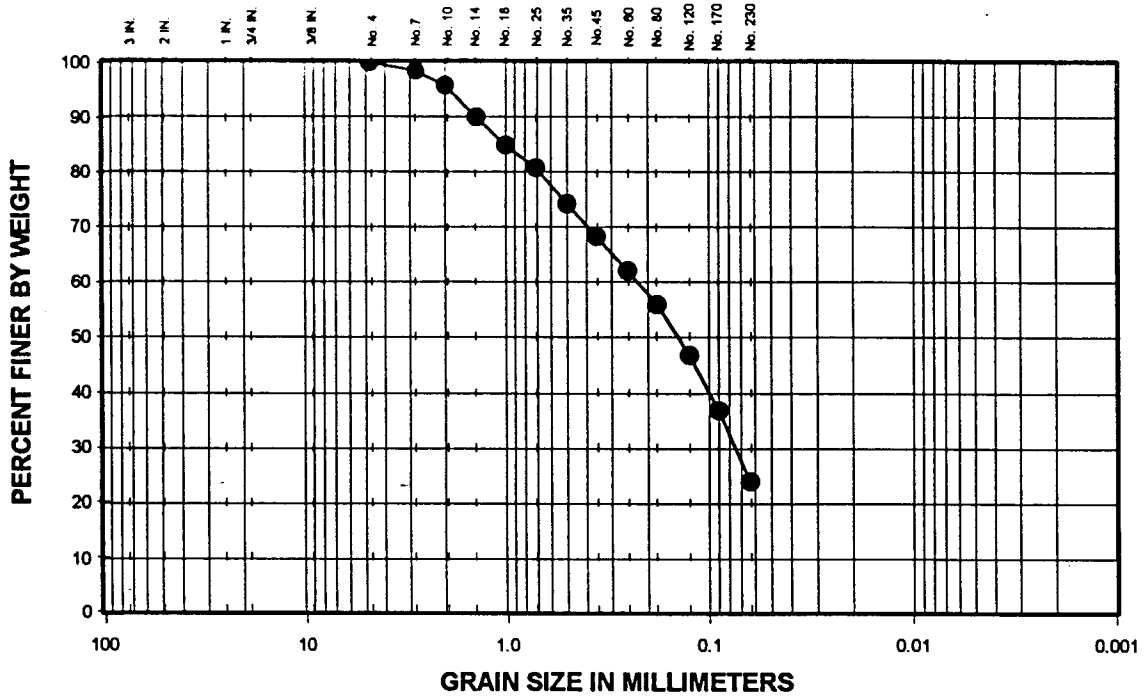
SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-186	12.5	●	SM

**GRAIN-SIZE DISTRIBUTION**

01000-G71

 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants		
Dade County SSP		
DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

U.S. STANDARD SIEVE SIZE



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-186	17.5	●	SM

GRAIN-SIZE DISTRIBUTION

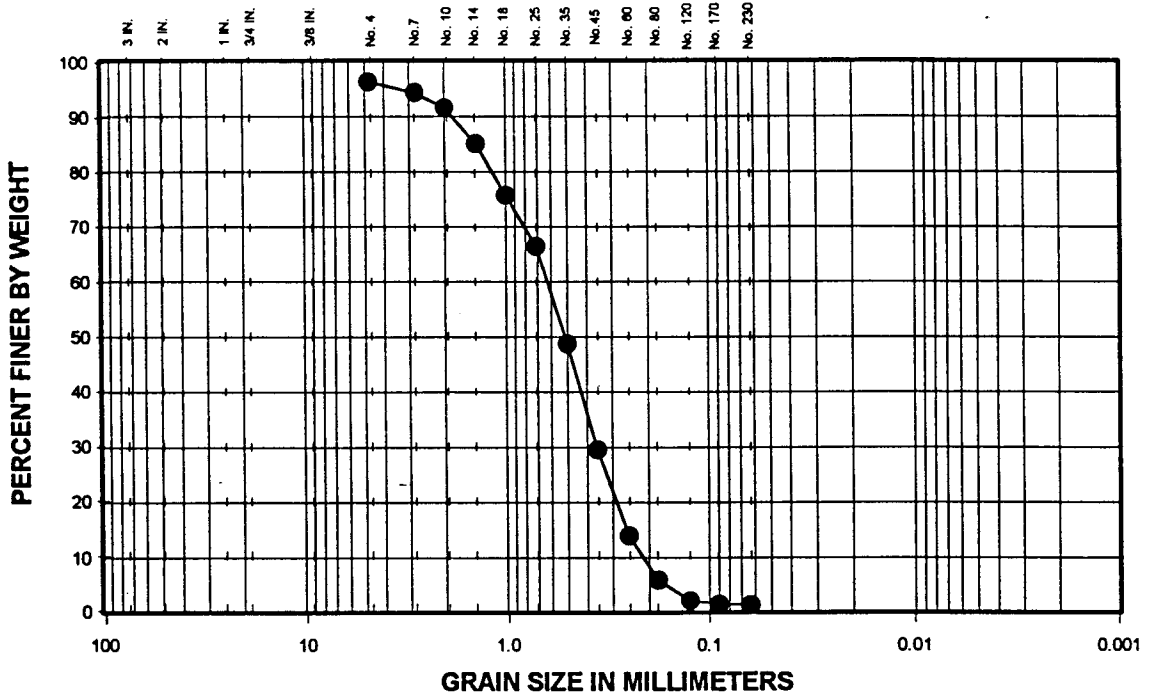
**Ardaman & Associates, Inc.**  
 Geotechnical, Environmental and  
 Materials Consultants

Dade County SSP

DRAWN BY: GDS    CHECKED BY:    DATE: August, 1996  
 FILE NO. 96-026    APPROVED BY:    FIGURE:

01000-G72

**U.S. STANDARD SIEVE SIZE**



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-187	4.0	●	SP

**GRAIN-SIZE DISTRIBUTION**

**Ardaman & Associates, Inc.**  
 Geotechnical, Environmental and  
 Materials Consultants

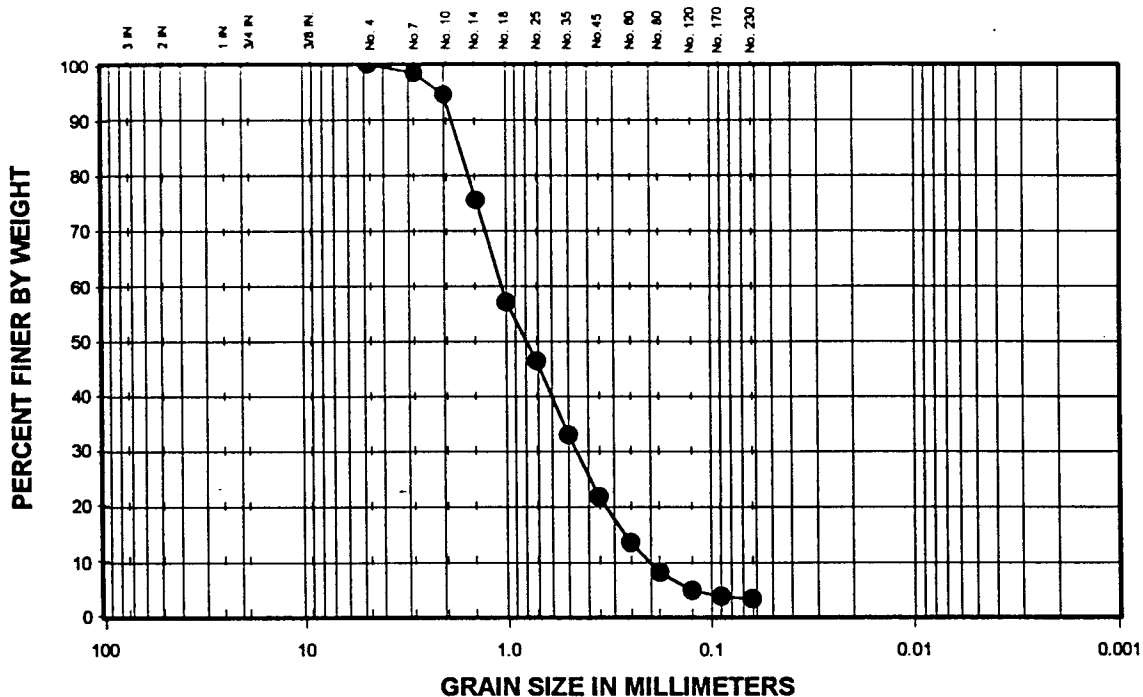
Dade County SSP

DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

01000-G73



U.S. STANDARD SIEVE SIZE




GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

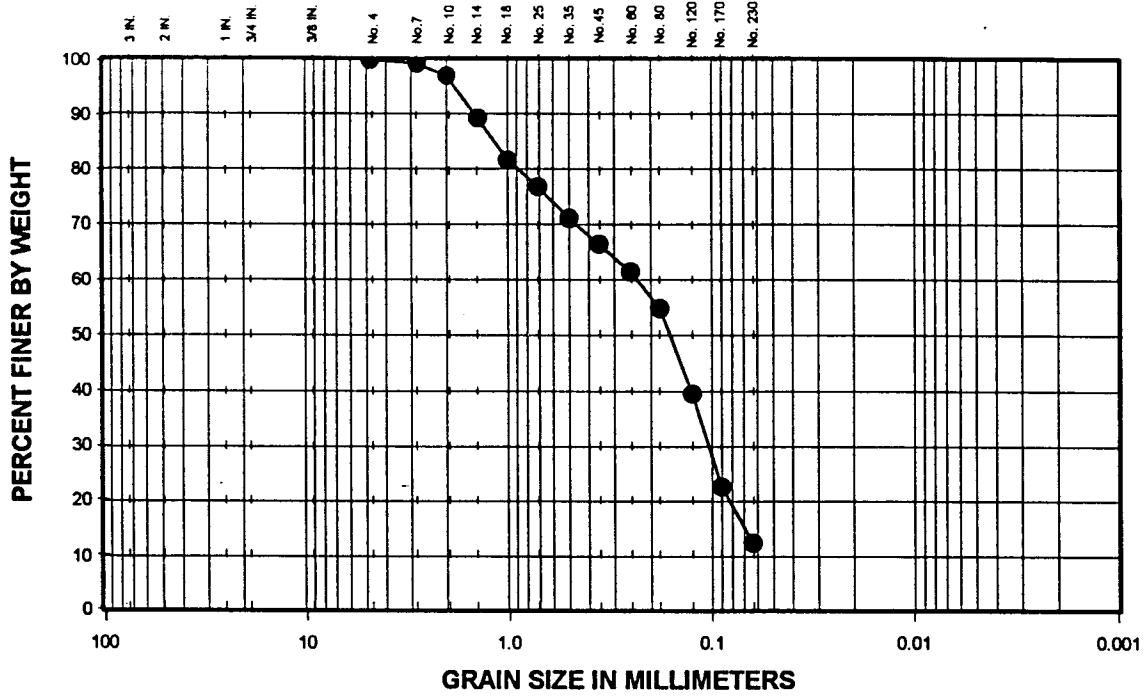
SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-187	7.5	●	SP

GRAIN-SIZE DISTRIBUTION

01000-G74

 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants			
Dade County SSP			
DRAWN BY:	GDS	CHECKED BY:	DATE: August, 1996
FILE NO.	96-026	APPROVED BY:	FIGURE:

U.S. STANDARD SIEVE SIZE



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-187	14.0	●	SM

GRAIN-SIZE DISTRIBUTION

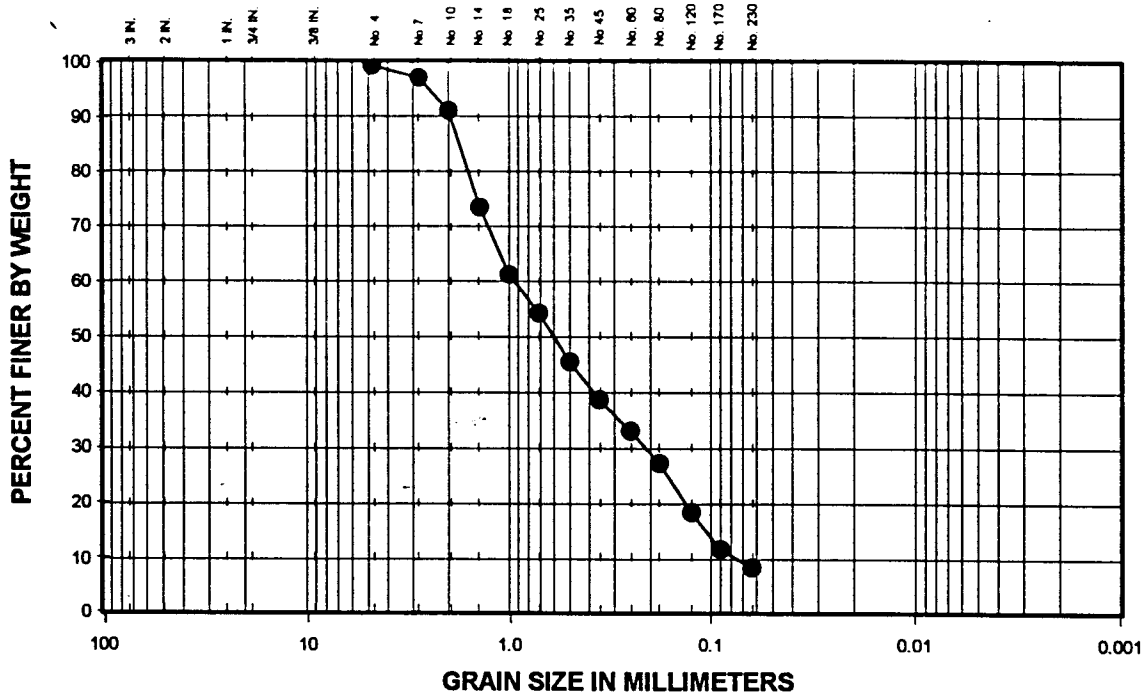
01000-G75

**Ardaman & Associates, Inc.**  
 Geotechnical, Environmental and  
 Materials Consultants

Dade County SSP

DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

U.S. STANDARD SIEVE SIZE



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-187	16.0	●	SP-SM

GRAIN-SIZE DISTRIBUTION

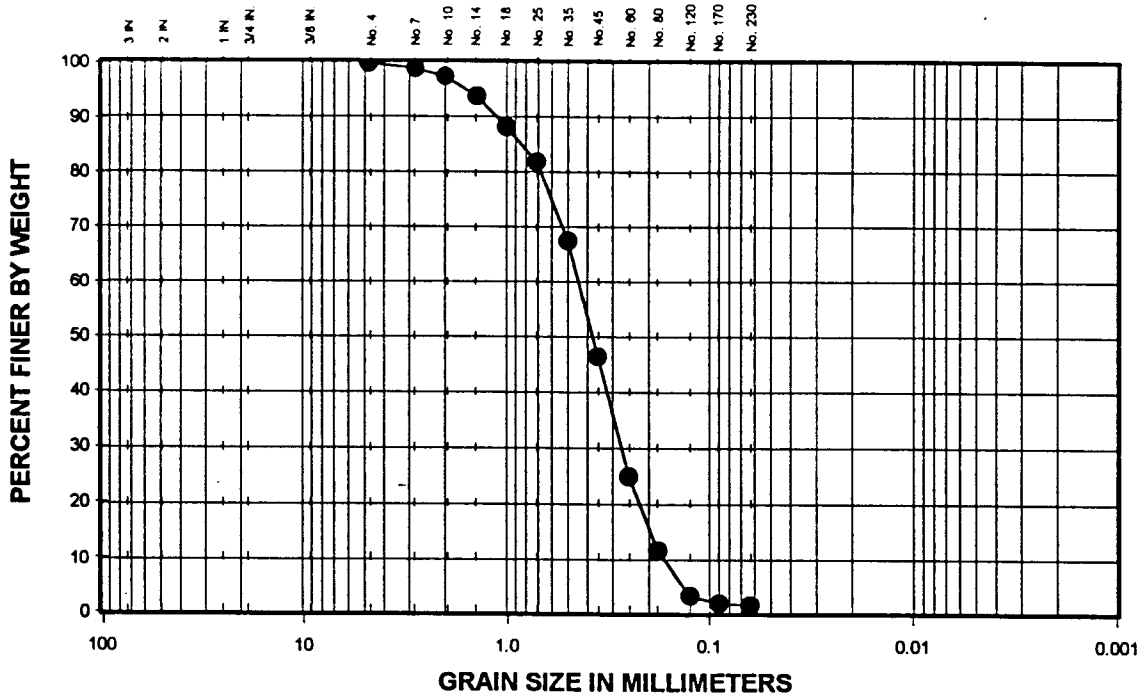
01000-G76

**Ardaman & Associates, Inc.**  
 Geotechnical, Environmental and  
 Materials Consultants

Dade County SSP

DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

**U.S. STANDARD SIEVE SIZE**




GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

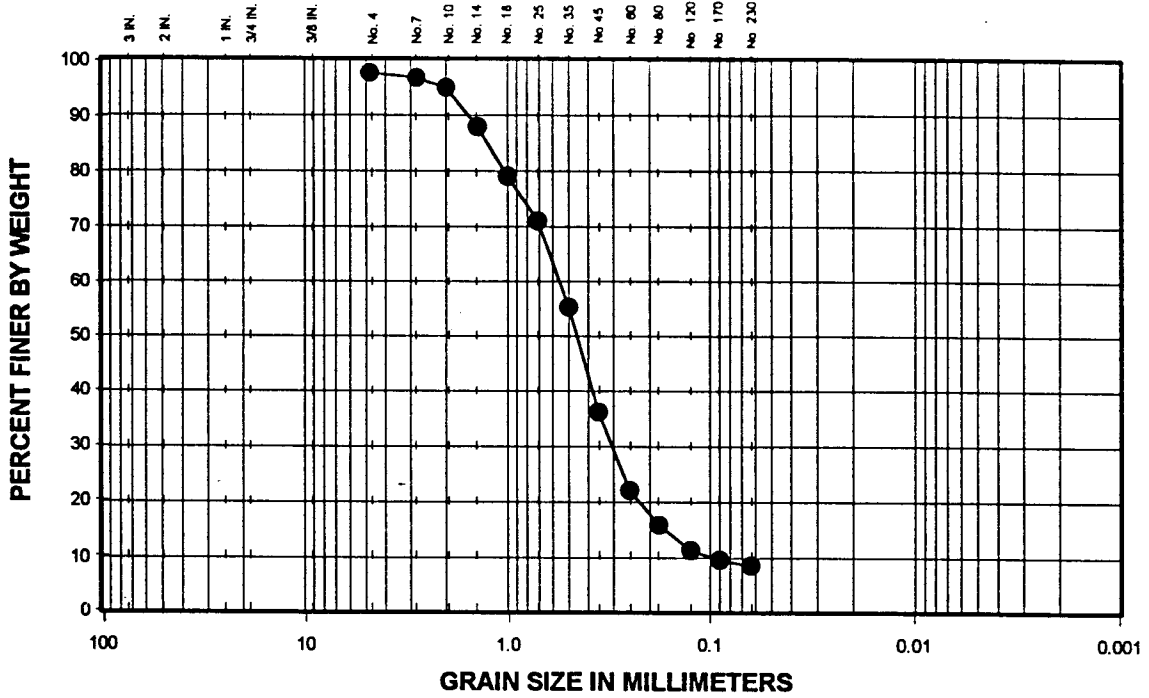
SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-188	2.0	●	SP

**GRAIN-SIZE DISTRIBUTION**

01000-G77

 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants		
Dade County SSP		
DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

U.S. STANDARD SIEVE SIZE



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

SAMPLE LOCATION	DEPTH	SYMBOL	UNIFIED CLASS.
CB-DAC-188	8.0	●	SP-SM

GRAIN-SIZE DISTRIBUTION

**Ardaman & Associates, Inc.**  
 Geotechnical, Environmental and  
 Materials Consultants

Dade County SSP

DRAWN BY: GDS	CHECKED BY:	DATE: August, 1996
FILE NO. 96-026	APPROVED BY:	FIGURE:

01000-G78

**CORE BORING AND WASH PROBE LOGS  
BREAKWATER AREA**

### Hole No. CB-SI-1

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1
1. PROJECT Sunny Isles Breakwater		10. SIZE AND TYPE OF BIT See Remarks		
2. LOCATION (Coordinates or Station) X=790,136 Y=590,550		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW (FEET)		
3. DRILLING AGENCY Corps of Engineers		12. MANUFACTURER'S DESIGNATION OF DRILL Failing 314		
4. HOLE NO. (As shown on drawing title and file number) CB-SI-1		13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN disturbed: 5 undisturbed: 0		
5. NAME OF DRILLER D. Justiss		14. TOTAL NUMBER OF CORE BOXES 1		
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		15. ELEVATION GROUND WATER TIDAL		
7. THICKNESS OF BURDEN Ft.		16. DATE HOLE STARTED COMPLETED 2/6/94 2/6/94		
8. DEPTH DRILLED INTO ROCK 0 Ft.		17. ELEVATION TOP OF HOLE -12.1 Ft.		
9. TOTAL DEPTH OF HOLE 7.4 Ft.		18. TOTAL CORE RECOVERY FOR BORING 47 %		
		19. SIGNATURE OF GEOLOGIST Marty Goff		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS Bit or Barrel	BLOWS/ 5'
-12.1	.0					-12.1	0
			SAND, fine to medium shell, some quartz, trace silt, gray to dark gray (SP)	53	1	SPLIT SPOON	1 2 4
						-13.6	
				53	2	SPLIT SPOON	8 12 11
						-15.1	
				47	3	SPLIT SPOON	9 10 13
						-16.6	
				40	4	SPLIT SPOON	9 8 14
-17.6	5.5		below -17.6, gravel sized limestone fragments, trace clay, tan-gray			-18.1	6
-18.6	6.5			40	5	SPLIT SPOON	15 100+
-19.5	7.4		SAND, some gravel sized limestone fragments, little CH clay, sandy layers, clayey layers, tan-brown (SC)			-19.5	8
			Top of rock @ -19.5				
			NOTE: Soils are field visually classified in accordance with the Unified Soils Classification System.				
			Samples recovered using a Standard SPLIT SPOON (1-3/8" I.D. x 2" O.D.) Drive with a 140# hammer, 30" drop.				10 12 14 16 18

01000-C80

## Hole No. CB-SI-2

<b>DRILLING LOG</b>	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1
1. PROJECT Sunny Isles Breakwater		10. SIZE AND TYPE OF BIT See Remarks	
2. LOCATION (Coordinates or Station) X=790,092 Y=589,805		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW (FEET)	
3. DRILLING AGENCY Corps of Engineers		12. MANUFACTURER'S DESIGNATION OF DRILL Failing 314	
4. HOLE NO. (As shown on drawing title and file number) CB-SI-2		13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN disturbed: 7    undisturbed: 0	
5. NAME OF DRILLER D. Justiss		14. TOTAL NUMBER OF CORE BOXES 1	
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		15. ELEVATION GROUND WATER TIDAL	
7. THICKNESS OF BURDEN Ft.		16. DATE HOLE STARTED COMPLETED 2/6/94    2/6/94	
8. DEPTH DRILLED INTO ROCK 0 Ft.		17. ELEVATION TOP OF HOLE -13.5 Ft.	
9. TOTAL DEPTH OF HOLE 7.4 Ft.		18. TOTAL CORE RECOVERY FOR BORING 64 %	
		19. SIGNATURE OF GEOLOGIST Marty Goff	

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS Bit or Barrel	BLOWS/ 5'
-13.5	.0					-13.5	0
		•••••	SAND, fine to medium shell, some quartz, trace silt, gray to dark gray (SP)	60	1	SPLIT SPOON	3 1 5
						-15.0	2
		•••••		53	2	SPLIT SPOON	6 7 8
						-16.5	4
		•••••	below -17.9, gravel sized limestone fragments	40	3	SPLIT SPOON	5 4
-18.0	4.5	~ ~ ~				-18.0	1
		~ ~ ~	PEAT, trace shell and limestone fragments, dark brown (PT)	60	4		2
-18.8	5.3	•••••				SPLIT SPOON	2
		•••••	SAND, same as above, (SP)		5		2
-19.2	5.7	•••••				-19.5	6
		•••••	CLAY, little sand sized to gravel sized limestone fragments (CH)		6		11
		•••••		100	7	SPLIT SPOON	12 100+
-20.9	7.4	// //				-20.9	8
			Top of rock @ -20.9				8
			NOTE: Soils are field visually classified in accordance with the Unified Soils Classification System.				10
			Samples recovered using a Standard SPLIT SPOON (1-3/8" I.D. x 2" O.D.) Drive with a 140# hammer, 30" drop.				12
							14
							16
							18

01000-G81



# Hole No. WB-SI-1

<b>DRILLING LOG</b>	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1
1. PROJECT Sunny Isles Breakwater		10. SIZE AND TYPE OF BIT See Remarks	
2. LOCATION (Coordinates or Station) X=790,057 Y=589,442		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW (FEET)	
3. DRILLING AGENCY Corps of Engineers		12. MANUFACTURER'S DESIGNATION OF DRILL Failing 314	
4. HOLE NO. (As shown on drawing title and file number) WB-SI-1		13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN disturbed: 0 undisturbed: 0	
5. NAME OF DRILLER D. Justiss		14. TOTAL NUMBER OF CORE BOXES 0	
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		15. ELEVATION GROUND WATER TIDAL	
7. THICKNESS OF BURDEN Ft.		16. DATE HOLE STARTED COMPLETED 2/6/94 2/6/94	
8. DEPTH DRILLED INTO ROCK 0 Ft.		17. ELEVATION TOP OF HOLE -12.5 Ft.	
9. TOTAL DEPTH OF HOLE 4 Ft.		18. TOTAL CORE RECOVERY FOR BORING 0 %	
		19. SIGNATURE OF GEOLOGIST Marty Goff	

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS Drill Rod	
-12.5	.0					-12.5	0
						WASH BORING	2
-16.5	4.0		-16.5 top of rock			_____	4
							6
							8
							10
							12
							14
							16
							18

01000-G82



Hole No. WB-SI-3

<b>DRILLING LOG</b>	<b>DIVISION</b> South Atlantic	<b>INSTALLATION</b> Jacksonville District	SHEET 1 OF 1
	<b>1. PROJECT</b> Sunny Isles Breakwater	<b>10. SIZE AND TYPE OF BIT</b> See Remarks	
	<b>2. LOCATION (Coordinates or Station)</b> X=790,159 Y=590,928	<b>11. DATUM FOR ELEVATION SHOWN (TBM or NSL)</b> MLW (FEET)	
	<b>3. DRILLING AGENCY</b> Corps of Engineers	<b>12. MANUFACTURER'S DESIGNATION OF DRILL</b> Failing 314	
	<b>4. HOLE NO. (As shown on drawing title and file number)</b> WB-SI-3	<b>13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN</b> disturbed: 0 undisturbed: 0	
	<b>5. NAME OF DRILLER</b> D. Justiss	<b>14. TOTAL NUMBER OF CORE BOXES</b> 0	
	<b>6. DIRECTION OF HOLE</b> <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED	<b>15. ELEVATION GROUND WATER</b> TIDAL	
	<b>7. THICKNESS OF BURDEN</b> Ft.	<b>16. DATE HOLE STARTED COMPLETED</b> 2/6/94 2/6/94	
	<b>8. DEPTH DRILLED INTO ROCK</b> 0 Ft.	<b>17. ELEVATION TOP OF HOLE</b> -15.6 Ft.	
<b>9. TOTAL DEPTH OF HOLE</b> 7.3 Ft.	<b>18. TOTAL CORE RECOVERY FOR BORING</b> 0 %		
		<b>19. SIGNATURE OF GEOLOGIST</b> Marty Goff	

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS Drill Rod
-15.6	.0					-15.6
						0
						2
						4
						6
						8
						10
						12
						14
						16
						18
						01000-G84

WASH BORING

-22.9 top of rock

01000-G84

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01330

SUBMITTAL PROCEDURES

PART 1 GENERAL

- 1.1 SUBMITTAL IDENTIFICATION
- 1.2 SUBMITTAL CLASSIFICATION
  - 1.2.1 Contracting Officer/Contracting Officer's Representative (CO/COR)  
Approved
  - 1.2.2 Information Only
- 1.3 APPROVED SUBMITTALS
- 1.4 DISAPPROVED SUBMITTALS
- 1.5 WITHHOLDING OF PAYMENT

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

- 3.1 GENERAL
- 3.2 SUBMITTAL REGISTER (ENG FORM 4288)
- 3.3 SCHEDULING
- 3.4 TRANSMITTAL FORM (ENG FORM 4288)
- 3.5 SUBMITTAL PROCEDURE
  - 3.5.1 Procedures
  - 3.5.2 Deviations
  - 3.5.3 Reproduction Requirements
- 3.6 CONTROL OF SUBMITTALS
- 3.7 CO/COR APPROVED SUBMITTALS
- 3.8 INFORMATION ONLY SUBMITTALS
- 3.9 STAMPS
- 3.10 SUBMITTAL REGISTER, ENG FORM 4288
- 3.11 TRANSMITTAL OF SHOP DRAWINGS, ENG FORM 4025

-- End Section Table of Contents --

SECTION 01330

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SUBMITTAL IDENTIFICATION

Submittals required are identified by SD numbers as follows:

SD-01 Data

Submittals which provide calculations, descriptions, or documentation regarding the work.

SD-04 Drawings

Submittals which graphically show relationship of various components of the work, schematic diagrams of systems, details of fabrication, layouts of particular elements, connections, and other relational aspects of the work.

SD-06 Instructions

Preprinted material describing installation of a product, system or material, including special notices and material safety data sheets, if any, concerning impedances, hazards, and safety precautions.

SD-07 Schedules

Tabular lists showing location, features, or other pertinent information regarding products, materials, equipment, or components to be used in the work.

SD-08 Statements

A document, required of the Contractor, or through the Contractor, from a supplier, installer, manufacturer, or other lower tier Contractor. The purpose of which is to confirm the quality or orderly progression of a portion of the work by documenting procedures, acceptability of methods or personnel, qualifications, or other verifications of quality.

SD-09 Reports

Reports of inspections or tests, including analysis and interpretation of test results. Each report shall be properly identified. Test methods used shall be identified and test results shall be recorded.

SD-13 Certificates

Statement signed by an official authorized to certify on behalf of the manufacturer of a product, system or material, attesting that the product,

system or material meets specified requirements. The statement must be dated after the award of the contract, must state the Contractor's name and address, must name the project and location, and must list the specific requirements which are being certified

#### SD-14 Samples

Samples, including both fabricated and unfabricated physical examples of materials, products, and units of work as complete units or as portions of units of work.

#### SD-18 Records

Documentation to record compliance with technical or administrative requirements.

### 1.2 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

#### 1.2.1 Contracting Officer/Contracting Officer's Representative (CO/COR) Approved

CO/COR approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the CO/COR. Within the terms of the Clause SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION of Section 00700 CONTRACT CLAUSES, they are considered to be "shop drawings."

#### 1.2.2 Information Only

All submittals not requiring CO/COR approval will be for information only. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above. Submittal items identified as "FIO" are used as documentation to show contract compliance. "FIO" submittals will be reviewed by CO/COR and those found to not be in compliance will be coded "FX" (see Instructions on reverse side of ENG 4025, sample appended to the end of this Section). Retransmit submittal items coded "FX" as "GA" submittal items.

### 1.3 APPROVED SUBMITTALS

The CO/COR approval of submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory. Approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the CQC requirements of this contract is responsible for dimensions, the design of adequate connections and details, and the satisfactory construction of all work. After submittals have been approved by the CO/COR, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

#### 1.4 DISAPPROVED SUBMITTALS

The Contractor shall make all corrections required by the CO/COR and promptly furnish a corrected submittal in the form and number of copies specified for the initial submittal. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice in accordance with the Clause CHANGES of Section 00700 CONTRACT CLAUSES shall be given promptly to the CO/COR.

#### 1.5 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

#### PART 2 PRODUCTS (NOT APPLICABLE)

#### PART 3 EXECUTION

##### 3.1 GENERAL

The Contractor shall make submittals as required by the specifications. The CO/COR may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections. Units of weights and measures used on all submittals shall be the same as those used in the contract drawings. Submittal shall be made in the respective number of copies and to the respective addresses set forth below. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Prior to submittal, all items shall be checked and approved by the Contractor's Quality Control (CQC) representative and each item shall be stamped, signed, and dated by the CQC representative indicating action taken. Proposed deviations from the contract requirements shall be clearly identified. Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals. Submittals requiring CO/COR approval shall be scheduled and made prior to the acquisition of the material or equipment covered thereby. Samples remaining upon completion of the work shall be picked up and disposed of in accordance with manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

##### 3.2 SUBMITTAL REGISTER (ENG FORM 4288)

At the end of this section is one set of ENG Form 4288 listing items of equipment and materials for which submittals are required by the specifications; this list may not be all inclusive and additional submittals may be required. The Contractor will also be given the submittal register as a diskette containing the computerized ENG Form 4288 and instructions on the use of the diskette. Columns "d" through "r" have been completed by the CO/COR; the Contractor shall complete columns "a" through "c" and "s" through

"u" and submit the forms (hard copy plus associated electronic file) to the CO/COR for approval within 30 calendar days after Notice to Proceed. The Contractor shall keep this diskette up-to-date and shall submit it to the Area Engineer, Atlantic Coast Area Office, ATTN: CESAJ-CO-P together with the monthly payment request. The approved submittal register will become the scheduling document and will be used to control submittals throughout the life of the contract. The submittal register and the progress schedules shall be coordinated.

### 3.3 SCHEDULING

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings shall be so scheduled. Adequate time (a minimum of 30 calendar days exclusive of mailing time) shall be allowed and shown on the register for review and approval. No delay damages or time extensions will be allowed for time lost in late submittals.

### 3.4 TRANSMITTAL FORM (ENG FORM 4025)

The sample transmittal form (ENG Form 4025) attached to this section shall be used for submitting both CO/COR approved and information only submittals in accordance with the instructions on the reverse side of the form. These forms will be furnished to the Contractor. This form shall be properly completed by filling out all the heading, blank spaces, and identifying each item submitted. Six (6) copies of the transmittal form shall be prepared by the Contractor. The six (6) copies will accompany the required CO/COR approved and information only submittals. The transmittal forms shall be numbered consecutively and the resubmittals, if any, shall be suffixed alphabetically, e.g., transmittal No. 10, first resubmittal No. 10-A, second resubmittal No. 10-B, etc. The alphabetical suffixing system for resubmittals described in the preceding sentence shall be used in lieu of that given in paragraph 2 on the reverse side of ENG Form 4025. All pertinent information required by the transmittal form shall be supplied. Each transmittal shall be limited to one specification section and in no instance shall a transmittal include requirements of more than one section. A separate transmittal form shall be used for transmitting welder's certification and welding procedure qualifications. Transmittals including work of more than one section or lacking specification paragraph numbers or other data will be returned without action and required to be corrected and resubmitted. Transmittal of any data by the Contractor not required to be submitted shall be returned without action. Special care shall be exercised to ensure proper listing of the specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item.

### 3.5 SUBMITTAL PROCEDURE

Submittals shall be made as follows:



### 3.5.1 Procedures

The Contractor shall submit to the Area Engineer, Atlantic Coast Area Office, ATTN: CESAJ-CO-P, 6 copies of all shop drawings and information submittals, unless specified otherwise in the specifications. These data shall be submitted sufficiently in advance of the particular work for which they are a part, to allow time for review prior to incorporation into the work, but shall be submitted not later than 90 calendar days after receipt of Notice to Proceed, unless otherwise specified or notified by the CO/COR. The drawings, plans, and data shall be complete and shall contain all required detailed information. The Contractor shall identify each separate sheet of drawings and equipment data and each item of descriptive literature with the contract number and the respective transmittal number. Included on the drawings and data sheets shall be an identification of materials (by specification number or otherwise) to be used for the items shown thereon. Testing of equipment shall not be performed until all required submittals are approved.

### 3.5.2 Deviations

For submittals which include proposed deviations requested by the Contractor, the column "variation" of ENG Form 4025 shall be checked. The Contractor shall set forth in writing the reason for any deviations and annotate such deviations on the submittal. The CO/COR reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

### 3.5.3 Reproduction Requirements

The submittal of contract drawings or reproduced portions of contract drawings as shop drawings will not be acceptable. Submittals on thermofax or other instant copy reproduction methods that are subject to fading will not be acceptable.

### 3.6 CONTROL OF SUBMITTALS

The Contractor shall carefully control his procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register."

### 3.7 CO/COR APPROVED SUBMITTALS

Upon completion of review of submittals requiring CO/COR approval, the submittals will be identified as having received approval by being so stamped and dated. Four (4) copies of the submittal will be retained by the CO/COR and two (2) copies of the submittal will be returned to the Contractor.

### 3.8 INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the CO/COR is not required on information only submittals. These submittals will be used for information purposes. The CO/COR reserves the right to require the Contractor to resubmit any item found not to comply with the

contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the CO/COR from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the CO/COR approved laboratory or for check testing by the CO/COR in those instances where the technical specifications so prescribe.

3.9 STAMPS

Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements shall be similar to the following:

CONTRACTOR  (Firm Name)
_____ Approved
_____ Approved with corrections as noted on submittal data and/or attached sheet(s).
SIGNATURE: _____
TITLE: _____
DATE: _____

3.10 SUBMITTAL REGISTER, ENG FORM 4288

See APPENDIX A at the end of this Section (5 pages).

3.11 TRANSMITTAL OF SHOP DRAWINGS, ENG FORM 4025

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

-- End of Section --

SUBMITTAL REGISTER (ER 415-1-10)										CONTRACT NUMBER												
TITLE AND LOCATION: MOD. TO SUNNY ISLES SEGMENT AND BEACH RENOURISHMENT AT MIAMI BEACH, DADE COUNTY SPP										SPECIFICATION SECTION												
A C T I V I T Y I T E M N O	T R A N S M I T T A L E R	S P E C I F I C A T I O N P A R A G R A P H N U M B E R	D E S C R I P T I O N O F I T E M S S U B M I T T E D	TYPE OF SUBMITTAL																		
				DRAWINGS	PHOTOS	ITEMS	TESTS	CERTS	RECORDS	PERMITS	OTHER	CLASSIFICATION	CONTRACTOR SCHEDULE DATES	CONTRACTOR ACTION	GOVERNMENT ACTION							
				DR A W I N G S	PH O T O S	I T E M S	T E S T S	C E R T S	R E C O R D S	P E R M I T S	O T H E R	C L A S S I F I C A T I O N	S U B M I T	A P P R O V A L N E E D E D B Y	M A T E R I A L N E E D E D B Y	C O D E	D A T E	S U B M I T T O G O V E R N M E N T	C O D E	D A T E	R E M A R K S	
		01000-1.3	As-Built Contract Drawings	X								INFORMATION										
		01000-1.3	Electronic As-Built Files	X								INFORMATION										
		01000-1.3	Progress Chart			X						GOVERNMENT										
		01000-1.3	Critical Lift Plan				X					GOVERNMENT										
		01000-1.3	Letter Appointing Superintendent					X				GOVERNMENT										
		01000-1.3	Signature Authority					X				GOVERNMENT										
		01000-1.3	Affirmative Action Plan					X				GOVERNMENT										
		01000-1.3	Drug-Free Workplace					X				GOVERNMENT										
		01000-1.3	List of Subcontractors					X				GOVERNMENT										
		01000-1.3	Hazard Communication Program					X				GOVERNMENT										
		01410-1.5	Turtle Deflector Device	X								GOVERNMENT										

SUBMITTAL REGISTER										CONTRACT NUMBER											
MOD. TO SUNNY ISLES SEGMENT AND BEACH RENOURISHMENT AT MIAMI BEACH, DADE COUNTY SPP										SPECIFICATION SECTION											
TITLE AND LOCATION:	(ER 415-1-10)	CONTRACTOR	TYPE OF SUBMITTAL	CLASSIFICATION	CONTRACTOR NUMBER DATES	CONTRACTOR ACTION	GOVERNMENT ACTION	REMARKS													
A C T I V I T Y N O	T R A M S I T I O N	S P E C I F I C A T I O N P A R A G R A P H N U M B E R	D E S C R I P T I O N O F I T E M S S U B M I T T E D	D R A W I N G S	I N S T R U C T I O N S	S T A T E M E N T S	C E R T I F I C A T I O N S	R E C O R D S	O A K I O N D A L	I N F O R M A T I O N O N L Y	G O V E R N M E N T A P P R O V E D	R E V I E W E R	S U B M I T	A P P R O V A L N E E D E D B Y	M A T E R I A L N E E D E D B Y	C O D E	D A T E	S U B M I T T O G O V E R N M E N T	C O D E	D A T E	R E M A R K S
		d																			
		01410-1.5	Environmental Protection Plan			X					X	PD									
		01410-1.5	Logs/Final Summary Report					X		X		AE									
		01410-1.5	Project Environmental Summary Sheet					X		X		PD									
		01410-1.5	Hopper Dredge(s) Recording Chart(s)					X		X		AE									
		01411-1.2	Calibration Standard		X					X		AE									
		01411-1.2	Test Reports				X			X		AE									
		02278-1.4	Surveys	X							X	AE									
		02278-1.4	Cross Sections	X							X	AE									
		02278-1.4	Stone Placement Plan		X						X	ED									
		02278-1.4	Stone				X				X	ED									
		02278-1.4	Stone Samples					X			X	AE									

SUBMITTAL REGISTER (ER 415-1-10)				CONTRACT NUMBER															
TITLE AND LOCATION: MOD. TO SUNNY ISLES SEGMENT AND BEACH RENOURISHMENT AT MIAMI BEACH, DADE COUNTY SPP				SPECIFICATION SECTION															
A C T I V I T Y I T E M N O	I T E M N U M B E R	SPECIFICATION PARAGRAPH NUMBER	DESCRIPTION OF ITEMS SUBMITTED	TYPE OF SUBMITTAL			CLASSIFICATION			CONTRACTOR SCHEDULE DATES			CONTRACTOR ACTION		GOVERNMENT ACTION		REMARKS		
				DRAWINGS	PERMITS	OTHER	PERMITS	OTHER	OTHER	APPROVAL NEEDED BY	MATERIAL NEEDED BY	DATE	DATE	DATE	SUBMIT TO GOVERNMENT	DATE			
		02278-1.4	Notice of Construction Activities																
		02278-1.4	Relocation of Navigation Aids																
		02278-1.4	Not. Of Discovery of Historical Period Shipwreck Sites																
		02278-1.4	Notice of Misplaced Material																
		02370-1.4	Shop Drawings	X															
		02370-1.4	Manufacturer's Instructions																
		02370-1.4	Geogrid																
		02370-1.4	Geogrid																
		02370-1.4	Braid																
		02370-1.4	Mechanical Connection Elements																
		02391-1.2	Equipment and Performance Data	X															

SUBMITTAL REGISTER										CONTRACT NUMBER											
TITLE AND LOCATION:	CONTRACTOR	SPECIFICATION SECTION	CONTRACTOR SCHEDULE DATES	CONTRACTOR ACTION	GOVERNMENT ACTION	REMARKS	CONTRACTOR SCHEDULE DATES	CONTRACTOR ACTION	GOVERNMENT ACTION	REMARKS											
TYPE OF SUBMITTAL	CLASSIFICATION	DESCRIPTION OF ITEMS SUBMITTED	SPECIFICATION PARAGRAPH NUMBER	I N S T R U C T I O N S	D R A W I N G S	S T A T E M E N T S	C E R T I F I C A T E S	O L D F O R M A T I O N	I N F O R M A T I O N	G O V E R N M E N T											
A C T I V I T Y N O	I T E M N O	D E S C R I P T I O N	P A R A G R A P H N O	I N S T R U C T I O N S	D R A W I N G S	S T A T E M E N T S	C E R T I F I C A T E S	O L D F O R M A T I O N	I N F O R M A T I O N	G O V E R N M E N T											
A	B	C	D	E	F	G	H	I	J	K											
			02391-1.2		X				X	AE											
			02391-1.2																		
			02391-1.2																		
			02391-1.2																		
			02391-1.2																		
			02391-1.2																		
			02391-1.2																		
			02391-1.2																		
			02391-1.2																		
			02391-1.2																		
			02391-1.2																		
			02391-1.2																		
			02391-1.2																		

**SUBMITTAL REGISTER**  
(ER 415-1-10)

TITLE AND LOCATION:		CONTRACTOR										CONTRACT NUMBER						
MOD. TO SUNNY ISLES SEGMENT AND BEACH RENOURISHMENT AT MIAMI BEACH, DADE COUNTY SPP		CONTRACTOR SCHEDULE DATES										SPECIFICATION SECTION						
		CLASSIFICATION																
A C T I V I T Y N O	T R A N S M I T T A L N O	I T E M N O	S P E C I F I C A T I O N P A R A G R A P H N U M B E R	D E S C R I P T I O N O F I T E M S S U B M I T T E D	TYPE OF SUBMITTAL										REMARKS			
					DRAGG	INSURANCE	STAKEOUT	SETBACK	CONSTRUCTION	RECORDS	PERMITS	OPERATIONS	ENVIRONMENTAL	INFORMATIONS		GOVERNMENT	CONTRACTOR ACTION	GOVERNMENT ACTION
DATE	NO.	NO.			DRAGG	INSURANCE	STAKEOUT	SETBACK	CONSTRUCTION	RECORDS	PERMITS	OPERATIONS	ENVIRONMENTAL	INFORMATIONS	GOVERNMENT	CONTRACTOR ACTION	GOVERNMENT ACTION	
			d	Dive Inspn. Log of Pumpout and Pipeline Location														
			02391-1.2	Constrn. And Grade Staking Inventory Record														
			02391-1.2	Buoy and Anchoring Inventory Record														
			02391-1.2	Not. Of Instrn. Of Lighted Aids to Nav. & Intent to Dredge														
			02391-1.2	Relocation of Navigation Aids														
			02391-1.2	Not. Of Discovery of Historical Period Shipwreck Sites														
			02391-1.2	Daily/Monthly Report of Operations														
			02391-1.2	Notice of Misplaced Material														
			02391-1.2	Quals. F/Struc. Inspn/Eval. And Vibration Monitoring P'snl.														

**TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR  
MANUFACTURER'S CERTIFICATES OF COMPLIANCE**

*(Read instructions on the reverse side prior to initiating this form)*

**SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS** *(This section will be initiated by the contractor)*

**TO:** \_\_\_\_\_ **FROM:** \_\_\_\_\_ **DATE:** \_\_\_\_\_ **TRANSMITTAL NO.:** \_\_\_\_\_

**SPECIFICATION SEC. NO.** (Cover only one section with each transmittal) \_\_\_\_\_ **CONTRACT NO.:** \_\_\_\_\_

**PROJECT TITLE AND LOCATION:** \_\_\_\_\_

**CHECK ONE:**  
 THIS IS A NEW TRANSMITTAL  
 THIS IS A RESUBMITTAL OF TRANSMITTAL \_\_\_\_\_

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED <i>(Type size, model number/etc.)</i>	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. <i>(See instruction no. 8)</i>	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		CONTRACTOR USE CODE	VARIATION <i>(See instruction No. 6)</i>	FOR CE USE CODE
				SPEC. PARA. NO. <i>e.</i>	DRAWING SHEET NO. <i>f.</i>			
<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>			<i>g.</i>	<i>h.</i>	<i>i.</i>

**REMARKS**  
 I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as other wise stated.

NAME AND SIGNATURE OF CONTRACTOR \_\_\_\_\_

**SECTION II - APPROVAL ACTION**

**ENCLOSURES RETURNED** (List by Item No.) \_\_\_\_\_ **DATE** \_\_\_\_\_

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY \_\_\_\_\_



# INSTRUCTIONS

1. Section I will be initiated by the Contractor in the required number of copies.
2. Each transmittal shall be numbered consecutively in the space provided for "Transmittal No.". This number, in addition to the contract number, will form a serial number for identifying each submittal. For new submittals or resubmittals mark the appropriate box; on resubmittals, insert transmittal number of last submission as well as the new submittal number.
3. The "Item No." will be the same "Item No." as indicated on ENG FORM 4288 for each entry on this form.
4. Submittals requiring expeditious handling will be submitted on a separate form.
5. Separate transmittal form will be used for submittals under separate sections of the specifications.
6. A check shall be placed in the "Variation" column when a submittal is not in accordance with the plans and specifications--also, a written statement to that effect shall be included in the space provided for "Remarks".
7. Form is self-transmittal, letter of transmittal is not required.
8. When a sample of material or Manufacturer's Certificate of Compliance is transmitted, indicate "Sample" or "Certificate" in column c, Section I.
9. U.S. Army Corps of Engineers approving authority will assign action codes as indicated below in space provided in Section I, column i to each item submitted. In addition they will ensure enclosures are indicated and attached to the form prior to return to the contractor. The Contractor will assign action codes as indicated below in Section I, column g, to each item submitted.

A	::	Approved as submitted	E	::	Disapproved (See attached)
B	::	Approved, except as noted on drawings.	F	::	Receipt acknowledged
C	::	Approved, except as noted on drawings. Refer to attached sheet resubmission required.	FX	::	Receipt acknowledged, does not comply as noted with contract requirements
D	::	Will be returned by separate correspondence.	G	::	Other (Specify)
10. Approval of items does not relieve the contractor from complying with all the requirements of the contract plans and specifications.

Reverse of ENG FORM 4025

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01410

ENVIRONMENT PROTECTION

PART 1 GENERAL

- 1.1 SCOPE
- 1.2 REFERENCES
- 1.3 QUALITY CONTROL
- 1.4 PERMITS AND AUTHORIZATIONS
- 1.5 SUBMITTALS
- 1.6 SUBCONTRACTORS
- 1.7 NOTIFICATION
- 1.8 TRAINING OF CONTRACTOR PERSONNEL IN POLLUTION CONTROL
- 1.9 PAYMENT

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

- 3.1 PROTECTION OF ENVIRONMENTAL RESOURCES
  - 3.1.1 Protection of Land Resources
    - 3.1.1.1 Work Area Limits
    - 3.1.1.2 Protection of Landscape
    - 3.1.1.3 Unprotected Erodible Soils
    - 3.1.1.4 Disturbed Areas
    - 3.1.1.5 Location of Field Offices, Storage, and Other Contractor Facilities
    - 3.1.1.6 Borrow Areas on Government Property
    - 3.1.1.7 Disposal Areas on Government Property
    - 3.1.1.8 Temporary Excavations and Embankments
    - 3.1.1.9 Disposal and Removal of Solid Wastes
    - 3.1.1.10 Dispensing of Fuel
    - 3.1.1.11 Disposal of Chemical Waste
    - 3.1.1.12 Disposal of Discarded Materials
  - 3.1.2 Preservation and Recovery of Historic, Archeological, and Cultural Resources
    - 3.1.2.1 Known Resources
    - 3.1.2.2 New Resources
  - 3.1.3 Protection of Water Resources
    - 3.1.3.1 Washing and Curing Water
    - 3.1.3.2 Cofferdam and Diversion Operations
    - 3.1.3.3 Stream Crossings
    - 3.1.3.4 Monitoring of Water Areas
    - 3.1.3.5 Turbidity

- 3.1.3.6 Oil Spill Prevention
- 3.1.4 Protection of Fish and Wildlife Resources
  - 3.1.4.1 Endangered Species Protection
  - 3.1.4.2 Endangered Specifities Observers (Hopper Dredge Only)
  - 3.1.4.3 Manatee and Sea Turtle Sighting Reports
  - 3.1.4.4 Disposition of Turtles or Turtle Parts
  - 3.1.4.5 Report Submission
  - 3.1.4.6 Hopper Dredge Equipment
  - 3.1.4.7 Recording Charts for Hopper Dredge(s)
  - 3.1.4.8 Sea Turtle Monitoring
  - 3.1.4.9 Beach Placement Restrictions
  - 3.1.4.10 Escarpments
  - 3.1.4.11 Hardground/Reef Protection
- 3.1.5 Protection of Air Resources
- 3.1.6 Protection of Sound Intrusions
- 3.2 POSTCONSTRUCTION CLEANUP
- 3.3 PRESERVATION AND RESTORATION OF LANDSCAPE AND MARINE VEGETATION DAMAGES
- 3.4 MAINTENANCE OF POLLUTION CONTROL FACILITIES
- 3.5 SAMPLE - DAILY MANATEE REPORTING LOG
- 3.6 SAMPLE - MANATEE CAUTION SIGNS
- 3.7 SAMPLE - HOPPER DREDGE REPORTING LOG--TURTLE OBSERVES NOTES
- 3.8 SAMPLE - INCIDENT REPORT OF SEA TURTLE MORTALITY AND DREDGING ACTIVITIES
- 3.9 MARINE TURTLE NESTING SUMMARY REPORT
- 3.10 CONCEPTUAL TURTLE DEFLECTOR DESIGN DETAILS
- 3.11 TREE PROTECTION PLAN DETAIL
- 3.12 PROJECT ENVIRONMENTAL SUMMARY SHEET

--End Section Table of Contents --

SECTION 01410

ENVIRONMENT PROTECTION

PART 1 GENERAL

1.1 SCOPE

This section covers prevention of environmental pollution and 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 pollution and damage are defined as the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to man; or degrade the utility of the environment for aesthetic, cultural, and/or historical purposes. The control of environmental pollution and damage requires consideration of air, water, and land, and includes management of visual aesthetics, noise, solid waste, radiant energy and radioactive materials, as well as other pollutants.

1.2 REFERENCES

The publication listed below forms a part of this specification to the extent referenced. The publication is referred to in the text by basic designation only.

ENGINEERING MANUALS (EM)

EM 1110-1-1003 (Aug 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 obtain, review, and comply with all requirements under the terms and conditions set out in the following permit(s) and 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, Programs and Project Management Division at 904-232-2113.

a. Notice of Intent to Issue Florida Department of Environmental Protection Permit No. 0126527-001-JC; Date: April 10, 2000.

## 1.5 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

Turtle Deflector Device; GA|CO.

If the Contractor proposes to use a hopper dredge for this work, detail drawings shall be submitted showing the proposed device and its attachment to the Contractor's equipment. Contractor's drawings to be submitted shall include the approach angle for any and all depths to be dredged during this contract. A copy of the approved drawings and calculations shall be available on the vessel during the life of this contract. No dredging work will be allowed to commence until approval of the turtle deflector device.

### SD-08 Statements

Environmental Protection Plan; GA|PD.

Within 15 calendar days after the date of Notice of Award, the Contractor shall submit in writing an Environmental Protection Plan. Approval of the Contractor's plan will not relieve the Contractor of his responsibility for adequate and continuing control of pollutants and other environmental protection measures. 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. Traffic control plan.

h. Methods of protecting surface and ground water during construction activities.

i. Oil spill prevention.

j. Oil spill contingency plan.

k. Work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. Plan should include measures for marking the limits of use areas.

l. Plan of borrow area(s).

m. A statement as to the person who will 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.

n. Operational plan to achieve protection of sea turtles during hopper dredge(s) operation.

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).

Hopper Dredge(s) Recording Chart(s); FIO.

Contractor shall submit as specified, a copy of the hopper dredge(s) output recording chart(s) for each day's operation on a daily basis.

#### 1.6 SUBCONTRACTORS

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

#### 1.7 NOTIFICATION

The Contracting Officer/Contracting Officer's Representative (CO/COR) 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 CO/COR of proposed corrective action and take such action as may be approved. If the Contractor fails to comply promptly, the CO/COR 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 CO/COR, 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 installation and care of facilities to insure 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 cost of the work covered under this section, except that:

a. All costs for monitoring sea turtles shall be included in the applicable contract unit price for Base Offer Item No. 0002 and Optional Item A No. 0010, "Beach Fill" of the Bidding Schedule.

b. All costs for endangered species observers shall be included in the applicable contract unit price for Base Offer Item No. 0007 and Optional Item A No. 0013, "Endangered Species Observers" of the Bidding Schedule.

c. All costs for tilling which, if required, shall be included in the applicable contract unit price per acre for Base Offer Item No. 0003 and Optional Item A No. 0011, "Beach Tilling" of the Bidding Schedule.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 PROTECTION OF ENVIRONMENTAL RESOURCES

The environmental resources within the project boundaries and those affected outside the limits of permanent work under this contract shall be protected during the entire period of this contract. The Contractor shall immediately report to the Corps any incident that causes damage or could potentially cause damage to environmental resources. The order of contact of Corps personnel is provided in subparagraph "Manatee and Sea Turtle Sighting Reports" of subparagraph "Protection of Fish and Wildlife Resources" below. The Contractor shall confine his activities to areas defined by the drawings and specifications. Environmental protection shall be as stated in the following subparagraphs.

3.1.1 Protection of Land Resources

Prior to the beginning of any construction, the Contractor shall identify all land resources to be preserved within the Contractor's work area. The Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, top soil, and land forms without special permission from the CO/COR. Engage a qualified tree surgeon to perform all tree surgery. 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.

3.1.1.1 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. Protect from damage all existing trees designated to remain. Protect tree roots from noxious materials in solution caused by run-off or spillage. Keep fires from under 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.



### 3.1.1.2 Protection of Landscape

Trees and their roots, shrubs, vines, grasses, land forms, and other landscape features shall be clearly identified and protected by fencing or any other approved techniques as illustrated in the Tree Protection Plan Detail appended to the end of this Section. Place tree protection fencing before excavation or grading is begun and maintain in place until construction is complete. Remove branches of protected trees, if required, to clear for construction and extend pruning operation to restore the natural shape of the entire tree. Cut branches or roots, if required, with sharp pruning instruments; do not break or chop. Fertilize protected trees to compensate for root loss with 6-6-6 as per manufacturer's application direction. Repair any damage to tree crowns or roots promptly after damage occurs.

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

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

c. Replacement. Remove dead or damaged protected trees determined, by the CO/COR, to be incapable of restoration to normal health growth. Replace each removed tree up to 4" caliper with tree of equal specie and size. For each tree above 4" caliper, replace with one 4" caliper tree per 4" caliper increment or fraction thereof.

### 3.1.1.3 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 CO/COR.

#### 3.1.1.4 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 shall be controlled by construction of diversion ditches, benches, and berms to retard and divert runoff to protected drainage courses, and 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 all temporary and permanent erosion and sedimentation control features as directed by the CO/COR. Temporary erosion and sediment control measures such as berms, dikes, drains, sediment traps, sedimentation basins, grassing, and mulching shall be maintained until permanent drainage and erosion control facilities are completed and operative.

#### 3.1.1.5 Location of Field Offices, Storage, and Other Contractor Facilities

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in areas designated on the drawings. Temporary movement or relocation of Contractor facilities shall be made only on approval by the CO/COR.

#### 3.1.1.6 Borrow Areas on Government Property

Areas shall be managed to minimize erosion and to prevent sediment from entering nearby watercourses or lakes.

#### 3.1.1.7 Disposal Areas on Government Property

Areas shall be managed and controlled to limit disposal to areas designated on the drawings and prevent erosion of soil or sediment from entering nearby watercourses or lakes. Disposal areas shall be developed in accordance with the grading plan indicated on the drawings.

#### 3.1.1.8 Temporary Excavations and Embankments

Areas for plant and/or work areas shall be controlled to protect adjacent areas from despoilment.

#### 3.1.1.9 Disposal and Removal of 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. The Contractor shall transport all solid waste off Government property/project area and dispose of it in compliance with Federal, State, and local requirements for solid waste disposal. The Contractor shall not dispose of any solid wastes into waters of the United States.

#### 3.1.1.10 Dispensing of Fuel

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 ascertain 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.

#### 3.1.1.11 Disposal of Chemical Waste

Chemical waste shall be stored in corrosion resistant containers, removed from the work area and disposed of in accordance with Federal, State, and local regulations.

#### 3.1.1.12 Disposal of Discarded Materials

Discarded materials other than those which can be included in the solid waste category shall be handled as directed.

### 3.1.2 Preservation and Recovery of Historic, Archeological, and Cultural Resources

#### 3.1.2.1 Known Resources

Known historic, archeological and cultural resources within the Contractor's work area are designated on the contract drawings. The Contractor shall install protection for these resources as shown on the drawings and shall be responsible for their preservation during the contract.

#### 3.1.2.2 New Resources

If, during construction activities, the Contractor observes items that may have historic or archeological value, such observations shall be reported immediately to the CO/COR so that the appropriate authorities may be notified and a determination made as to their significance and what, if any, special disposition of the finds should be made. The Contractor shall cease all activities that may result in the destruction of these resources and shall prevent his employees from trespassing on, removing, or otherwise damaging such resources.

### 3.1.3 Protection of Water Resources

The Contractor shall keep construction activities under surveillance, management, and control to avoid pollution of surface and ground waters. 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.

#### 3.1.3.1 Washing and Curing Water

Wastewaters directly derived from construction activities shall not be allowed to enter water areas. These wastewaters 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.

#### 3.1.3.2 Cofferdam and Diversion Operations

The Contractor shall plan his operation and perform all work necessary to minimize adverse impact or violation of the water quality standard. 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.

#### 3.1.3.3 Stream Crossings

Stream crossings shall be controlled during construction. Crossings shall provide movement of materials or equipment which do not violate water pollution control standards of the Federal, State, or local government.

#### 3.1.3.4 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.

#### 3.1.3.5 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) as well as DEP Permit No. 0126527-001-JC. A copy of the FDEP surface water quality standards can be downloaded from the following web sites:

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

#### 3.1.3.6 Oil Spill Prevention

Prevent oil or other hazardous substances from entering the ground, drainage, or local bodies of water. Provide containment, diversionary structures, or equipment to prevent discharged oil from reaching a watercourse. Take immediate action to contain and clean up any spill of oily substances, petroleum products, and hazardous substances. Immediately report such spills to the CO/COR. Provide one or more of the following preventive systems at each oil storage site. The provision of such preventive systems shall be approved by the CO/COR prior to tank installation and use.

a. Dikes, berms, or retaining walls shall be capable of containing the contents of the largest single tank.

b. Culverting, curbing, guttering, or other similar structures shall be capable of containing the contents of the largest single tank.

c. Spill diversion ponds shall be capable of containing the contents of the largest single tank.

d. Absorbent materials shall be capable of absorbing the contents of the largest single tank.

(1) Oil Storage Tank Installation. All oil storage tank installation shall be constructed so that a secondary means of containment is provided for the entire contents of the largest single tank. Dikes and other structures shall be impervious to spilled oil to prevent infiltration into the ground. Mobile or portable oil storage tanks shall be positioned or located so as to provide a secondary containment identical to that required for non-mobile storage tanks. Storage tanks shall be located where they will not be subject to flooding or washout. When it is determined that the installation of containment structures or equipment to prevent discharged oil from reaching a watercourse is not practicable, a clear demonstration of such impracticability shall be submitted to the CO/COR for approval prior to installation or use of the storage tank. The following shall also be provided to the CO/COR for approval prior to installation or use of the storage tank:

(a) An oil spill contingency plan strictly following the criteria of 40 CFR, Part 109.

(b) A written certification of commitment of manpower, equipment, and materials required to expeditiously control and remove the discharge oil.

(2) 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.

#### 3.1.4 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 will be listed in the Contractor's Environmental Protection Plan prior to the beginning of construction operation.

#### 3.1.4.1 Endangered Species Protection

The Contractor shall instruct all personnel associated with the project of the potential presence of manatees, sea turtles, and whales in the area, and the need to avoid collisions with these animals. All construction personnel shall be advised that there are civil and criminal penalties for harming, harassing, or killing manatees, sea turtles, or whales 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 shall be held responsible for any manatee, sea turtle, or whale harmed, harassed, or killed as a result of construction activities.

a. Siltation Barriers. If siltation barriers are used, they will be made of material in which manatees cannot become entangled, are properly secured, and are regularly monitored to avoid manatee entrapment. Barriers must not block manatee entry to or exit from essential habitat.

#### b. Special Operating Conditions

(1) All vessels associated with the project shall operate at "no wake/idle" speeds at all times while in waters where the draft of the vessel provides less than a four-foot clearance from the bottom, and vessels will follow routes of deep water whenever possible. Boats used to transport personnel shall be shallow-draft vessels, preferably of the light-displacement category, where navigational safety permits.

(2) 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 will be shut down and all construction activities will cease to ensure protection of the manatee. Construction activities will not resume until the manatee has departed the project area.

#### 3.1.4.2 Endangered Species Observers (Hopper Dredge Only)

During dredging operations, an observer approved by the National Marine Fisheries Service (NMFS) shall be aboard to monitor for the presence of sea turtles. During dredging operations, the observer shall monitor the inflow screening for turtles and/or turtle parts.

a. Observation Sheets. The results of the monitoring shall be recorded on the appropriate observation sheet. An observation sheet shall be completed for each dredging cycle whether or not sea turtle or sea turtle parts are present. Sample observation sheets are appended to the end of this Section.

b. Endangered Species Observer(s). NMFS-approved firms shall provide and manage the endangered species observer(s). A list of acceptable firms can be obtained by contacting NMFS (Mr. Charles Oravetz) in St. Petersburg,

Florida at 727-570-5312. The trained observer(s) shall require quarters on board the dredge.

c. 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" will 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.

#### 3.1.4.3 Manatee and Sea Turtle Sighting Reports

Any collisions with a manatee, sea turtle, or whale or sighting of any injured or incapacitated manatees, sea turtles, or whales will be reported immediately to the Corps of Engineers. The order of contact within the Corps of Engineers will be as follows:

##### Order of Contact of Corps Personnel for Dredging Contractor to Report Endangered Species 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, Area Engineer, Atlantic Coast Area Office (CESAJ-CO-P)	321-783- 8700	Will be Provided
Dr. Hanley K. Smith, Chief Environmental Branch, Planning Division (CESAJ-PD-E)	904-232- 1685	Will be Provided
Mr. Charles McGehee, Chief, Construction Branch, Construction-Operations Division (CESAJ-CO-C)	904-232-1122	Will be Provided
Mr. Gordon M. Butler, Jr., Chief, Construction-Operations Division (CESAJ-CO)	904-232-3765	Will 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 561-562-3909 for South Florida.

#### 3.1.4.4 Disposition of Turtles or Turtle Parts

Positively identified turtle parts shall be disposed of at the rock disposal site(s). Turtle parts which cannot be positively identified on board the dredge or barge(s) shall be preserved by the observer(s) for later identification. Observer(s) shall measure, weigh, tag, and release any uninjured turtles incidentally taken by the dredge. Observer(s) (or their authorized representative) shall transport, as soon as possible, any injured turtles to a rehabilitation facility such as Sea World at Orlando, Florida.

#### 3.1.4.5 Report Submission

The Contractor shall maintain a log detailing all incidents, including sightings, collisions with, injuries, or killing of manatees, sea turtles, or whales occurring during the contract period. The data shall be recorded on forms provided by the CO/COR (sample forms are appended to the end of this Section). All data in original form shall be forwarded directly to Dr. Hanley K. Smith, Chief, Environmental Branch, P. O. Box 4970, Jacksonville, Florida, 32232-0019, within 10 days of collection and copies of the data will be supplied to the CO/COR. Following project completion, a report summarizing the above incidents and sightings will be submitted to the following:

Florida Fish and Wildlife Conservation Commission (FF&WCC)  
Bureau of Protected Species Management  
620 S. 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 Area Office  
U.S Army Corps of Engineers (CESAJ-CO-P)  
1135 Redstone Road, Building 738  
Patrick Air Force Base, Florida 32925-7478

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

National Marine Fisheries Service  
Protected Species Management Branch  
9721 Executive Center Drive  
St. Petersburg, Florida 33702

#### 3.1.4.6 Hopper Dredge Equipment

Hopper dredge drag heads shall be equipped with rigid sea turtle deflectors which are rigidly attached. No dredging shall be performed by a hopper



dredge without a turtle deflector device that has been approved by the CO/COR. (Sample Turtle Deflector Design Details are appended to the end of this Section.)

a. Deflector Design

(1) The leading vee-shaped portion of the deflector shall have an included angle of less than 90 degrees. Internal reinforcement shall be installed in the deflector to prevent structural failure of the device. The leading edge of the deflector shall be designed to have a plowing effect of at least 6" depth when the drag head is being operated. Appropriate instrumentation or indicator shall be used and kept in proper calibration to insure the critical "approach angle". (Information Only Note: The design "approach angle" or the angle of lower drag head pipe relative to the average sediment plane is very important to the proper operation of a deflector. If the lower drag head pipe angle in actual dredging conditions varies tremendously from the design angle of approach used in the development of the deflector, the 6" plowing effect does not occur. Therefore, every effort should be made to insure this design "approach angle" is maintained with the lower drag pipe.)

(2) If adjustable depth deflectors are installed. They shall be rigidly attached to the drag head using either a hinged aft attachment point or an aft trunnion attachment point in association with an adjustable pin front attachment point or cable front attachment point with a stop set to obtain the 6" plowing effect. This arrangement allows fine-tuning the 6" plowing effect for varying depths. After the deflector is properly adjusted there shall be NO openings between the deflector and the drag head that are more than 4" by 4".

b. In Flow Basket Design

(1) The Contractor shall install baskets or screening over the hopper inflow(s) with no greater than 4" x 4" openings. The method selected shall depend on the construction of the dredge used and shall be approved by the CO/COR prior to commencement of dredging. The screening shall provide 100% screening of the hopper inflow(s). The screens and/or baskets shall remain in place throughout the performance of the work.

(2) The Contractor shall install and maintain floodlights suitable for illumination of the baskets or screening to allow the observer to safely monitor the hopper basket(s) during non-daylight hours or other periods of poor visibility. Safe access shall be provided to the inflow baskets or screens to allow the observer to inspect for turtles, turtle parts or damage.

(3) The turtle deflector device and inflow screens shall be maintained in operational condition for the entire dredging operation.

c. Hopper Dredge Operation

(1) The Contractor shall operate the hopper dredge to minimize the possibility of taking sea turtles and to comply with the requirements stated in the Incidental Take Statement provided by the National Marine Fisheries Service in their Biological Opinion.

(2) When initiating dredging, suction through the drag heads shall be allowed just long enough to prime the pumps, then the drag heads must be placed firmly on the bottom. When lifting the drag heads from the bottom, suction through the drag heads shall be allowed just long enough to clear the lines, and then must cease. Pumping water through the drag heads shall cease while maneuvering or during travel to/from the disposal area. (Information Only Note: Optimal suction pipe densities and velocities occur when the deflector is operated properly. If the required dredging section includes compacted fine sands or stiff clays, a properly configured arrangement of teeth may enhance dredge efficiency which reduces total dredging hours and "turtle takes." The operation of a drag head with teeth must be monitored for each dredged section to insure that excessive material is not forced into the suction line. When excess high-density material enters the suction line, suction velocities drop to extremely low levels causing conditions for plugging of the suction pipe. Dredge operators should configure and operate their equipment to eliminate all low level suction velocities. Pipe plugging in the past was easily corrected, when low suction velocities occurred, by raising the drag head off the bottom until the suction velocities increased to an appropriate level. Pipe plugging cannot be corrected by raising the drag head off the bottom. Arrangements of teeth and/or the reconfiguration of teeth should be made during the dredging process to optimize the suction velocities.)

(3) Raising the drag head off the bottom to increase suction velocities is not acceptable. The primary adjustment for providing additional mixing water to the suction line should be through water ports. To insure that suction velocities do not drop below appropriate levels, the Contractor's personnel shall monitor production meters throughout the job and adjust primarily the number and opening sizes of water ports. Water port openings on top of the drag head or on raised stand pipes above the drag head shall be screened before they are utilized on the dredging project. If a dredge section includes sandy shoals on one end of a tract line and mud sediments on the other end of the tract line, the Contractor shall adjust the equipment to eliminate drag head pick-ups to clear the suction line.

(4) The Contractor shall keep the drag head buried a minimum of 6 inches in the sediment at all times.

(5) During turning operations the pumps must either be shut off or reduced in speed to the point where no suction velocity or vacuum exists.

(6) These operational procedures are intended to stress the importance of balancing the suction pipe densities and velocities in order to keep from taking sea turtles. The Contractor shall develop a written

operational plan to minimize turtle takes and submit it as part of the Environmental Protection Plan.

(7) The Contractor must comply with all requirements of this specification and the Contractor's accepted Environmental Protection Plan. The contents of this specification and the Contractor's Environmental Protection Plan shall be shared with all applicable crew members of the hopper dredge.

#### 3.1.4.7 Recording Charts for Hopper Dredge(s)

All hopper dredge(s) shall be equipped with recording devices for each drag head that capture real time, drag head elevation, slurry density, and at least two of the following: Pump(s) slurry velocity measured at the output side, pump(s) vacuum, and/or pump(s) RPM. The Contractor shall record continuous real time positioning of the dredge, by plot or electronic means, during the entire dredging cycle including dredging area and disposal area. Dredge location accuracy shall meet the requirements of the latest version of EM 1110-1-1003. A copy of the EM can be downloaded from the following website: <http://www.usace.army.mil/inet/usace-docs/eng-manuals/em.htm>. The recording system shall be capable of capturing data at variable intervals but with a frequency of not less than every 60 seconds. All data shall be time correlated to a 24 hour clock and the recording system shall include a method of daily evaluation of the data collected. Data shall be furnished to the CO/COR for each day's operation on a daily basis. A written plan of the method the Contractor intends to use in order to satisfy these requirements shall be included with the Contractor's Quality Control Plan.

#### 3.1.4.8 Sea Turtle Monitoring

a. Sea Turtle (Work Stoppage) Window and Monitoring. If dredging and placement of material in the beach fill area along Florida Beaches has commenced on or before April 1st, turtle monitoring and nest location shall commence on April 1st and continue concurrently with the performance of work. If dredging and placement of material on Florida Beaches has not commenced prior to April 1st, the Contractor shall commence turtle monitoring and nest location activities for a period of 65 days prior to performing any work (including movement of equipment) in the beach fill area. In such case, after turtle monitoring and nest location activities have been performed for a period of 65 days, the Contractor shall commence work in the beach fill area and continue the monitoring activities concurrently with performance of the work. In any case turtle monitoring and nest location/relocation activities are required through September 30th or until completion of the work on Florida Beaches, whichever is earlier. For this contract, surveys and nest relocations will be performed by the local sponsor (Dade County).

b. Daily Visual Inspection/Hopper Dredge Reporting Log. Turtle monitoring activities shall include performance of daily visual inspections of the beach at sunrise by a person permitted by the FF&WCC for handling sea turtle eggs. Any nests discovered shall be excavated and relocated prior to 9:00 a.m. to a nearby permitted hatchery facility where artificial lighting and/or other disturbances will not interfere with successful incubation,

hatching nor hatchling orientation. Mr. Jim Hoover (Miami-Dade Parks and Recreation Department--Haulover Park) is the FF&WCC permitted sea turtle monitor for all of Dade County (excluding Golden Beach and Virginia Key) and manages the County's sea turtle hatchery and nest relocation program. The Contractor shall contact and coordinate all sea turtle monitoring needs and requirements with the permitted individual. Mr. Hoover can be contacted at 305-947-3526, Extension 12. The Contractor shall make arrangements with the person responsible for the turtle monitoring and nest relocation to obtain copies of the daily turtle survey logs taken during the contract period and to provide a report describing the results of survey and nest relocation. A log of the results of turtle egg monitoring and recovery activities shall be kept and a copy submitted weekly to the Chief, Environmental Branch, Jacksonville District (sample Marine Turtle Nesting Summary Report form is appended to the end of this Section).

c. Disturbance of Turtle Nest by Contractor. In the event a turtle nest is dug up by construction activities, the Contractor must immediately notify the FF&WCC permitted individual responsible for the nest relocation on the project and have the nest relocated by the individual. Disturbance to the nest must be avoided until it is relocated. Any dead turtles will be immediately recovered and held until instructions are received by telephone from the Chief, Environmental Branch.

d. Report Submission. Following completion of the project, a copy of the Contractor's log regarding sea turtles shall be forwarded to the Chief, Environmental Branch and the Area Engineer, Atlantic Coast Area Office.

#### 3.1.4.9 Beach Placement Restrictions

If work is conducted between April 1st and October 31st, the following shall apply:

a. Equipment Lighting. All on-beach lighting associated with the project shall be limited to the immediate construction area and shall comply with safety requirements. Such lighting shall be the minimal lighting necessary to comply with safety requirement, and shall incorporate reduced wattage, downlights, and/or screens to minimize illumination of the nesting beach and nearshore waters. Lighting on offshore equipment shall be shielded to avoid excessive illumination of the waters surface while meeting all Coast Guard requirements.

b. Pipeline Placement. Any construction pipes placed parallel to the shoreline shall be placed as far landward as possible up to the vegetated dune line.

c. Beach Tilling. Till the fill area between the landward edge of the newly constructed berm and mean high water (MHW) with equipment operated so as to penetrate and loosen beach sand (a) to a depth of 36 inches and (b) laterally without leaving unloosened compact sand between the adjacent paths of tines or penetrating part of the equipment. (Suitable equipment is Caterpillar D9L/No. 9 Adjustable Parallelogram Multishank Ripper, or equal.)

The Contractor should be careful not to drag the beach where rock structures have been covered by less than 3 feet of sand.

#### 3.1.4.10 Escarpments

The Contractor shall perform daily visual surveys for escarpments along finished sections of the beach nourishment area that have not been accepted by the Corps as complete. Escarpments that exceed 18 inches in height for a distance of 100 feet or more shall be mechanically leveled by the Contractor to the natural beach contour. Once a beach section is accepted by the CO/COR as complete, Dade County Department of Environmental Resources Management (DERM) will take over the responsibility for visual surveys and escarpment removal.

#### 3.1.4.11 Hardground/Reef Protection

Existing hardground/reef areas within the Contractor's work area will be so designated by the CO/COR and precaution will be taken to preserve these resources as they existed at the time they were pointed out to the Contractor. The Contractor shall install all protection for these resources so designated on the drawings and shall be responsible for their preservation during this contract. Pipelines will be placed only in approved areas and anchoring will be permitted in sandy areas only. Pipeline will be monitored for leaks. Any leaks that develop shall be repaired immediately, especially over hardground/reefs, and the pumpout operations shall be shutdown until repairs are completed. Refer to Section 02391 BEACH FILL.

#### 3.1.5 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 Statue, Chapter 403 and others) and all Federal emission and performance laws and standards.

#### 3.1.6 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 will be accomplished at the Contractor's expense.

3.4 MAINTENANCE OF POLLUTION CONTROL FACILITIES

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

3.5 SAMPLE - DAILY MANATEE REPORTING LOG

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

3.6 SAMPLE - MANATEE CAUTION SIGNS

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

3.7 SAMPLE - HOPPER DREDGE REPORTING LOG--TURTLE OBSERVER NOTES

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

3.8 SAMPLE - INCIDENT REPORT OF SEA TURTLE MORTALITY AND DREDGING ACTIVITIES

See APPENDIX D at the end of this Section (1 page).

3.9 MARINE TURTLE NESTING SUMMARY REPORT

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

3.10 CONCEPTUAL TURTLE DEFLECTOR DESIGN DETAILS

See APPENDIX F at the end of this Section (2 pages).

3.11 TREE PROTECTION PLAN DETAIL

See APPENDIX G at the end of this Section (1 page).

3.12 PROJECT ENVIRONMENTAL SUMMARY SHEET

See APPENDIX H at the end of this Section (2 pages).

-- End of Section --

DATE: \_\_\_\_\_

MANATEE REPORTING LOG

1. PROJECT: MOD. TO SUNNY ISLES SEGMENT AND BEACH RENOURISHMENT AT  
MIAMI BEACH, DADE COUNTY SPP

2. DEP WATER QUALITY CERTIFICATE #: 0126527-001-JC

3. MANATEES SIGHTED: YES \_\_\_\_\_ NO \_\_\_\_\_

IF "NO", PROCEED TO NO. 10

4. TIME: \_\_\_\_\_

5. NUMBER OF MANATEES SIGHTED: ADULT \_\_\_\_\_ JUVENILE \_\_\_\_\_

6. NUMBER OF MANATEES INJURED:

ADULT \_\_\_\_\_ JUVENILE \_\_\_\_\_ WORK RELATED: YES \_\_\_\_\_ NO \_\_\_\_\_

7. NUMBER OF MANATEES KILLED:

ADULT \_\_\_\_\_ JUVENILE \_\_\_\_\_ WORK RELATED: YES \_\_\_\_\_ NO \_\_\_\_\_

8. LOCATION:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

9. REMARKS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

10. SIGNATURE: \_\_\_\_\_

11. TITLE: \_\_\_\_\_

# **CAUTION**

## **MANATEE HABITAT**

**IDLE SPEED IS REQUIRED IF OPERATING A  
VESSEL IN THE CONSTRUCTION AREA.**

**ALL EQUIPMENT MUST BE SHUTDOWN IF A  
MANATEE COMES WITHIN 50 FEET OF  
OPERATION.**

**ANY COLLISION WITH AND/OR INJURY TO A MANATEE  
SHALL BE REPORTED IMMEDIATELY TO THE FLORIDA  
MARINE PATROL AT 1-800-DIAL FMP  
(1-800-342-5367)**



# **CAUTION**

# **MANATEE HABITAT**

**ALL EQUIPMENT MUST BE SHUTDOWN IF A  
MANATEE COMES WITHIN 50 FEET OF  
OPERATION.**

**ANY COLLISION WITH AND/OR INJURY TO A MANATEE  
SHALL BE REPORTED IMMEDIATELY TO THE FLORIDA  
MARINE PATROL AT 1-800-DIAL FMP  
(1-800-342-5367)**

PROJECT: MOD. TO SUNNY ISLES SEGMENT, AND BEACH RENOURISHMENT AT MIAMI  
BEACH, DADE COUNTY SPP

HOPPER DREDGE REPORTING LOG

TURTLE OBSERVER NOTES

LOAD NUMBER \_\_\_\_\_ DATE \_\_\_\_\_ TIME \_\_\_\_\_

PORT BASKET CONTENTS

---

---

---

STARBOARD BASKET CONTENTS

---

---

---

TURTLE OR TURTLE PARTS PRESENT YES \_\_\_\_\_ NO \_\_\_\_\_

COMMENTS AND OTHER OBSERVATIONS

---

---

---

BRIDGE WATCH: TIME \_\_\_\_\_ LOCATION \_\_\_\_\_

NUMBER OF TURTLES SIGHTED \_\_\_\_\_

\_\_\_\_\_  
OBSERVER'S NAME

PROJECT: MOD. TO SUNNY ISLES SEGMENT AND BEACH RENOURISHMENT AT  
MIAMI BEACH, DADE COUNTY SPP

INCIDENT REPORT OF SEA TURTLE MORTALITY  
AND DREDGING ACTIVITIES

Species: \_\_\_\_\_

Date: \_\_\_\_\_ Time: 24 hour clock \_\_\_\_\_

Geographic Site: \_\_\_\_\_

Location: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

Vessel Name: \_\_\_\_\_

Type of Dredging Activity: \_\_\_\_\_

Load #: \_\_\_\_\_ Sampling Method: \_\_\_\_\_

Location Specimen Recovered: \_\_\_\_\_

Draghead Deflector? YES \_\_\_\_\_ NO \_\_\_\_\_

Condition of Deflector: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Water Temp: Surface \_\_\_\_\_ Column \_\_\_\_\_

Head Width: \_\_\_\_\_ Plastron Length: \_\_\_\_\_

Carapace S.L. Length: \_\_\_\_\_ Carapace S.L. Width: \_\_\_\_\_

Carapace O.C. Length: \_\_\_\_\_ Carapace O.C. Width: \_\_\_\_\_

Condition of Specimen: \_\_\_\_\_

Turtle Tagged: YES \_\_\_\_\_ NO \_\_\_\_\_

Tag #: \_\_\_\_\_ Tag Date: \_\_\_\_\_

Comments/Other: \_\_\_\_\_

Observer's Name: \_\_\_\_\_

**MARINE TURTLE NESTING SUMMARY REPORT**

**This form must be typed or printed legibly in ink and signed.**

Turtle Permit Number (TP#): \_\_\_\_\_ Contract No. \_\_\_\_\_  
 Principal Permit Holder: \_\_\_\_\_  
 Organization: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 \_\_\_\_\_

Telephone: (day) \_\_\_\_\_ (evening) \_\_\_\_\_

Beach Name: \_\_\_\_\_

Describe survey boundaries geographically, be specific and use known landmarks that can be found on a map (or send a marked map). Example - North Boundary: 1.5 miles south of the Martin/St. Lucie County Line; South Boundary: St. Lucie Inlet.

North Survey Boundary: \_\_\_\_\_  
 South Survey Boundary: \_\_\_\_\_  
 Beach Length: \_\_\_\_\_ km / mi (circle unit)  
 County: \_\_\_\_\_  
 Start Date of Survey: \_\_\_\_\_ (include month/day)  
 End Date of Survey: \_\_\_\_\_ (include month/day)  
 Number of Days Per Week Surveyed: \_\_\_\_\_ Time of Day Surveyed: \_\_\_\_\_

<b>NESTING SUMMARY TABLE</b>	<b>CC</b>	<b>CM</b>	<b>DC</b>	<b>UNKNOWN</b>
Total # of false crawls				
Total # of nests				
Date of first nest				
Date of last nest				
<b>BEACH RELOCATION DATA:</b>				
Total # of nests relocated				
Total # of eggs relocated				
Total # of relocated nests screened				
Total # of live hatchlings				
<b>HATCHERY DATA:</b>				
Total # of nests in hatchery				
Total # of eggs in hatchery				
Total # of live hatchlings				
<b>IN SITU DATA:</b>				
Total # of in situ nests screened				

**NOTE:** False Crawl = emergence by an adult female that does not result in a nest  
 Relocated = nest reburied at a different site on the beach, not in a hatchery  
 Hatchery = permanent fenced area where nests are reburied and concentrated in a group  
 In Situ = natural nest left in place where deposited  
 Screened = protective flat screening or portable cage screening placed over nest

**COMPLETE THE BACK OF THIS FORM ALSO**

MARINE TURTLE NESTING SUMMARY REPORT CONTINUED

Are false crawls (non-nesting crawls) counted during your survey? YES NO

Type of hatchery utilized: Self-releasing restraining (circle one)

Reason hatchery was utilized: \_\_\_\_\_  
\_\_\_\_\_

Location of hatchery (be specific): \_\_\_\_\_  
\_\_\_\_\_

Reason nests were beach relocated: \_\_\_\_\_  
\_\_\_\_\_

Predators (type predator and number of nests affected if known): \_\_\_\_\_  
\_\_\_\_\_

Describe predator control methods employed (if any): \_\_\_\_\_  
\_\_\_\_\_

Were hatchling disorientation events documented? \_\_\_\_\_

Have all disorientation reports been submitted to DEP? YES NO

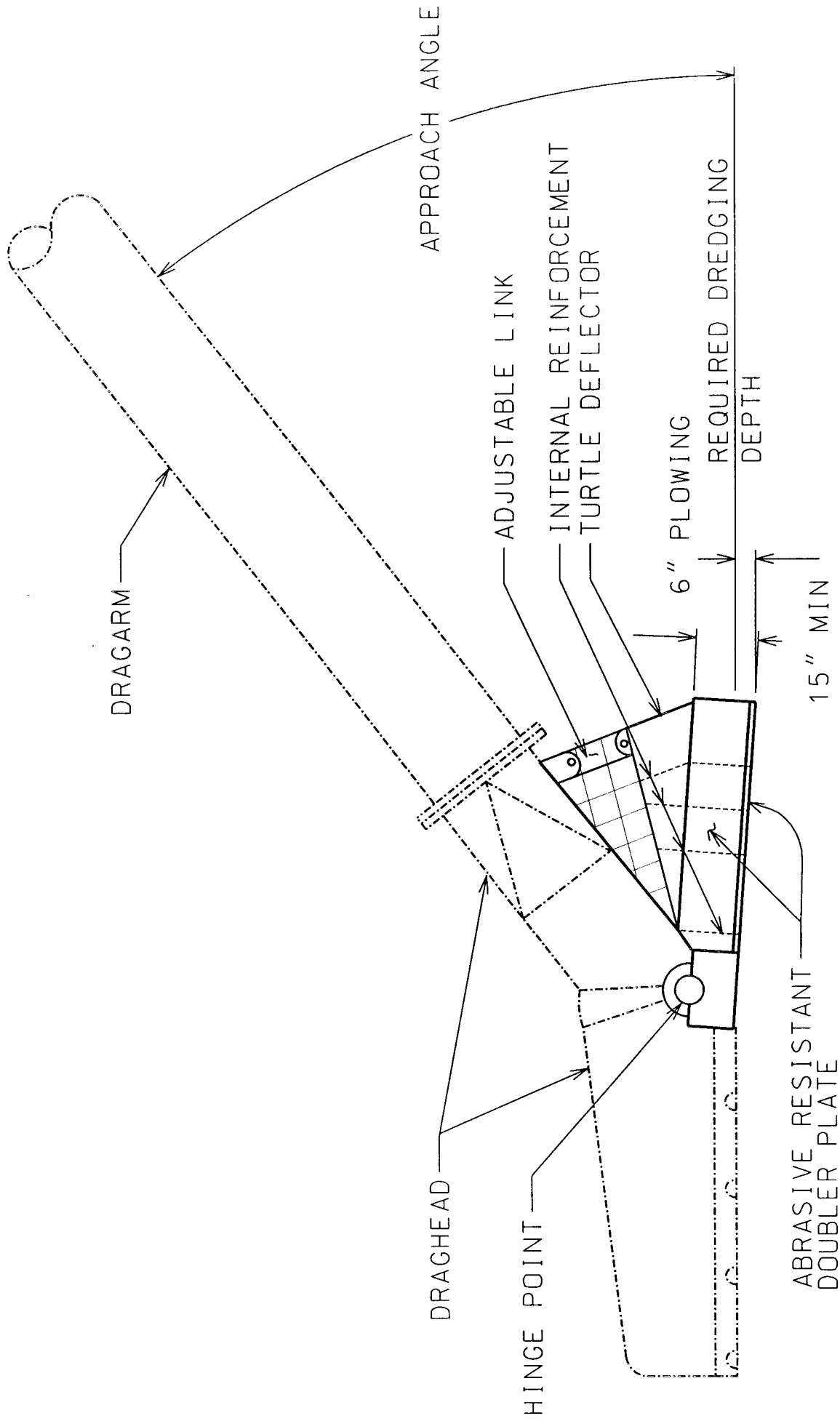
If you do not survey seven (7) days per week, please describe how nests are counted on the day(s) surveys are resumed: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

How many persons were involved in actually surveying your assigned beach?  
\_\_\_\_\_

I certify the above information to be true and accurate to the best of my knowledge.

\_\_\_\_\_  
Signature of Principal Permit Holder

\_\_\_\_\_  
Date



ELEVATION

RIGID ADJUSTABLE TURTLE DEFLECTOR  
SCALE: NONE

6" TYP

DRAGHEAD

45° (MIN)

TURTLE  
DEFLECTOR

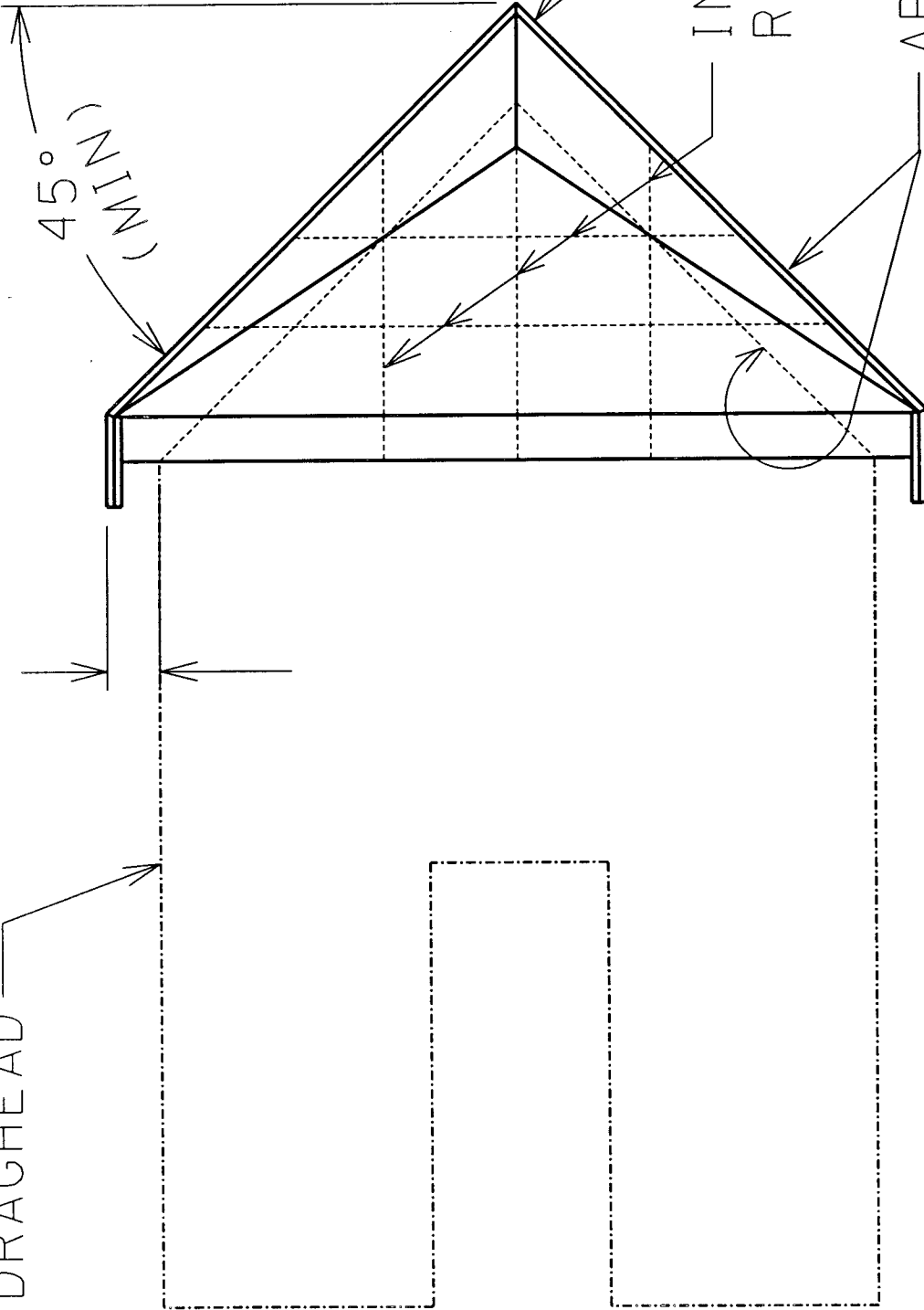
INTERNAL  
REINFORCEMENT

ABRASIVE  
RESISTANT  
DOUBLER PLATE

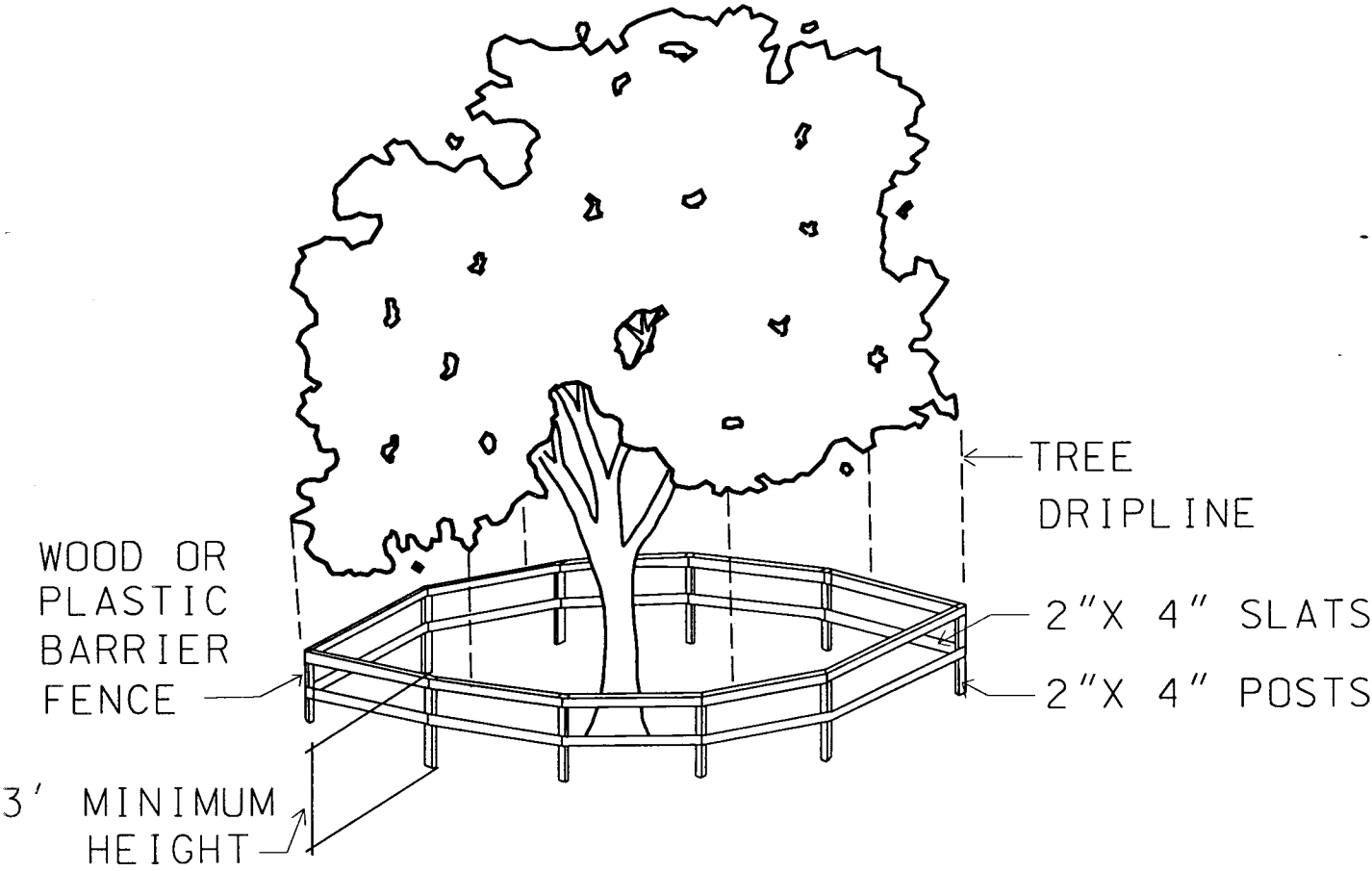
PLAN VIEW

RIGID TURTLE DEFLECTOR

SCALE: NONE



# TREE TO BE PRESERVED DURING CONSTRUCTION



## TREE PROTECTION PLAN NOT TO SCALE



## Project Environmental Summary Sheet

Note: This sheet shall be submitted within 30 days following completion of the project. In addition, for construction activities whose anticipated duration is more than one calendar year, a sheet shall be completed each May 31<sup>st</sup> ( $\pm$  14 days). The Contractor will prepare this sheet so as to include all Subcontractor information also. Original data will be forwarded via the COR to the Chief of the Environmental Branch, Planning Division, P.O. Box 4970, Jacksonville, FL 32232-0019. Use additional sheets as necessary.

Today's date: \_\_\_\_\_

Page: \_\_\_ of \_\_\_

Project Name: \_\_\_\_\_ Project Notice to Proceed Date: \_\_\_\_\_  
 Project Solicitation Number: \_\_\_\_\_ Project Contract Number: \_\_\_\_\_

1. Project activities that have occurred:

<u>Actual</u>	<u>Date of Anticipated</u>	<u>Date of</u>
<u>Activities</u>	<u>% Completion</u>	<u>Completion</u>
<u>Completion</u>		

2. Describe project survey benchmark if a structure is involved:

3. Check whether the following environmental incidents occurred:

Yes\*:                      No:

- a. Spill of petroleum or hazardous substance
- b. Surface water or ground water contamination event
- c. Air pollution event
- d. Monitoring sample outside limit
- e. Required sampling or monitoring not conducted
- f. Event which threatened or actually harmed:
  - i. Vegetation, habitat, or wetland
  - ii. Human, fish, bird, or other wildlife species
  - iii. Protected soil or water bottom
  - iv. Historic, archeological, or cultural resources
- g. Regulatory violation, regulatory warning, permit violation, newsworthy event, or other (describe):

4. For each asterisked (\*) 'Yes' item:

- a. Describe incident and how discovered:
- b. Describe how, when, and if incident reported (initially and subsequently):
- c. Describe act which resulted in incident:
- d. Describe any failures of containment systems, contingency plans, or emergency procedures:
- e. Describe severity or extent of incident and landowner(s) affected:
- f. Describe how situation corrected and verified:

g. List and describe costs involved with incident correction (\$\_\_\_\_\_):

h. Additional sheets, sketches, pertinent photographs with annotations and dates, daily reports, or other items attached? Yes\_\_\_ No\_\_\_

Contractor Signature: \_\_\_\_\_

Typed or Handwritten Name:

Position:

Company Name, Address, and Telephone Number:

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01411

TURBIDITY MONITORING

PART 1 GENERAL

- 1.1 SCOPE
- 1.2 SUBMITTALS
- 1.3 PAYMENT

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 MONITORING REQUIREMENTS

3.1.1 General

- 3.1.1.1 Turbidity Monitoring Equipment
- 3.1.1.2 Turbidity Monitoring Conducted by Dade County

3.1.2 Dredging Location

- 3.1.2.1 Station Descriptions
- 3.1.2.2 Collection Frequency

3.2 TURBIDITY TESTS

3.2.1 Testing

3.2.2 Reporting

- 3.2.2.1 Report Contents
- 3.2.2.2 Monitoring Reports
- 3.2.2.3 Notification
- 3.2.2.4 Work Delay

3.3 SAMPLE - TURBIDITY MONITORING TEST REPORT

-- End Section Table of Contents --

SECTION 01411

TURBIDITY 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 monitoring for turbidity.

1.2 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-06 Instructions

Calibration Standard; FIO.

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

SD-09 Reports

Test Reports; FIO.

All required turbidity test reports shall be submitted by electronic mail to the CO/COR and to the Florida Department of Environmental Protection (FDEP) within 24 hours after completion of each test.

1.3 PAYMENT

All costs for monitoring and reporting turbidity and all costs in connection therewith or incidental thereto shall be included in the applicable contract lump sum price for Base Offer Item No. 0002 and Optional Item A No. 0010, "Beach Fill" of the Bidding Schedule.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 MONITORING REQUIREMENTS

3.1.1 General

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.

3.1.1.2 Turbidity Monitoring Conducted by Dade County

The County will have representatives in the project area obtaining measurements and samples throughout the construction period to comply with other permit requirements.

3.1.2 Dredging Location

Routine monitoring samples shall be taken at the following locations:

3.1.2.1 Station Descriptions

a. Dredge Site (Only When Offshore Borrow Area Used)

(1) Turbidity samples shall be taken no more than 150 meters downcurrent from the dredge, in the densest portion of any visible turbidity plume. Samples shall be collected from the surface, mid-depth and 1-meter above the bottom.

(2) A background turbidity sample shall be collected 500 meters from the suction head in the opposite direction of the prevailing current flow, clearly outside the influence of any turbidity plume. Samples shall be collected from the surface, mid-depth, and 1-meter above the bottom.

b. Beach Fill Site

(1) Turbidity samples shall be taken at a point no more than 150 meters downcurrent from the discharge point within the densest portion of any visible turbidity plume. Samples shall be collected from the surface and 1-meter above the bottom.

(2) A background turbidity sample shall be collected at a point approximately 150 meters offshore and 1,000 meters upcurrent from the discharge point, clearly outside the influence of any turbid plume. Samples shall be collected from the surface and 1-meter above the bottom.

### 3.1.2.2 Collection Frequency

a. Dredging Site. Dredging site and background samples shall be collected approximately midway through each loading operation of the hopper at the borrow site.

b. Beach Fill Site Beach fill site and background samples shall be collected approximately midway through each beach filling operation from the dredge.

## 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 CO/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 listed below. An example form is 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 electronically to the CO/COR and to the FDEP within 24 hours of collection. Electronic mail addresses of the CO/COR and FDEP personnel to receive these reports are provided below. Reports shall be provided in a common format such as Excel (.xls), Word (.doc), .jpg.

NAME	ORGANIZATION	E-MAIL ADDRESS
Keith Mille	FDEP	Keith.Mille@dep.state.us.fl
Martin Seeling	FDEP	Martin.Seeing@dep.state.us.fl
John Cooper	CO/COR	john.g.cooper@usace.army.mil
Jose Carrio	CO/COR	jose.r.carrio@usace.army.mil
Matt Miller	CO/COR	matthew.j.miller@usace.army.mil
Diana Gerland	CO/COR	diama.r.gerland@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 (example map appended to the end of this Section).
- e. A map plotting the dredge locate during each traverse through the borrow area. This map can be combined with the map indicating the sampling location.
- f. A statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection, and accuracy of the data.
- g. Results of the analyses.
- h. A description of any factors influencing the dredging 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 samples 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. Dredge location (station location and map).
- g. Water sample location.
- h. FDEP Permit No. 0126527-001-JC.

#### 3.2.2.3 Notification

If turbidity exceeds background levels by more than 29 NTU, the Contractor shall immediately notify Dr. Smith at 904-232-1685 and the CO/COR, or on the morning of the following work day if it occurs after normal work hours. In addition, all dredging activity shall cease immediately and all measures to reduce turbidity shall be taken. Dredging 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 Location" above.

3.2.2.4 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.

3.3 SAMPLE - TURBIDITY MONITORING TEST REPORT

See APPENDIX A at the end of this Section (with example location map appended) (6 pages).

-- End of Section --



Date 7/16/99  
 Time 2315  
 Load Number 418

Borrow Area  
**TURBIDITY MONITORING**

Project: Contract No. 2, 2d Beach Renourishment, Surfside and South Miami Beach, Beach Erosion Control and Hurricane Protection, Dade County, FL

DEP PERMIT NUMBER: 0129419-001-JC

Date: 7/16/99 Time: 2315 Collector: DD

Location: Surfside South Beach Borrow Site X

Dredge Status: Working X Not Working

Weather and Water Observations

Tide High Wind Speed 5 kts Wind Direction E Current Direction S Load # 418

Weather Conditions

Partly cloudy

Station Data

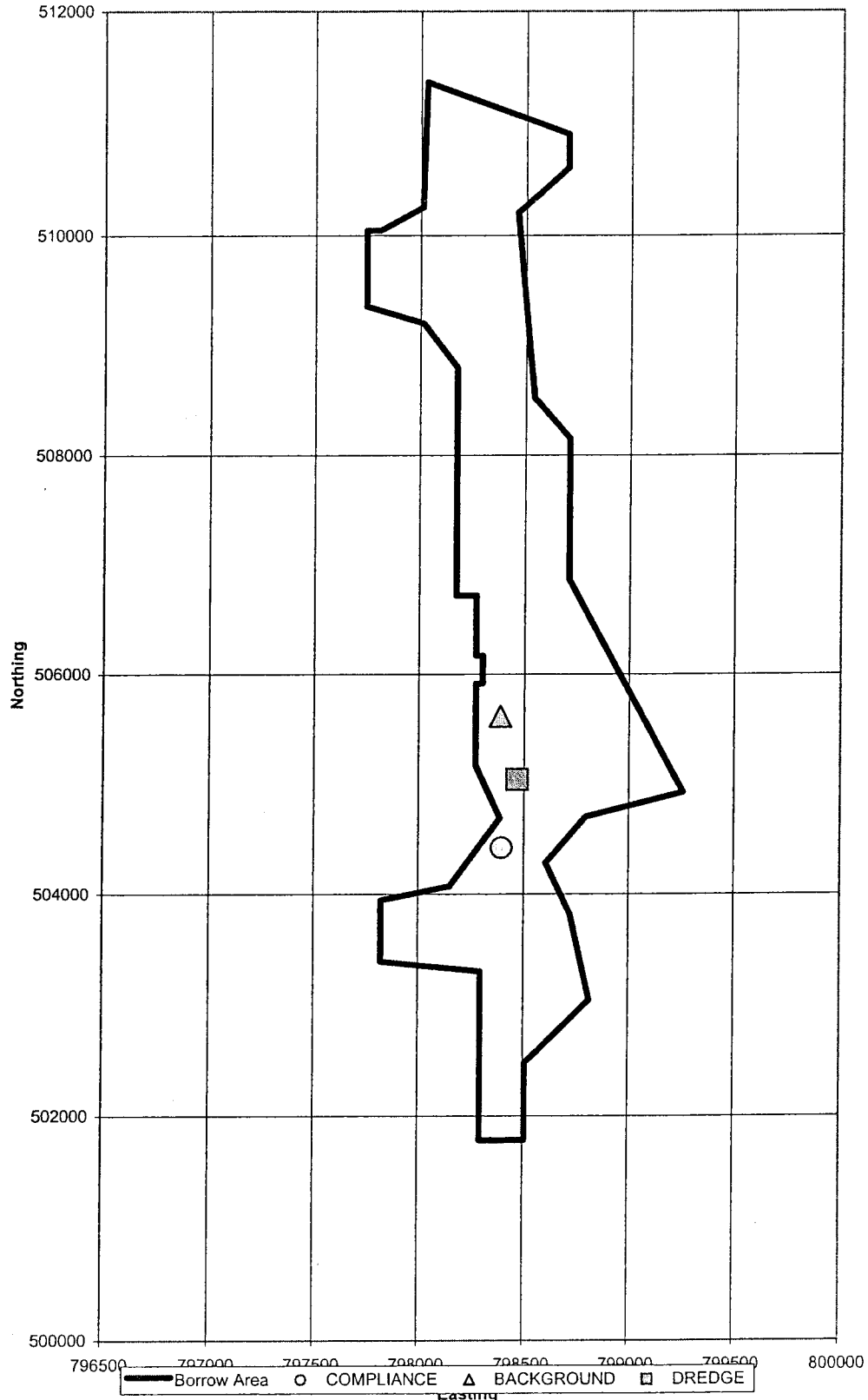
	Top	Top	Top	Mid	Mid	Mid	Bottom	Bottom	Bottom
Water Depth	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Collection Depth	1.0	1.0	1.0	20.0	20.0	20.0	39.0	39.0	39.0
Collection Time	2315	2315	2315	2315	2315	2315	2315	2315	2315
Analysis Time	2350	2350	2350	2350	2350	2350	2350	2350	2350
Turbidity (NTU)	3.80	3.80	3.90	3.80	3.90	3.90	3.70	3.80	3.80
Analysis Date	7/16/99								

Background Station Data

	Top	Top	Top	Mid	Mid	Mid	Bottom	Bottom	Bottom
Water Depth	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Collection Depth	1.0	1.0	1.0	20.0	20.0	20.0	39.0	39.0	39.0
Collection Time	2320	2320	2320	2320	2320	2320	2320	2320	2320
Analysis Time	2355	2355	2355	2355	2355	2355	2355	2355	2355
Turbidity (NTU)	1.50	1.50	1.50	1.40	1.50	1.50	1.40	1.60	1.60
Analysis Date	7/16/99								

	<u>Northing</u>	<u>Easting</u>
COMPLIANCE	504420	798395
BACKGROUND	505610	798387
DREDGE	505037	798468

Great Lakes Dredge & Dock  
Turbidity Sample Locations  
Borrow Area  
Miami Beach Nourishment Project T2500



01411-A2

**dump site and borrow area coordinates**

**Booster (Sand Pile)**

E	N
796557	566678 NE
796427	566653 NW
796433	566562 SW
796574	566589 SE
796557	566678 NE

**Rock Disp.**

797256	540222
798576	540222
798576	536262
797256	536262
797256	540222

**Borrow Area**

798700	510900 A
798700	510600 B
798460	510200 C
798540	508520 D
798710	508150 E
798710	506865 F
799260	504920 G
798795	504700 H
798604	504282 I
798721	503819 J
798814	503038 K
798508	502471 NN
798508	501785 L
798295	501785 11
798295	503294 10
797820	503385 V
797820	503945 W
798149	504070 X
798386	504688 Y
798270	505165 Z
798270	505910 AA
798300	505910 BB
798300	506170 CC
798270	506170 DD
798270	506720 EE
798175	506720 FF
798175	508800 GG
798015	509200 HH
797740	509355 II
797740	510045 JJ
797805	510045 KK
798010	510250 LL
798029	511367 MM
798700	510900 A

**Beach**

788392	569302
788719	565816
788744	565480
789255	560219
789292	559844
789255	560219
789506	560220
789817	560437
789836	561588
789555	562822
789632	563839
789535	565447
788718	565606

**Work Area**

788687	566162
790184	566170
790761	560228
789255	560219

Date 7/16/99  
 Time 2110  
 Load Number 417

Beach Fill  
**TURBIDITY MONITORING**

Project: Contract No. 2, 2d Beach Renourishment, Surfside and South Miami Beach, Beach Erosion Control and Hurricane Protection, Dade County, FL

DEP PERMIT NUMBER: 0129419-001-JC

Date: 7/16/99 Time: 2110 Collector: RWW

Location: Surfside South Beach Borrow Site  
 X

Dredge Status: Working Not Working  
 X

Weather and Water Observations

Tide Low Wind Speed 5 kts Wind Direction E Current Direction S Load # 417

Weather Conditions

Overcast

Station Data

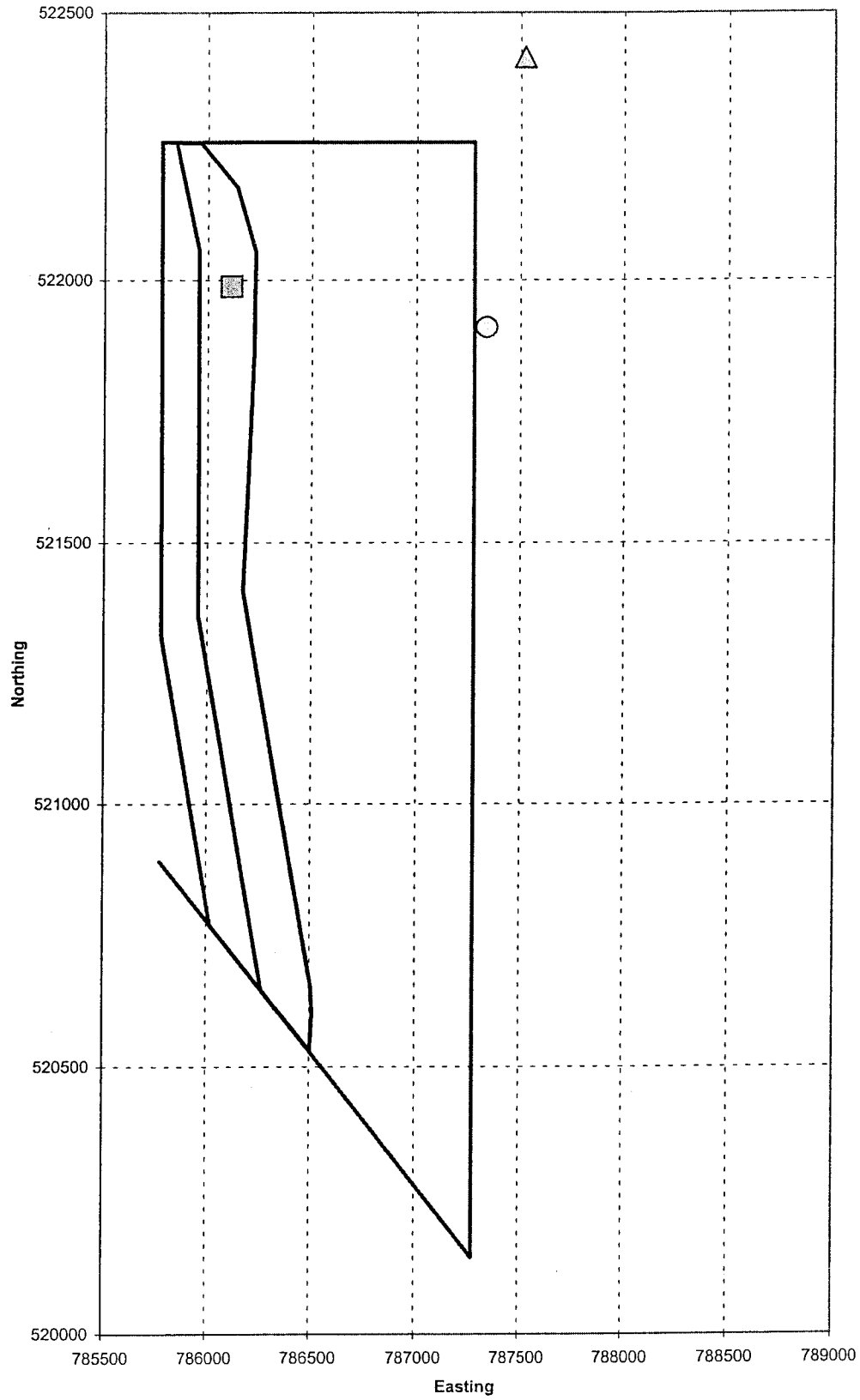
	Top	Top	Top				Bottom	Bottom	Bottom
Water Depth	14.0	14.0	14.0				14.0	14.0	14.0
Collection Depth	1.0	1.0	1.0				13.0	13.0	13.0
Collection Time	2110	2110	2110				2110	2110	2110
Analysis Time	2150	2150	2150				2150	2150	2150
Turbidity (NTU)	8.50	8.40	8.40				7.10	7.00	7.00
Analysis Date	7/16/99								

Background Station Data

	Top	Top	Top				Bottom	Bottom	Bottom
Water Depth	14.0	14.0	14.0				14.0	14.0	14.0
Collection Depth	1.0	1.0	1.0				13.0	13.0	13.0
Collection Time	2115	2115	2115				2115	2115	2115
Analysis Time	2155	2155	2155				2155	2155	2155
Turbidity (NTU)	2.80	3.00	3.00				2.00	2.20	2.20
Analysis Date	7/16/99								

	<u>Northing</u>	<u>Easting</u>
COMPLIANCE	521910	787335
BACKGROUND	522416	787521
SPREADER	521988	786114

Great Lakes Dredge & Dock  
Turbidity Sample Locations  
South Beach Fill Area  
DACW17-C-98-0032



**Dump Site And Borrow Area Coordinates**

**Borrow Area**

798700	510900	A
798700	510600	B
798460	510200	C
798540	508520	D
798710	508150	E
798710	506865	F
799260	504920	G
798795	504700	H
798604	504282	I
798721	503819	J
798814	503038	K
798508	502471	NN
798508	501785	L
798295	501785	11
798295	503294	10
797820	503385	V
797820	503945	W
798149	504070	X
798386	504688	Y
798270	505165	Z
798270	505910	AA
798300	505910	BB
798300	506170	CC
798270	506170	DD
798270	506720	EE
798175	506720	FF
798175	508800	GG
798015	509200	HH
797740	509355	II
797740	510045	JJ
797805	510045	KK
798010	510250	LL
798029	511367	MM
798700	510900	A

**Work Area**

785776	522258
785776	521324
786019	520769
785775	520890
786019	520769
787275	520143
787276	522257
785776	522258

**Beach Fill Area**

785846	522258
785956	522058
785956	521361
786270	520645
786503	520530
786513	520602
786505	520654
786470	520733
786174	521407
786225	521852
786232	522053
786142	522173
785965	522256
785776	522258
785776	521324
786019	520769
786270	520645

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01451

CONTRACTOR QUALITY CONTROL

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 PAYMENT

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

- 3.1 GENERAL
- 3.2 QUALITY CONTROL PLAN
  - 3.2.1 General
    - 3.2.1.1 Resubmittal
    - 3.2.1.2 Failure
  - 3.2.2 Content of the CQC Plan
  - 3.2.3 Acceptance of Plan
  - 3.2.4 Notification of Changes
- 3.3 COORDINATION MEETING
- 3.4 QUALITY CONTROL ORGANIZATION
  - 3.4.1 General
  - 3.4.2 CQC System Manager
  - 3.4.3 CQC Personnel
  - 3.4.4 Additional Requirement
  - 3.4.5 Registered Land Surveyor
  - 3.4.6 Organizational Changes
- 3.5 SUBMITTALS
- 3.6 CONTROL
  - 3.6.1 Preparatory Phase
  - 3.6.2 Initial Phase
  - 3.6.3 Follow-up Phase
  - 3.6.4 Additional Preparatory and Initial Phases
- 3.7 TESTS
  - 3.7.1 Testing Procedure
  - 3.7.2 Testing Laboratories
    - 3.7.2.1 Capability Check
    - 3.7.2.2 Capability Recheck
  - 3.7.3 Onsite Laboratory
  - 3.7.4 Furnishing or Transportation of Samples for Testing
- 3.8 COMPLETION INSPECTION
  - 3.8.1 Punch-Out Inspection
  - 3.8.2 Pre-Final Inspection

- 3.8.3 Final Acceptance Inspection
- 3.9 DOCUMENTATION
- 3.10 SAMPLE FORMS
- 3.11 NOTIFICATION OF NONCOMPLIANCE
- 3.12 SAMPLE - PREPARATION AND INITIAL PHASE CHECKLISTS
- 3.13 SAMPLE - CONTRACTOR'S QUALITY CONTROL REPORT (QCR)

-- End Section Table of Contents --



SECTION 01451

CONTRACTOR QUALITY CONTROL

PART 1 GENERAL

1.1 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.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM C 1077 (1996) Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation

ASTM D 3740 (1996) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction

ASTM E 329 (1995c) Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction

1.2 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control program, and all costs associated therewith shall be included in the applicable unit prices or lump-sum prices contained in the Bidding Schedule.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 GENERAL

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with the Clause INSPECTION OF CONSTRUCTION of Section 00700 CONTRACT CLAUSES. The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence. The project superintendent will be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer/Contracting Officer's Representative (CO/COR) for non-compliance with quality requirements specified in the contract. The project superintendent in this context shall

mean the individual with the responsibility for the overall management of the project including quality and production.

### 3.2 QUALITY CONTROL PLAN

#### 3.2.1 General

Within 15 calendar days of the Notice of Award, the Contractor shall submit the CQC Plan for review and acceptance by the CO/COR prior to the Coordination Meeting. The CO/COR will consider an interim plan for the first 30 days of operation. However, the Contractor shall furnish, not later than 30 calendar days after receipt of the Notice to Proceed, an acceptable final CQC Plan with which he proposes to implement the requirements of the Clause INSPECTION OF CONSTRUCTION of Section 00700 CONTRACT CLAUSES. The plan shall identify personnel, procedures, control, instructions, tests, records, and forms to be used.

##### 3.2.1.1 Resubmittal

If the Contractor fails to submit an acceptable CQC plan 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 CO/COR shall 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 CO/COR, the CO/COR 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.

##### 3.2.1.2 Failure

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 of this contract.

#### 3.2.2 Content of the CQC Plan

The CQC Plan shall include, as a minimum, the following to cover all construction operations, both onsite and offsite, including work by subcontractors, fabricators, suppliers, and purchasing agents:

- a. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three phase control system for all aspects of the work specified. The staff shall include a CQC System Manager who shall perform his duties in tandem with those of the Project Superintendent and with direct

reporting responsibility to an officer of the prime Contractor and/or an individual not directly responsible for production.

b. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.

c. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities. Copies of these letters shall also be furnished to the CO/COR.

d. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, offsite fabricators, suppliers, and purchasing agents. These procedures shall be in accordance with Section 01330 SUBMITTAL PROCEDURES.

e. Control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test. (Laboratory facilities will be approved by the CO/COR.)

f. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.

g. Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures shall establish verification that identified deficiencies have been corrected.

h. Reporting procedures, including proposed reporting formats.

i. A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there are frequently more than one definable feature under a particular section. This list will be agreed upon during the Coordination Meeting.

### 3.2.3 Acceptance of Plan

Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The CO/COR reserves the right to require the Contractor to make changes in his CQC Plan and operations including removal of personnel, as necessary, to obtain the quality specified.

#### 3.2.4 Notification of Changes

After acceptance of the CQC Plan, the Contractor shall notify the CO/COR in writing a minimum of seven calendar days prior to any proposed change. Proposed changes are subject to acceptance by the CO/COR.

#### 3.3 COORDINATION MEETING

After award of the contract, but before physical work starts, the Contractor shall meet with the CO/COR and discuss the Contractor's quality control system. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting shall be prepared by the CO/COR and signed by both the Contractor and the CO/COR. The minutes shall become a part of the contract file. There may also be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

#### 3.4 QUALITY CONTROL ORGANIZATION

##### 3.4.1 General

The requirements for the CQC organization are a CQC System Manager and sufficient number of additional qualified personnel to ensure contract compliance. The Contractor shall provide a CQC organization which shall be at the site at all times during progress of the work and with complete authority to take any action necessary to ensure compliance with the contract. All CQC staff members shall be subject to acceptance by the CO/COR.

##### 3.4.2 CQC System Manager

The Contractor shall identify as CQC System Manager an individual within the onsite work organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. The CQC System Manager shall be a construction person with a minimum of 8 years in related work. This CQC System Manager shall be on the site at all times during construction and shall be employed by the prime Contractor. The CQC System Manager shall be assigned no other duties. An alternate for the CQC System Manager shall be identified in the plan to serve in the event of the System Manager's absence. Period of absence may not exceed 1 week at any one time, and not more than 15 workdays during a calendar year. The requirements for the alternate shall be the same as for the designated CQC System Manager.

##### 3.4.3 CQC Personnel

A staff shall be maintained under the direction of the CQC System Manager to perform all CQC activities. The staff must be of sufficient size to ensure

adequate CQC coverage of all work phases, work shifts, and work crews involved in the construction. These personnel may perform other duties, but must be fully qualified by experience and technical training to perform their assigned CQC responsibilities and must be allowed sufficient time to carry out these responsibilities. The CQC plan will clearly state the duties and responsibilities of each staff member.

#### 3.4.4 Additional Requirement

In addition to the above experience and education requirements the CQC System Manager shall have completed the U.S. Army Corps of Engineers (COE) course "Construction Quality Management For Contractors". In the event the proposed CQC System Manager has not completed the training, he or she will have 60 days after Notice of Award to do so. This course is periodically offered by the COE. Information regarding the course can be obtained from the following website: <http://www.saj.usace.army.mil/conops/construction> or by contacting Chief, Quality Assurance Section at 904-232-2119.

#### 3.4.5 Registered Land Surveyor

A Registered Land Surveyor registered in the State of Florida shall perform the layout of the work as required in the paragraph LAYOUT OF WORK of Section 01000 GENERAL REQUIREMENTS.

#### 3.4.6 Organizational Changes

The Contractor shall maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, the Contractor shall revise the CQC Plan to reflect the changes and submit the changes to the CO/COR for acceptance.

#### 3.5 SUBMITTALS

Submittals shall be made as specified in Section 01330 SUBMITTAL PROCEDURES. The CQC organization shall be responsible for certifying that all submittals are in compliance with the contract requirements.

#### 3.6 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least three phases of control shall be conducted by the CQC System Manager for each definable feature of work as follows:

##### 3.6.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work, after all required plans/documents/materials are approved/accepted, and after copies are at the work site. This phase shall include:

- a. A review of each paragraph of applicable specifications.
- b. A review of the contract drawings.
- c. A check to assure that all materials and/or equipment have been tested, submitted, and approved.
- d. Review of provisions that have been made to provide required control inspection and testing.
- e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.
- f. A physical examination of required materials, equipment, and sample work to assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.
- g. A review of the appropriate activity hazard analysis to assure safety requirements are met.
- h. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.
- i. A check to ensure that the portion of the plan for the work to be performed has been accepted by the CO/COR.
- j. Discussion of the initial control phase.
- k. The CO/COR shall be notified at least 24 hours in advance of beginning the preparatory control phase. This phase shall include a meeting conducted by the CQC System Manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC System Manager and attached to the Contractor's Quality Control Report (QCR) (sample QCR form appended to the end of this Section). A suggested format for the minutes is appended to the end of this Section. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

### 3.6.2 Initial Phase

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

- a. A check of work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory meeting.
- b. Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing.

c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required sample panels as appropriate.

d. Resolve all differences.

e. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.

f. The CO/COR shall be notified at least 24 hours in advance of beginning the initial phase. Separate minutes of this phase shall be prepared by the CQC System Manager and attached to the Contractor's Quality Control Report (QCR) (sample QCR form appended to the end of this Section). A suggested format for the minutes is appended to the end of this Section. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.

g. The initial phase should be repeated for each new crew to work onsite, or any time acceptable specified quality standards are not being met.

### 3.6.3 Follow-up Phase

Daily checks shall be performed to assure control activities, including control testing, are providing continued compliance with contract requirements, until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work which may be affected by the deficient work. The Contractor shall not build upon nor conceal non-conforming work.

### 3.6.4 Additional Preparatory and Initial Phases

Additional preparatory and initial phases shall be conducted on the same definable features of work if the quality of on-going work is unacceptable, if there are changes in the applicable CQC staff, onsite production supervision or work crew, if work on a definable feature is resumed after a substantial period of inactivity, or if other problems develop.

## 3.7 TESTS

### 3.7.1 Testing Procedure

The Contractor shall perform specified or required tests to verify that control measures are adequate to provide a product which conforms to contract requirements. Upon request, the Contractor shall furnish to the CO/COR duplicate samples of test specimens for possible testing by the CO/COR. Testing includes operation and/or acceptance tests when specified. The Contractor shall procure the services of a Corps of Engineers approved testing laboratory or establish an approved testing laboratory at the project site. The Contractor shall perform the following activities and record and provide the following data:

- a. Verify that testing procedures comply with contract requirements.
- b. Verify that facilities and testing equipment are available and comply with testing standards.
- c. Check test instrument calibration data against certified standards.
- d. Verify that recording forms and test identification control number system, including all of the test documentation requirements, have been prepared.
- e. Results of all tests taken, both passing and failing tests, shall be recorded on the CQC report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test shall be given. If approved by the CO/COR, actual test reports may be submitted later with a reference to the test number and date taken. An information copy of tests performed by an offsite or commercial test facility shall be provided directly to the CO/COR. Failure to submit timely test reports as stated may result in nonpayment for related work performed and disapproval of the test facility for this contract.

### 3.7.2 Testing Laboratories

#### 3.7.2.1 Capability Check

The CO/COR reserves the right to check laboratory equipment in the proposed laboratory for compliance with the standards set forth in the contract specifications and to check the laboratory technician's testing procedures and techniques. Laboratories utilized for testing soils, concrete, asphalt, and steel shall meet criteria detailed in ASTM C 1077, ASTM D 3740 and ASTM E 329.

#### 3.7.2.2 Capability Recheck

If the selected laboratory fails the capability check, the Contractor will be assessed a charge of \$1,950.00 to reimburse the CO/COR for each succeeding recheck of the laboratory or the checking of a subsequently selected laboratory. Such costs will be deducted from the contract amount due the Contractor.

#### 3.7.3 Onsite Laboratory

The CO/COR reserves the right to utilize the Contractor's control testing laboratory and equipment to make assurance tests and to check the Contractor's testing procedures, techniques, and test results at no additional cost to the Government.

#### 3.7.4 Furnishing or Transportation of Samples for Testing

Costs incidental to the transportation of samples or materials shall be borne by the Contractor. Samples of materials for test verification and acceptance



testing by the CO/COR shall be delivered to the Government-approved laboratory.

Coordination for each specific test, exact delivery location, and dates will be made through the Atlantic Coast Area Office.

### 3.8 COMPLETION INSPECTION

#### 3.8.1 Punch-Out Inspection

Near the completion of all work or any increment thereof established by a completion time stated in paragraph COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK of Section 00800 SPECIAL CONTRACT REQUIREMENTS, or stated elsewhere in the specifications, the CQC System Manager shall conduct an inspection of the work and develop a "punch list" of items which do not conform to the approved drawings and specifications. Such a list of deficiencies shall be included in the CQC documentation, as required by paragraph DOCUMENTATION below, and shall include the estimated date by which the deficiencies will be corrected. The CQC System Manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the CO/COR that the facility is ready for the Government "Pre-Final" inspection.

#### 3.8.2 Pre-Final Inspection

The CO/COR will perform this inspection to verify that the facility is complete and ready to be occupied. A Government "Pre-Final Punch List" may be developed as a result of this inspection. The Contractor's CQC System Manager shall ensure that all items on this list have been corrected before notifying the CO/COR so that a Final inspection with the customer can be scheduled. Any items noted on the Pre-Final inspection shall be corrected in a timely manner. These inspections and any deficiency corrections required by this paragraph shall be accomplished within the time slated for completion of the entire work or any particular increment thereof if the project is divided into increments by separate completion dates.

#### 3.8.3 Final Acceptance Inspection

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the CO/COR shall be in attendance at this inspection. Additional CO/COR personnel including, but not limited to, those from Sponsor, User, Customer, or Owner, and major commands may also be in attendance. The final acceptance inspection will be formally scheduled by the CO/COR based upon results of the Pre-Final inspection. Notice shall be given to the CO/COR at least 14 days prior to the final acceptance inspection and shall include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all contract work acceptably complete for this inspection will be cause for the CO/COR to bill

the Contractor for the CO/COR additional inspection cost in accordance with the Clause INSPECTION OF CONSTRUCTION of Section 00700 CONTRACT CLAUSES.

### 3.9 DOCUMENTATION

The Contractor shall maintain current records providing factual evidence that required quality control activities and/or tests have been performed. These records shall include the work of subcontractors and suppliers and shall be on an acceptable form that includes, as a minimum, the following information:

- a. Contractor/subcontractor and their area of responsibility.
- b. Operating plant/equipment with hours worked, idle, or down for repair.
- c. Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) is used, identify each phase of work performed each day by NAS activity number.
- d. Test and/or control activities performed with results and references to specifications/drawings requirements. The control phase should be identified (Preparatory, Initial, Follow-up). List deficiencies noted along with corrective action.
- e. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.
- f. Submittals reviewed, with contract reference, by whom, and action taken.
- g. Off-site surveillance activities, including actions taken.
- h. Job safety evaluations stating what was checked, results, and instructions or corrective actions.
- i. Instructions given/received and conflicts in plans and/or specifications.
- j. Contractor's verification statement.

These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. The original and one copy of these records in report form shall be furnished to the CO/COR daily within 24 hours after the date(s) covered by the report, except that reports need not be submitted for days on which no work is performed. As a minimum, one report shall be prepared and submitted for every 7 days of no work and on the last day of a no work period. All calendar days shall be accounted for throughout the life of the contract.

The first report following a day of no work shall be for that day only. Reports shall be signed and dated by the CQC System Manager. The report from the CQC System Manager shall include copies of test reports and copies of reports prepared by all subordinate quality control personnel.

### 3.10 SAMPLE FORMS

Sample forms are appended at the end of this Section. The CO/COR will instruct the Contractor in the preparation of these forms during the Preconstruction Conference as specified in Section 01000 GENERAL REQUIREMENTS.

### 3.11 NOTIFICATION OF NONCOMPLIANCE

The CO/COR will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the CO/COR may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

### 3.12 SAMPLE - PREPARATION AND INITIAL PHASE CHECKLISTS

See APPENDIX A at the end of this Section (3 pages).

### 3.13 SAMPLE - CONTRACTOR'S QUALITY CONTROL REPORT (QCR)

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

-- End of Section --

PREPARATORY PHASE CHECKLIST

Date Preparatory Held: \_\_\_\_\_

Contract No.: \_\_\_\_\_ Spec. Sect. & Para.: \_\_\_\_\_

Title: \_\_\_\_\_ Dwg. No.: \_\_\_\_\_

MAJOR DEFINABLE SEGMENT OF WORK: \_\_\_\_\_

A. PERSONNEL PRESENT:

	<u>NAME</u>	<u>POSITION</u>	<u>COMPANY</u>
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____

(List additional personnel on attached sheet)

B. HAS EACH SPEC. PARAGRAPH AND DRAWING AND SHOP DRAWING DETAIL BEEN STUDIED :

Yes \_\_\_\_\_ No \_\_\_\_\_

C. TRANSMITTALS INVOLVED:

Yes \_\_\_\_\_ No \_\_\_\_\_

	<u>NUMBER &amp; ITEM</u>	<u>CODE</u>	<u>CONTRACTOR/GOVT. APPROVAL</u>
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____

C-I. Have all items involved been approved? Yes \_\_\_\_\_ No \_\_\_\_\_

If No, list items: \_\_\_\_\_  
\_\_\_\_\_

D. ARE ALL MATERIALS ON HAND? Yes \_\_\_\_\_ No \_\_\_\_\_

D-I. Have all materials been checked for contract compliance against approved shop drawings? Yes \_\_\_\_\_ No \_\_\_\_\_

D-II. Items not on hand or not in accordance with transmittals:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

E. TESTS REQUIRED IN ACCORDANCE WITH CONTRACT REQUIREMENTS:

<u>TEST</u>	<u>PARAGRAPH</u>
1. _____	_____
2. _____	_____
3. _____	_____

F. ACCIDENT PREVENTION PREPLANNING - HAZARD CONTROL MEASURES:

F-I. Applicable Outlines (Attach completed copies):

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

F-II. Operational Equipment Checklists:

ATTACHED FOR:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

ON FILE FOR:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

G. HAVE PROCEDURES FOR ACCOMPLISHING WORK BEEN REVIEWED WITH APPROPRIATE PEOPLE?

Yes \_\_\_\_\_ No \_\_\_\_\_

H. HAS ALL PRELIMINARY WORK BEEN ACCOMPLISHED IN ACCORDANCE WITH CONTRACT REQUIREMENTS AND IS THIS SEGMENT OF WORK READY TO START?

Yes \_\_\_\_\_ No \_\_\_\_\_

H-I. Explain any problems: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Quality Control Representative

INITIAL PHASE CHECKLIST

Contract No. \_\_\_\_\_ Date: \_\_\_\_\_

Spec. Para: \_\_\_\_\_

Description and Location of Work Inspected: \_\_\_\_\_

REFERENCE CONTRACT DRAWINGS: \_\_\_\_\_

A. PERSONNEL PRESENT:

	<u>NAME</u>	<u>POSITION</u>	<u>COMPANY</u>
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____

B. MATERIALS BEING USED ARE IN STRICT COMPLIANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS. Yes \_\_\_\_\_ No \_\_\_\_\_

If not, explain: \_\_\_\_\_

C. PROCEDURES AND/OR WORK METHODS WITNESSED ARE IN STRICT COMPLIANCE WITH THE REQUIREMENT OF THE CONTRACT SPECIFICATIONS. Yes \_\_\_\_\_ No \_\_\_\_\_

If not, explain: \_\_\_\_\_

D. WORKMANSHIP IS ACCEPTABLE. Yes \_\_\_\_\_ No \_\_\_\_\_

State areas where improvement is needed: \_\_\_\_\_

E. SAFETY VIOLATIONS AND CORRECTIVE ACTION TAKEN: \_\_\_\_\_

\_\_\_\_\_  
Quality Control Representative

<b>CONTRACTOR'S QUALITY CONTROL REPORT (QCR)</b> (ER 1180-1-6)		DATE: _____	REPORT No _____
CONTRACT NUMBER AND NAME OF CONTRACTOR (DAC -17- -C- )		DESCRIPTION AND LOCATION OF THE WORK:	
<b>WEATHER CLASSIFICATION:</b> CLASS A No Interruptions of any kind from weather conditions occurring this or previous shifts. CLASS B Weather occurred during this shift that caused a complete stoppage of all work. CLASS C Weather occurred during this shift that caused a partial stoppage of work. CLASS D Weather overhead excellent or suitable during shift. Work stopped due to results of previous adverse weather. CLASS E Weather overhead excellent or suitable during shift but work partially stopped due to previous adverse manner. OTHER Explain _____		<b>CLASSIFICATION:</b> CLASS _____ TEMPERATURE: MAX _____ MIN _____ PRECIPITATION: INCHES _____.	
<b>CONTRACTOR/SUBCONTRACTORS AND AREA OF RESPONSIBILITY FOR WORK PERFORMED TODAY:</b> <i>(Attach list of items of equipment either idle or working as appropriate)</i> a. _____ b. _____ c. _____ d. _____ e. _____ f. _____ g. _____			
<b>1. WORK PERFORMED TODAY:</b> <i>(Indicate location and description of work performed refer to work by prime and/or subcontractors by letter in table above)</i>      			
<b>2. TYPE AND RESULTS OF INSPECTION:</b> <i>(Indicate whether: P- Preparatory, I - Initial, or F - Follow-up and include satisfactory work completed or deficiencies with action to be taken.):</i>      			
<b>3. TESTS REQUIRED BY PLANS AND/OR SPECIFICATIONS PERFORMED AND RESULTS OF TESTS :</b>      			

4. **VERBAL INSTRUCTIONS RECEIVED:** (List any instructions given by Government personnel on construction deficiencies, retesting required, etc., with action to be taken.)

5. **REMARKS:** (Cover any conflicts in plans, specifications or instructions: acceptability of incoming materials ; offsite surveillance activities; progress of work, delays, causes and extent thereof; days of no work with reasons for same. Note if a Preparatory or Initial Phase Meeting was held, and attach a copy of the checklist.)

5. a. **REQUESTS FOR INFORMATION:** (Note that there is an RFI attached to this daily report, assign a control number and attach a sheet to this report which fully describes the RFI , and recommends a solution if applicable.)

RFI Attached ; Control Number =

5. b. **ENVIRONMENTAL QUALITY CONTROL**

Environmental Quality Control Requirements are in place and have been checked?  Yes;  Not Applicable

Have any endangered species been encountered?  Yes;  No

(If Yes, attach required reports in accordance with Section ENVIRONMENTAL PROTECTION!)

5. c. **VISITORS TO THE SITE** (List the name of all official visitors to the site and who they represent i.e. State DEP, OSHA)

6. **SAFETY:** (Include all infractions of the accident prevention plan; COE Safety and Health Requirements Manual, EM 385-1-1; or instructions from Government QA personnel. **Describe corrective actions taken.**)

Safety meeting held today?  Yes,  No (If Yes, state the subject and report number of personnel in attendance )

Safety meeting subject: \_\_\_\_\_

Number of Contractor personnel attending = \_\_\_\_\_ Number of subcontractor personnel attending = \_\_\_\_\_

Name of Reporting QC Inspector/s:

Signature & Date: \_\_\_\_\_

CONTRACTOR'S CERTIFICATION: I certify that the above report is complete and correct and that all material and equipment used, work performed and tests conducted during this reporting period were in compliance with the contract except as noted above.

\_\_\_\_\_  
Contractor's QC System Manager/ Authorized Representative



DEFICIENCY MANAGEMENT RECORD

CONTRACT NO. \_\_\_\_\_ PROJECT \_\_\_\_\_ CONTRACTOR \_\_\_\_\_

Date	Deficiency No.	Category	Discipline	Deficiency Description	Date	Corrected
------	----------------	----------	------------	------------------------	------	-----------

QA Init.    CQC Init.    QA Init

Category: 1- Urgent; 2, Significant, 3 Requires Written Letter of Non-compliance

Receipt Acknowledged:

\_\_\_\_\_  
Signature QC Staff, Date

FINAL/PRE-FINAL INSPECTION CHECKLIST

1. Contract DACW-\_\_\_-\_\_\_-
2. Contractor:
3. Project:
4. Date of (Final) (Pre-Final) Inspection:
5. Names and Positions of all Participants:

\_\_\_\_\_, CQC System Manager  
\_\_\_\_\_, Government's QA Representative

6. Topics Reviewed:

Yes    No    N/A    Initials

- a. All submittals received and approved?
- b. All payroll received?
- c. All measured quantities have been correctly measured in the field?
- d. Are all parties in agreement with final measured quantities?
- e. Are all change orders finalized? If "no" the date set for final negotiations is \_\_\_\_\_.
- f. Is warranty received and correct?
- g. (Final) (Pre-Final) log received?
- h. As-built drawings received?
- i. Is work per plans and Specifications?
- j. Is performance rating complete?
- k. Is safety rating complete?
- l. Was project turned over to beneficial occupant (keys, utilities, manuals, acceptance)?
- m. Final Inspection date set for \_\_\_\_\_.

ACTIVITY \_\_\_\_\_ ANALYZED BY/DATE \_\_\_\_\_ REVIEWED BY/DATE \_\_\_\_\_

PRINCIPAL STEPS	POTENTIAL HAZARDS	RECOMMENDED CONTROLS
EQUIPMENT TO BE USED	INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS

SECTION TABLE OF CONTENTS

DIVISION 02 - SITE WORK

SECTION 02278

STONE PROTECTION

PART 1 GENERAL

- 1.1 SCOPE
- 1.2 REFERENCES
- 1.3 QUALITY ASSURANCE
  - 1.3.1 Armor Stone
  - 1.3.2 Construction Tolerances
- 1.4 SUBMITTALS
- 1.5 COMPLIANCE SURVEY
- 1.6 PERMITS
- 1.7 UTILITY CROSSINGS
- 1.8 WORK AND ACCESS AREA
  - 1.8.1 Staging Area
  - 1.8.2 Work Area
  - 1.8.3 Contractor Responsibilities
- 1.9 ADJACENT PROPERTY AND STRUCTURES
- 1.10 MEASUREMENT
  - 1.10.1 Stone
  - 1.10.2 Railroad and Truck Weights
  - 1.10.3 Barge Displacement
    - 1.10.3.1 Fore and Aft Displacement
    - 1.10.3.2 Gauge Readings
    - 1.10.3.3 Barge Conditions
- 1.11 PAYMENT
  - 1.11.1 Mobilization and Demobilization
  - 1.11.2 Stone
  - 1.11.3 Obstructions
  - 1.11.4 Work and Access Area
    - 1.11.4.1 Access to Work Site
    - 1.11.4.2 Stone Samples
  - 1.11.5 Surveys
  - 1.11.6 Permanent Navigation Aids for Breakwater
  - 1.11.7 Work Violations

PART 2 PRODUCTS

- 2.1 STONE MATERIALS: TESTING
  - 2.1.1 Stone Quality Testing
    - 2.1.1.1 General
    - 2.1.1.2 Stone Sources
    - 2.1.1.3 Stone Sources Acceptance

- 2.1.1.4 Stone Quality Testing During Construction
- 2.1.2 Field Gradation Test
  - 2.1.2.1 Selection of Sample
  - 2.1.2.2 Gradation Test - Armor Stone
- 2.2 STONE
  - 2.2.1 Armor Stone
- 2.3 PERMANENT NAVIGATION AIDS

PART 3 EXECUTION

- 3.1 NOTIFICATION OF COAST GUARD
  - 3.1.1 Construction Aids
  - 3.1.2 Misplaced Material
- 3.2 ORDER OF WORK
- 3.3 FOUNDATION PREPARATION
- 3.4 PLACEMENT
  - 3.4.1 Armor Stone
  - 3.4.2 Misplaced Materials
  - 3.4.3 Divers
  - 3.4.4 Maintenance and Acceptance
- 3.5 DEBRIS REMOVAL
- 3.6 NAVIGATION AIDS
- 3.7 DRAWINGS
  - 3.7.1 As-Built Drawings
  - 3.7.2 Drawings and As-Builts
    - 3.7.2.1 Drawings
    - 3.7.2.2 Manual and Diskettes
- 3.8 STONE SOURCE INFORMATION

-- End Section Table of Contents --

SECTION 02278

STONE PROTECTION

PART 1 GENERAL

1.1 SCOPE

The work covered by this section consists of furnishing all plant, labor, equipment and materials, and performing all operations in connection with the stone placement in accordance with the contract drawings and specifications.

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.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A 88	(1990) Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
ASTM C 127	(1988; R 1993) Test Method for Specific Gravity and Absorption of Course Aggregate
ASTM C 295	(1990) Guide for Petrographic Examination of Aggregates for Concrete
ASTM C 535	(1996) Test Method for Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
ASTM D 5121	(1990; R 1995) Practice for Preparation of Rock Slabs for Durability Testing
ASTM D 5312	(1992) Test Method for Evaluation of Durability of Rock for Erosion Control Under Freezing and Thawing Conditions
ASTM D 5313	(1992) Test Method for Evaluation of Durability of Rock for Erosion Control Under Wetting and Drying Conditions

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  
Control Surveying  
EM 1110-1-1005 (1994) Topographic Surveying  
EM 1110-1-2909 (1998) Geospatial Data and Systems  
EM 1110-2-1906 Laboratory Soils Testing

FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS (FBPSM)

FBPSM Chapters 177, 472, 61G17 Minimum Technical Standards

TRI-SERVICE STANDARDS (TSS)

TSS (Jul 98) A/E/C CADD Standards

1.3 QUALITY ASSURANCE

1.3.1 Armor Stone

Armor stone may be tested by the Government during construction if the Contracting Officer/Contracting Officer's Representative (CO/COR) determines that testing is necessary. If such tests are determined necessary, the testing will be performed in a Government-approved testing laboratory in the State of Florida at the Government's expense. The Contractor shall obtain, under the supervision of the CO/COR, and deliver to the laboratory at the Contractor's expense, samples consisting of at least five (5) pieces of armor stone in the gradation specified. Tests to which the material may be subjected are indicated in the paragraph STONE MATERIALS: TESTING. Stone will be inspected for quality, shape, and/or gradation during loading at the source and unloading at the work site prior to placement.

1.3.2 Construction Tolerances

Variations in slope lines and grades from the indicated slope lines and grades shall be within the tolerances specified in the following table:

TOLERANCES FOR SLOPE LINES AND GRADES

Variation in Armor Stone	-0/+12 inches
--------------------------	---------------

1.4 SUBMITTALS

Government approval is required for all 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-01 Data

Surveys; GA|AE.

The surveys, original and one copy of all field notes, cross sections, computations, floppy disks, and all other records relating to the survey or layout of work shall be submitted to the CO/COR, who will use them as necessary to verify placement of material to required line and grade.

Cross Sections; GA|AE.

The same scale for the cross sections shall be used as in the contract drawings. The cross section profile shall be digitally captured. Refer to paragraph PROJECT RECORD DOCUMENTS of Section 01000 GENERAL REQUIREMENTS. The final cross sections and the theoretical design templates shall be superimposed over the original cross sections. Cross sections shall be taken on 50-foot intervals and shall include elevations at 20-foot ranges and at the top and toe of the scour apron. All stations, ranges, and elevation points taken from field books shall be clearly lettered as the profiles. In addition to the above, the original and final cross sections shall be furnished as X,Y,Z and descriptor ASCII files for each cross section line, and one X,Y,Z and descriptor ASCII file with all data included on 3.5 inch disks or CD-ROM using Windows 95/98/NT or later operating system.

SD-08 Statements

Stone Placement Plan; GA|ED.

Within 15 calendar days after date of receipt of 2d partial Notice to Proceed, a detailed Stone Placement Plan shall be submitted by the Contractor for approval to the CO/COR incorporating:

- a. The method of transporting stone from the stone source to the construction site and the method of weighing stone for payment purposes.
- b. The method of stone placement and the type of equipment to be utilized.
- c. The direction and area in which construction shall commence.

SD-13 Certifications

Stone; GA|ED.

The Contractor shall submit written certification that all material delivered to the site meets all the requirements of the contract specifications. Certification shall be provided weekly or upon request of all stone deliveries to the job site. Certifications shall be submitted in accordance with Section 01451 CONTRACTOR QUALITY CONTROL.



SD-14 Samples

Stone Samples; GA|AE.

Representative samples of all stone shall be submitted for approval prior to delivery of any such material to the work site. Sources from which the Contractor proposes to obtain the material shall be selected well in advance of the time when the material will be required in the work. All samples shall be obtained by the Contractor under the supervision of the CO/COR. Costs of obtaining and delivering the samples shall be at the expense of the Contractor.

SD-18 Records

Notice of Construction Activities; FIO.

Prior to commencement of work on this contract, the Contractor shall notify the Commander, Seventh Coast Guard District, of the intended construction operations and request that it be published in the Local Notice to Mariners.

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 CO/COR, 30 days in advance of the time he plans to commence construction activities at the proposed construction site and borrow area, which require relocation of any aids. 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 CO/COR.

Notification of Discovery of Historical Period Shipwreck Sites ; FIO.

The Contractor shall immediately notify the CO/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 Misplaced Material; FIO.

The Contractor shall notify the U.S. Coast Guard Marine Safety Officer of any misplaced material as stated in the Clause MISPLACED MATERIALS of Section 00700 CONTRACT CLAUSES.

1.5 COMPLIANCE SURVEY

Compliance surveys shall be performed in accordance with the paragraph LAYOUT OF WORK of Section 01000 GENERAL REQUIRMENTS; Section 01451 CONTRACTOR QUALITY CONTROL; EM 1110-1-1000, EM 1110-1-1002, EM 1110-1-1003, EM 1110-1-1005, EM 1110-1-2909, FBPSM Chapters 177, 472, 61G17; 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>. The original survey shall be performed prior to commencement of placement of material. The final survey shall be performed 30 days prior to final inspection, and shall be taken at the same stations that were used for the original survey. Cross sections shall be taken at every 50-foot station, using 5-foot ranges. (When unusual site or geographic conditions exist, additional stations, ranges and elevations shall be taken for greater definition and accuracy.) As-built surveys indicated in paragraph PROJECT RECORD DOCUMENTS of Section 01000 GENERAL REQUIREMENTS shall be performed in accordance with the references above.

#### 1.6 PERMITS

The Contractor's attention is directed to the Clause PERMITS AND RESPONSIBILITIES of Section 00700 CONTRACT CLAUSES and paragraph PERMITS AND AUTHORIZATIONS of Section 01410 ENVIRONMENT PROTECTION.

#### 1.7 UTILITY CROSSINGS

It is the Contractor's responsibility to investigate the location of existing utility crossings within the work area. The Contractor shall take precautions against damages which might result from his operations in the vicinity of utility crossings. If any damage occurs as a result of his operations, the Contractor will be required to suspend construction until the damage is repaired and approved by the CO/COR. Cost of such damage shall be at the Contractor's expense.

#### 1.8 WORK AND ACCESS AREA

##### 1.8.1 Staging Area

A staging area, as shown on the contract drawings, has been identified for the Contractor's use. The staging area shown is only for the temporary storage of a days worth of stone. It shall be the responsibility of the Contractor to investigate and obtain any additional areas which may be necessary for his/her construction operations. The additional areas will be subject to the approval of the CO/COR.

##### 1.8.2 Work Area

The area for accomplishing the work is shown on the contract drawings. No anchoring shall occur outside of the work area limits.

##### 1.8.3 Contractor Responsibilities

The Contractor shall exclude the public from the work area in the immediate vicinity of his operations. The Contractor shall install warning signs to warn the public and all commercial recreational boats of all construction activities. The Contractor shall be responsible for providing and maintaining all water and land access routes necessary for his equipment and

plant to and from the work sites. The Contractor shall ascertain the environmental conditions which can affect water and land access, such as climate, terrain, winds, current, waves, swells, depths, shoaling, and scouring tendencies.

#### 1.9 ADJACENT PROPERTY AND STRUCTURES

Any damage to private or public property within the project boundaries, including staging/stockpiling area(s) and work and access areas/roads shall be repaired promptly by the Contractor. Any damage as a result of the Contractor's operations shall be repaired at no cost to the Government.

#### 1.10 MEASUREMENT

##### 1.10.1 Stone

Stone shall be measured by the ton (2,000 pounds), dry in its natural state, as determined by railroad scales, truck scales or barge displacement. Stone shall be weighed as specified hereinafter in such a manner that only the weight of the stone will be included in the amount to be paid for. The weight of fuel, driver, or other personnel, moisture in excess of saturated surface dry moisture content or the weight of any other substance except stone shall not be included in the quantity to be paid for. All costs associated with breakage due to handling, processing, transportation and placement shall be included in the unit costs for furnishing and placing of the armor stone. All costs incidental to weight determination shall be borne by the Contractor.

##### 1.10.2 Railroad and Truck Weights

Stone is to be measured for payment in the presence of a CO/COR inspector by weighing on an approved scale, provided by and at the expense of the Contractor. Weight certificates furnished by a public weigh master will be acceptable in lieu of such procedure, when authorized by the CO/COR. When truck determination of weight is used, each truck shall be plainly marked by a number or letter which shall not be changed or given to any other truck during the period of the contract.

##### 1.10.3 Barge Displacement

When barge displacement is used for the determination of weights, the following procedure shall be used. Each barge shall be accurately measured with gauges graduated in tenths of a foot attached to each barge by the Contractor. The gauges shall be furnished and installed by the Contractor. They shall be located on each corner of the barge near the lower end of the rake, with two additional gauges amidships, if deemed necessary by the CO/COR. The Contractor shall furnish a plan drawing of the barge, which shall contain adequate measurements and dimensions of the barge. The CO/COR shall verify the accuracy by taking field measurements of the barge. After the barge dimensions are verified, a barge displacement table will be computed by the CO/COR.

#### 1.10.3.1 Fore and Aft Displacement

Fore and aft displacement due to load shall not differ more than 10 percent from their mean for the determination of tonnage, except in unavoidable cases. In determination of tonnage, the change in gauge readings due to unloading of stone shall be used; that is, from load marks to light marks.

#### 1.10.3.2 Gauge Readings

All gauge readings shall be made by the CO/COR and be attested to by the Contractor's representative. The weight displaced shall be assumed to be uniformly 64.0 pounds per cubic foot for sea water and 62.4 pounds per cubic foot for fresh water.

#### 1.10.3.3 Barge Conditions

All barges shall be pumped dry (within the limits of the pump suction) before each gauging. Limber holes shall be kept open so that any water in the barge will flow freely to the pump suction. All equipment, dirt, and other material which is on the barge when gauged as "loaded", shall remain on the barge until after the barge is gauged as "light". From the difference of the "loaded" and "light" gauging, the tonnage of stone shall be determined.

### 1.11 PAYMENT

#### 1.11.1 Mobilization and Demobilization

Payment for the cost of mobilization and demobilization is included in this contract. Payment therefore will be made in accordance with Clause PAYMENT FOR MOBILIZATION AND DEMOBILIZATION of Section 00800 SPECIAL CONTRACT REQUIREMENTS and all costs incidental thereto shall be included in the applicable contract lump sum price for sub-Base Offer Item Nos. 0001AA, "Mobilization and Demobilization - Beach Fill" and 0001AB, "Mobilization and Demobilization - Offshore Breakwater" of the Bidding Schedule.

#### 1.11.2 Stone

Payment for furnishing and placing stone will be made at the contract unit price per ton (2,000 pounds) for sub-Base Offer Item No. 0006AA, "Offshore Breakwater - Armor Stone" of the Bidding Schedule, for all satisfactory stone delivered and placed as specified. This contract unit price shall include all costs connected with site preparation, excavation, and furnishing and placing of the stone, as required by these specifications. No classification of stone will be credited for payment until after it is placed in the offshore breakwater structure.

#### 1.11.3 Obstructions

No separate payment or direct payment shall be made for the cost of work covered for removal and disposal of obstructions, trash and debris.

1.11.4 Work and Access Area

1.11.4.1 Access to Work Site

Payment for cost of providing and maintaining stockpile/staging areas and access to and from the work site shall be included in the contract lump sum price for sub-Base Offer Item No. 0001AB, "Mobilization and Demobilization - Offshore Breakwater" of the Bidding Schedule.

1.11.4.2 Stone Samples

Payment for the cost of obtaining, delivering and testing of stone samples shall be included in the contract unit price per ton (2,000 pounds) for sub-Base Offer Item No. 0006AA, "Offshore Breakwater - Armor Stone" of the Bidding Schedule.

1.11.5 Surveys

All costs connected with surveys and required as-builts shall be included in the applicable contract unit price per ton for sub-Base Offer Item No. 0006AA, "Offshore Breakwater - Armor Stone" of the Bidding Schedule, for all satisfactory stone delivered and placed as specified.

1.11.6 Permanent Navigation Aids for Breakwater

All costs connected with the installation of the permanent navigation aids for the breakwater shall be included in the contract lump sum price for sub-Base Offer Item No. 0006AD, "Offshore Breakwater - Permanent Navigation Aids" of the Bidding Schedule.

1.11.7 Work Violations

Work done in violation of these specifications or a verbal or written stop order issued by the CO/COR will be considered as unsatisfactory progress for the purposes of progress payment in accordance with the Clause PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS of Section 00700 CONTRACT CLAUSES.

PART 2 PRODUCTS

2.1 STONE MATERIALS: TESTING

2.1.1 Stone Quality Testing

2.1.1.1 General

As an integral part of the Contractor's quality control program, the Contractor will be required to test suitable samples of all stone to be used in the construction for approval prior to delivery of any such material to the work site. Sources from which the Contractor proposes to obtain the material shall be selected well in advance of the time when the material will be required in the work.

2.1.1.2 Stone Sources

The Contractor shall designate in writing the proposed stone source(s) and laboratory test results from which he proposes to furnish each class of stone. A sample of the "Stone Source Information" is appended to the end of this Section. The Government will pay for the testing of two (2) stone sources to be used for armor stone. Additional stone sources will be tested at the Contractor's expense. The CO/COR will make such investigations as necessary to determine whether acceptable stone can be produced from the proposed source. The tests to which the stone will be subjected are petrographic analysis, specific gravity, LA abrasion, sulfate soundness, absorption, wetting and drying, and freezing and thawing. Samples of stone from each source shall be submitted to the COR for testing and acceptance prior to delivery of the stone to the site of the work. Test samples representative of the materials to be used for each stone type shall consist of at least ten (10) pieces of stone, roughly cubical in shape and weighing not less than 100 pounds. All such samples shall be shipped at the expense of the Contractor to a Government-approved material testing laboratory within Florida to be designated by the CO/COR within 10 days after receipt of 2d partial Notice to Proceed.

2.1.1.3 Stone Source Acceptance

Suitability test results shown below shall be used to determine the acceptability of any stone source. No time extension or claim for costs will be allowed for the time or cost required to approve or reject alternate stone sources. The approval of any source of stone shall not be construed as approval of all the stone from the stone source. The right is reserved to reject certain localized areas, strata, or channels within the approved quarry when, in the opinion of the CO/COR, the stone does not meet the requirements established in the specifications. Each stone shall meet all the following test requirements for quality.

STONE ACCEPTANCE CRITERIA

Test	Reference	STONE TYPE
		Armor and Marine Mattress
Unit Weight	ASTM C 127	140 pcf
Absorption	ASTM C 127	Less than 8% loss
Sulfate Soundness	ASTM C 88	Less than 5% loss
LA Abrasion	ASTM C 535	Less than 40% loss
Freeze and Thawing	ASTM D 5312	Less than 10% loss for 12 cycles
Wetting and Drying Preparation of slabs for both tests	ASTM D 5313 ASTM D 5121	Less than 0.5% loss
Petrography	ASTM C 295	Fresh, interlocking crystalline, no clay or silt minerals, and no soluble minerals

#### 2.1.1.4 Stone Quality Testing During Construction

The Contractor shall submit on a weekly basis, for all material delivered during the week, a certification that the material meets all the requirements of the contract specifications. During the course of the work, the stone may be tested by the Government, if the CO/COR determines that testing is necessary. If such tests are determined necessary, the testing will be done in the Government-approved testing laboratory within Florida. The Contractor will be required to obtain, under the supervision of the CO/COR, samples of at least five (5) pieces of armor stone and deliver them at his own expense to the Government-approved testing laboratory within Florida. All tests will be made by the Government at its own expense. Tests to which the material will be subject to are as indicated in subparagraph "Stone Source Acceptance" above. All stone will be subject to inspection during loading at the source and at the site of the work prior to placement. Any stone rejected at the site of work as not meeting the requirements of these specifications for quality, condition, gradation or otherwise shall be removed from the site by and at the expense of the Contractor. Stone of suitable quality shall be furnished and placed at no additional cost to the Government.

#### 2.1.2 Field Gradation Test

Field gradation tests will be required for the armor stone. Labor, equipment and apparatus necessary for performing the tests shall be furnished by the Contractor. If the gradation test fails, additional gradation tests will be required at the Contractor's expense to delineate the limits of unacceptable stone. The additional gradation tests shall not count as part of the minimum number of gradation tests required. The unacceptable stone will either be reworked to bring the stone within the specified gradation or the stone will be removed from the project site.

##### 2.1.2.1 Selection of Sample

The CO/COR shall notify the Contractor 24 hours in advance of each gradation test. The selection of the test sample (stockpile location) shall be made by the CO/COR. The minimum sample size for each test and the number of tests required shall be as follows:

Gradation	Minimum Sample Weight	Number of Tests
Armor Stone	30 to 35 pieces	2 each gradation
Marine Mattress Stone	3,000 pounds	2

At least one gradation test shall be performed on each specified gradation prior to any placement of that material. The weight of the individual pieces of armor stone, representing the minimum, maximum and 50% greater than sizes, shall be set aside and the weight shall be painted on each stone. The stone shall be placed in a location adjacent to the work site in order to provide a basis for visual comparison during placement of the armor units. These stones shall be used as the last order of work.

#### 2.1.2.2 Gradation Test - Armor Stone

A gradation test shall consist of weighing every stone in a representative sample to determine the amount of each stone between the various specified weights. The weights thus obtained are expressed as a percent by weight of the total sample lighter than the various specified stone weight.

a. Required Apparatus. For very heavy individual stone, a dynamometer attached to one end of a lifting device shall be used instead of the scales. Its calibration shall be verified by checking several stones that have been previously weighed.

### 2.2 STONE

#### 2.2.1 Armor Stone

The armor stone shall weigh between 13,000 and 7,000 pounds with at least 50 percent of the individual stones weighing 10,000 pounds or more. The armor stone shall be hard, close grained, free of cracks, seams or other imperfections which might adversely affect its durability when exposed to weathering and wave action. All stones shall be roughly angular in shape, with the least dimension of any stone no less than one-third of its greater dimension. Flat stones will not be accepted. All stones shall have a unit weight of not less than 140 pounds per cubic foot (saturated, surface dry).

### 2.3 PERMANENT NAVIGATION AIDS

\* Permanent navigation aids shall meet U.S. Coast Guard requirements for can buoys to mark the location of the breakwater. The Contractor shall contact the U.S. Coast Guard, Seventh District, Aids to Navigation Branch, Planning and Marine Information Section for exact requirements (Section Chief: Joe Embres at 305-415-6750). U.S. Coast Guard website: <http://www.uscg.mil>.

\*

## PART 3 EXECUTION

### 3.1 NOTIFICATION OF COAST GUARD

#### 3.1.1 Construction Aids

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

#### 3.1.2 Misplaced Material

The Contractor shall notify the U.S. Coast Guard Marine Safety Office of any misplaced material or stone as stated in Clause MISPLACED MATERIAL of Section 00700 CONTRACT CLAUSES.



### 3.2 ORDER OF WORK

a. Refer to Section 02391 BEACH FILL for details on the sequencing of construction of the breakwater with the beach fill operations.

b. The armor stone shall be lowered to rest on 12-inch thick marine mattress. Dropping the armor stone through the water will not be allowed. The point of beginning of work is optional, except that when work commences, it shall proceed continuously without skipping areas. Due to tidal currents and wave action, no more than 50 feet of marine mattress shall be left open at any one time or as directed by the CO/COR. Any areas damaged by tidal currents or wave action shall be repaired or replaced to the original lines and grades at the Contractor's expense.

### 3.3 FOUNDATION PREPARATION

Areas on which the marine mattress and armor stone are to be placed shall be graded to conform to the lines and grades as shown in the contract drawing with a tolerance of plus or minus of 6 inches.

### 3.4 PLACEMENT

Equipment used in placing all material shall be presented for approval in the Stone Placement Plan. Care shall be taken when placing the armor stone so that it forms a compact mass with uniform blanket thickness to the indicated lines, slopes, and elevations. Materials shall be placed on the receiving surface within 14 days after approval has been received from the CO/COR. The receiving surface shall be maintained free of erosion or damage until the surface stone has been satisfactorily placed; areas damaged or eroded shall be repaired or replaced to the original lines and grades. All stone shall be lowered to rest before releasing the stone. Dropping the stone through the water will not be permitted. Divers may be required to aid in the placement of the armor stone.

#### 3.4.1 Armor Stone

Armor stone shall be placed on 12-inch thick marine mattress in such a manner as to produce a reasonably well-graded mass of rock with the minimum practicable percentage of voids. The breakwater shall be constructed to the lines, grades and elevations indicated on the contract drawings. Armor stone shall be placed to its full course thickness at one operation and in such a manner as to avoid displacing the underlying material. The stones shall be well distributed and the entire mass of stones shall be roughly graded to conform to the gradation specified in subparagraph "Armor Stone" of paragraph STONE. The stone shall be free from objectionable pockets of small stones, clusters of larger stones, or large voids. All armor stone shall be set using special placement. In general, the longitudinal axis of each stone shall be normal to the longitudinal axis of the structure and slope downward toward the center of the structure. Stones shall be interlocked or keyed in juxtaposition with adjacent stones by setting them for maximum contact with vertical joints broken. In setting stones, the moving and resetting of

adjacent stones to achieve the required interlock will be considered part of the work required to set the stones. The desired distribution of the various sizes of stones throughout the mass shall be obtained, at the option of the Contractor, either by selective loading at the quarry or source, by controlled placement of successive loads, or by a combination of these methods. Armor stone placed by clamshell or similar device shall be lowered to rest before releasing. Placing stone by dumping into chutes or by similar methods likely to cause segregation of the various sizes will not be permitted.

#### 3.4.2 Misplaced Materials

Materials deposited above the maximum indicated tolerances or outside of the construction limits will require the degrading or removal of such material at the Contractor's expense.

#### 3.4.3 Divers

Certified divers shall assist in the placement of anchors, spuds, or temporary piling so that these anchoring methods do not occur in the vicinity of any hardbottom/reef community.

#### 3.4.4 Maintenance and Acceptance

The Contractor is responsible for maintaining the structures to the proper lines and grades during construction until completion and acceptance by the Government. Should material be dislodged or disturbed prior to completion and acceptance the Contractor will, at no additional expense to the Government, make repairs to the structures to the satisfaction of the CO/COR.

### 3.5 DEBRIS REMOVAL

The Contractor shall remove all debris and cleared vegetation, as needed, from within the construction limits prior to placement of stone. Debris may consist of wooden piles, concrete, rebar, broken sheet piles, and other manmade trash. All debris removed from the work area shall be properly disposed by the Contractor in an approved disposal area at no additional cost to the Government.

### 3.6 NAVIGATION AIDS

Navigation aids to be installed by the Contractor shall meet U.S. Coast Guard requirements. The method of installation of the permanent buoys to identify the breakwater shall be approved by the CO/COR.

### 3.7 DRAWINGS

#### 3.7.1 As-Built Drawings

The Contractor shall submit both electronic and paper copies of as-built drawings in the same format as the contract plans.

### 3.7.2 Drawings and As-Builts

All drawings and as-builts shall be translated or digitally captured into Intergraph Graphic Design Software (IGDS) 3D design files or Intergraph Microstation (PC or 32) Version 5.0 or higher, AT&T System V Unix, CLIX R3.1 Vr. 6.3.2 format. The IGDS 3D design files shall be prepared with a global original of 0,0,2147483.65, Design file master units: Ft., Sub units: 1,000, and positional; units: 1. All drawings and as-builts shall be performed in accordance with EM 1110-1-1807.

#### 3.7.2.1 Drawings

Each drawing shall be a separate DGN file. Drawing packages shall contain a cover sheet, location map, sheet index, legend, control sketch, sheet layout, survey notes, section location and control tabulation.

#### 3.7.2.2 Manual and Diskettes

A copy of the manual and companion diskettes can be obtained from the U.S. Army Engineer Waterways Experiment Station, ATTN: CEWES-RF-D, 3909 Halls Ferry Road, Vicksburg, Mississippi 39180-6199. The manual and diskettes are available by mail only at a cost of \$50.00 (check made payable to the U.S. Treasury) at the address shown above.

### 3.8 STONE SOURCE INFORMATION

See APPENDIX A at the end of this Section (2 pages).

-- End of Section --

STONE SOURCE INFORMATION

Date \_\_\_\_\_

1. Quarry:

a. Name of quarry \_\_\_\_\_

b. Name and address of owner of quarry \_\_\_\_\_

---

c. State whether undeveloped, commercial, or abandoned

---

d. Location of quarry:

(1) Latitude and longitude to the nearest one degree for the latitude line south of the point and the longitude line east of the point from which the sample was obtained:

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

(2) Sufficient information to permit the location to be found by a person unfamiliar with the region, e.g., from Clewiston, FL, go north on Highway 27 to Highway 80; go west on Highway 80 to SR 29; go 5 miles south on SR 29 to a dirt road; go east 3 miles on dirt road; quarry on the right.

---

2. Name of the Project \_\_\_\_\_

3. Name of the project or projects in which the stone has been used, and dates (since 1946):

---

4. Name of individual performing the sampling:

STONE SOURCE INFORMATION--Continued

5. Give data as closely as it is known concerning geological formation, age, and rock type.

---

---

---

Signature

---

Title

SECTION TABLE OF CONTENTS

DIVISION 02 - SITE WORK

SECTION 02370

POLYMERIC MARINE MATTRESS

PART 1 GENERAL

- 1.1 SUMMARY
- 1.2 REFERENCES
- 1.3 DEFINITIONS
  - 1.3.1 Polymeric Marine Mattress
  - 1.3.2 Geogrid
  - 1.3.3 Minimum Average Roll Value
  - 1.3.4 True Tensile Modulus in Use
  - 1.3.5 Junction Strength
  - 1.3.6 Flexural Stiffness (Also Known as Flexural Rigidity)
  - 1.3.7 Resistance to Installation Damage
  - 1.3.8 Resistance to Long Term Degradation
  - 1.3.9 Ultraviolet Stability
- 1.4 SUBMITTALS
- 1.5 QUALITY ASSURANCE
- 1.6 PAYMENT
  - 1.6.1 Marine Mattress
  - 1.6.2 Geotextile Underlayer

PART 2 PRODUCTS

- 2.1 MANUFACTURERS
- 2.2 MATERIALS
  - 2.2.1 Structural Geogrid
  - 2.2.2 Mechanical Connection Elements
  - 2.2.3 UV Stabilized Braid
  - 2.2.4 Stone Fill Materials

PART 3 EXECUTION

- 3.1 EXAMINATION
- 3.2 FINAL FABRICATION AND FILLING
  - 3.2.1 Mechanical Connections
  - 3.2.2 Seaming
  - 3.2.3 Stone Filling
- 3.3 PREPARATION
  - 3.3.1 Subgrade
  - 3.3.2 Geotextile Underlayer
- 3.4 INSTALLATION
  - 3.4.1 Position

- 3.4.2 Placement Procedures
- 3.4.3 Splicing and Anchoring
- 3.5 REPAIR

-- End Section Table of Contents --

SECTION 02370

POLYMERIC MARINE MATTRESS

PART 1 GENERAL

1.1 SUMMARY

This section consists of furnishing a Polymeric Marine Mattress (PMM) system with structural geogrid, braid, mechanical connection elements and stone fill, and providing a geogrid composite as specified herein and shown on the contract drawings. The geogrid material for the mattress shall include sufficient quantities to form lifting hoops for the units. Fabricating, filling and placing PMM units in accordance with this section and in reasonably close conformity with the lines, grades and dimensions shown on the contract drawings or established by the Contracting Officer/Contracting Officer's Representative (CO/COR). Some prefabrication of the units may be accomplished prior to delivery to the site.

1.2 REFERENCES

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

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS  
(AASHTO)

AASHTO (1997 Interim) Standard Specification for Highway  
Bridges

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 1388 (1996) Stiffness of Fabrics (Option A)

ASTM D 4355 (1992) Deterioration of Geotextiles from Exposure  
to Ultraviolet Light and Water (Xenon-Arc Type  
Apparatus)

ASTM D 4759 (1988; R 1996) Standard Practice for Determining  
the Specification Conformance of Geosynthetics

ASTM D 5818 (1995) Practice for Obtaining Samples of  
Geosynthetics from a Test Section for Assessment  
of Installation Damage

GEOSYNTHETIC RESEARCH INSTITUTE (GRI)

GRI GG1-87 Standard Test Method for Geogrid Rib Tensile Strength



GRI GG2-87 Standard Test for Geogrid Junction Strength

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA 9090 Compatibility Test for Wastes and Membrane Liners

### 1.3 DEFINITIONS

#### 1.3.1 Polymeric Marine Mattress

A non-metallic compartmental structure filled densely and tightly with stone prior to installation. Filling is achieved while each unit is positioned on edge prior to installation. Units are comprised of structural geogrid, braid, and mechanical connection elements fabricated to allow placement and provide containment of aggregate fill.

#### 1.3.2 Geogrid

An integrally formed grid structure manufactured of a stress resistance high density polyethylene (HDPE) material with molecular weight and molecular characteristics which impart high resistance to:

- a. Loss of load capacity or structural integrity when the geogrid is subjected to mechanical stress in installation.
- b. Deformation when the geogrid is subjected to applied force in use.
- c. Loss of load capacity or structural integrity when the geogrid is subjected to long-term environmental stress.

#### 1.3.3 Minimum Average Roll Value

Value based on testing and determined in accordance with ASTM D 4759.

#### 1.3.4 True Tensile Modulus in Use

The ratio of tensile strength to corresponding strain (e.g., 1%). The tensile strength is measured via GRI GG1-87 as modified by AASHTO using a single rib having the greater of 3 junctions or 8 inches and tested at a strain rate of 10 percent per minute based on this gauge length without deforming test materials under load before measuring such resistance or employing "secant" or "offset" tangent methods of measurement so as to overstate tensile properties. Values shown are minimum average roll values.

#### 1.3.5 Junction Strength

Breaking tensile strength of junctions when tested in accordance with GRI GG2-87 as modified by AASHTO using a single rib having the greater of 3 junctions or 8 inches and tested at a strain rate of 10 percent per minute based on this gauge length. Values shown are minimum average roll values.

1.3.6 Flexural Stiffness (Also Known as Flexural Rigidity)

Resistance to bending force measured via ASTM D 1388. Values shown are minimum average roll values.

1.3.7 Resistance to Installation Damage

Resistance to loss of load capacity or structural integrity when subjected to mechanical stress in installation measured via ASTM D 5818 in a crushed stone classified as a poorly graded gravel with a maximum 2 inch particle size (GP). Values shown are typical values.

1.3.8 Resistance to Long Term Degradation

Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments measured via EPA 9090 immersion testing. Values shown are typical values.

1.3.9 Ultraviolet Stability

The ratio of tensile strength after exposure to the tensile strength prior to exposure with exposure per ASTM D 4355 and tensile strengths measured via GRI GG1-87 as specified in subparagraph "True Tensile Modulus in Use" of paragraph DEFINITIONS above.

1.4 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

Shop Drawings; GA|ED.

The Contractor shall submit details of the typical sections and connections.

SD-06 Instructions

Manufacturer's Instructions; FIO.

The Contractor shall submit manufacturer's fabrication instructions, installation instructions, and general recommendations.

SD-13 Certifications

Geogrid; FIO.

The Contractor shall submit geogrid product data sheet and certification from the manufacturer that the geogrid product supplied meets the requirements.

#### SD-14 Samples

The Contractor shall submit product samples for the following:

Geogrid; FIO. Braid; FIO. Mechanical Connection Elements; FIO.

#### 1.5 QUALITY ASSURANCE

Prior to the installation of the units, the Contractor shall arrange a meeting at the site with the system supplier and, where applicable, the system installer. The CO/COR shall be notified at least 5 days in advance of the time of the meeting.

#### 1.6 PAYMENT

##### 1.6.1 Marine Mattress

All costs for work specified in this section and all appropriate costs in connection therewith or incidental thereto shall be included in the contract unit price per square yard for sub-Base Offer Item No. 0006AB, "Offshore Breakwater - 12-Inch Marine Mattress" of the Bidding Schedule.

##### 1.6.2 Geotextile Underlayer

All costs for work specified in this section and all appropriate costs in connection therewith or incidental thereto shall be included in the contract unit price per square yard for sub-Base Offer Item No. 0006AC, "Offshore Breakwater - Geotextile Underlayer" of the Bidding Schedule.

#### PART 2 PRODUCTS

##### 2.1 MANUFACTURERS

An approved source of geogrid is Tensar Earth Technologies, Inc., or approved equivalent.

##### 2.2 MATERIALS

###### 2.2.1 Structural Geogrid

a. Unless otherwise specified on the contract drawings, shop drawings, or directed by the CO/COR, the structural geogrid type shall be:

- (1) Type 1 for the internal diaphragms of the units.
- (2) Type 2 for the top, bottom and sides of the units.

b. The structural geogrid shall be produced from virgin resin and classified as HDPE and shall possess complete continuity of all properties throughout its structure.

c. The structural geogrid shall accept applied force in use by positive mechanical interlock (i.e., direct mechanical keying) with:

- (1) Compacted soil or construction fill materials;
- (2) Contiguous sections of itself when overlapped and embedded in compacted soil or construction fill materials; and,
- (3) Rigid mechanical connection elements such as bodkins, pins or hooks.

d. The structural geogrid shall have the following characteristics:

PROPERTY	UNITS	TYPE 1	TYPE 2
True 1% Tensile Modulus in Use (MD)	kN/m (lb/ft)	750 (51,400)	1,650 (113,090)
Junction Strength (MD)	kN/m (lb/ft)	48.60 (3,330)	100.8 (6,908)
Flexural Stiffness	mg-cm	670,000	6,600,000
Resistance to Installation Damage	% GP	85	85
Resistance to Long Term Degradation	%	100	100
Ultraviolet Stability (Retained Strength @ 500 hours)	%	100	100

2.2.2 Mechanical Connection Elements

a. The mechanical connection elements shall be as shown on the contract drawings and shop drawings and shall be composed of high density HDPE, unless otherwise approved by the CO/COR.

b. The mechanical connection used shall be bodkin type, unless otherwise approved by the CO/COR.

2.2.3 UV Stabilized Braid

a. The braid used for tying and lacing in the fabrication of the units shall be 8-strand hollow-core braid composed of HDPE. Each strand shall consist of a bundle of monofilament HDPE.

b. The braid shall have a nominal diameter of not less than 3/16 inch and a breaking strength of not less than 400 pounds on a test specimen 36 inches in length.

c. The braid shall be UV stabilized with a minimum carbon black content of 2.0% by weight.

#### 2.2.4 Stone Fill Materials

a. The stone fill shall be sound and durable, free of cracks, soft seams, and other structural defects.

b. Unless otherwise shown on the contract drawings and shop drawings or approved by the CO/COR:

(1) The stone shall have a unit weight of at least 140 pcf and meet the criteria specified in subparagraph "Stone Source Acceptance" of paragraph STONE MATERIALS: TESTING of Section 02278 STONE PROTECTION.

(2) The stone shall be graded between 4 to 8 inches. No flat or elongated stone will be allowed.

c. Contingent on approval of the CO/COR, recycles, processed concrete meeting these requirements may be used as stone fill.

#### 2.2.5 Biaxial Grid Composite

The grid composite shall be a regular grid structure formed by biaxially drawing a continuous sheet of select polypropylene material which is heat bonded to a polyester fabric, and shall have aperture geometry and rib and junction cross-sections sufficient to permit significant mechanical interlock with the material being reinforced. The geogrid shall have high flexural rigidity and high tensile modulus in relation to the material being reinforced and shall also have high continuity of tensile strength through all ribs and junctions of the grid structure. The geogrid shall maintain its reinforcement and interlock capabilities under repeated dynamic loads while in service and shall also be resistant to ultraviolet degradation, to damage under normal construction practices and to all forms of biological or chemical degradation normally encountered in the material being reinforced. The geogrid shall also conform in all respects to the property requirements listed below:

PROPERTY	TEST METHOD	UNITS	VALUE
<u>Interlock</u>			
* aperture size <sup>1</sup>	I.D. Calipered <sup>2</sup>		
@ MD		in	1.8 (nom)
@ CMD		in	2.5 (nom)
* open area (min)	COE Method <sup>3</sup>	%	75
* thickness	ASTM D 1777		
@ ribs		in	0.07 (nom)
@ junctions		in	0.20 (nom)
<u>Reinforcement</u>			
* flexural rigidity	ASTM D 1388 <sup>4</sup>	mg-cm	
MD			600,000 (min)
CMD			800,000 (min)
* tensile modulus	GRI GG1-87 <sup>5</sup>	lb/ft	
MD			20,000 (min)
CMD			21,000 (min)
* junction strength	GRI GG2-87 <sup>6</sup>	lb/ft	
MD			1,350 (min)
CMD			1,350 (min)
* junction efficiency	GRI GG2-87 <sup>6</sup>	%	90 (min)
<u>Material</u>			
* copolymer polypropylene	ASTM D 4101 Group 2/Class 1/ Grade 1	%	97 (min)
* colorant and UV inhibitor	ASTM D 4218	%	2.0 (min)
<u>Geotextile</u>			
* Grab tensile strength	ASTM D 1682	lbs	285/250
* EOS	ASTM D 422	US Std Sv Sz	70
* Weight	ASTM D 1910	oz/sy	8.0
<u>Dimensions</u>			
* roll length		ft	200
* roll width		ft	13
* roll weight		lb	210 & 260

Notes:

1. MD dimension is along roll length. CMD dimension is across roll width.
2. Maximum inside dimension in each principal direction measured by calipers.
3. Percent open area measured without magnification by COE method as specified in CW 02215 Civil Works Construction Guide, November 1977.
4. ASTM D 1388 modified to account for wide specimen testing as described in Tensar test method TTM-5.0 "Stiffness of Geosynthetics".

5. Secant modulus at 2% elongation measured by GRI GG1-87. No offset allowances are made in calculating secant modulus.
6. Geogrid junction strength and junction efficiency measured by GRI GG2-87.

### PART 3 EXECUTION

#### 3.1 EXAMINATION

The Contractor shall check the geogrid, braid and mechanical connection elements upon delivery to verify that the proper material has been received. These materials shall be inspected by the Contractor to be free of flaws or damage occurring during manufacturing, shipping, or handling.

#### 3.2 FINAL FABRICATION AND FILLING

##### 3.2.1 Mechanical Connections

The joints where the ends and baffles of each unit join the top or bottom of the unit shall be made with a mechanical connection between geogrid elements and shop drawings.

##### 3.2.2 Seaming

Unless otherwise shown on the contract drawings and shop drawings or approved by the CO/COR:

a. The joints along the sides of each unit shall be secured by seaming with braid using a lock-stitch configuration to provide complete closure of each unit.

b. Stitches shall be spaced evenly along each seam, with a minimum of 6 stitches per foot of seam. The braid material shall be securely knotted to the geogrid material at each end of each seam and at a minimum 3-foot spacing along each seam. The ends of each piece of braid used shall be knotted to prevent raveling of the braid.

c. The braiding shall be sufficiently tight to prevent openings greater than 1 inch along the seam, but shall not be cinched so tightly that overlaps and binding result.

d. Seaming to connect adjacent units is not required.

##### 3.2.3 Stone Filling

Unless otherwise shown on the contract drawings and shop drawings or approved by the CO/COR:

a. Each unit shall be filled and the fill densified while the unit is supported in an upright position resting on its side. The filling sequence of the compartments within each unit shall be appropriate to prevent excess deformation or displacement of the interior diaphragms.

b. Densification of the stone fill material and complete filling of each compartment shall be accomplished by rodding and/or vibration.

c. Lifting hoops shall be formed by joining the top and bottom layers of grid from each unit by means of approved mechanical connections.

d. When filling and fabrication of a unit are complete, the unit shall be rotated to a horizontal position resting on its bottom in order to facilitate subsequent lifting.

e. Filling shall be accomplished in a manner that does not cause excessive damage to the geogrid, mechanical connection elements or the braid.

### 3.3 PREPARATION

#### 3.3.1 Subgrade

The subgrade shall be prepared as indicated on the contract drawings or as directed by the CO/COR.

#### 3.3.2 Geotextile Underlayer

The Contractor shall place the geotextile simultaneously with the units by pre-attaching the geotextile material to each unit in accordance with manufacturer's standards with provision for sufficient overlap of the geotextile.

### 3.4 INSTALLATION

#### 3.4.1 Position

The units shall be placed at the proper elevation, alignment and orientation as shown on the contract drawings or as directed by the CO/COR.

#### 3.4.2 Placement Procedures

a. The procedure used in placement of the units shall be in accordance with the recommendations of the system supplier and as approved by the CO/COR.

b. For lifting of each unit, a spreader beam and/or spreader bars shall be used in a manner that the unit is not subjected to severe bending or distortion and that the top and bottom layers of geogrid are tensioned uniformly across their width. Units should generally be lifted from a horizontal position.

c. Personnel shall stay clear of the area beneath units and rigging during lifting. Tag lines and/or divers may be required to facilitate proper placement of the units.



### 3.4.3 Splicing and Anchoring

Where applicable, splicing and/or anchoring of the units shall be accomplished as shown on the contract drawings, the shop drawings, or as directed by the CO/COR.

### 3.5 REPAIR

Any units damaged during installation shall be repaired in a manner approved by the CO/COR or shall be replaced by the Contractor. Any such measures required shall be at no additional cost to the Government.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 02 - SITE WORK

SECTION 02391

BEACH FILL

PART 1 GENERAL

- 1.1 SCOPE
- 1.2 SUBMITTALS
- 1.3 ORDER OF WORK
  - 1.3.1 South of the Pipeline Corridor (Y=589,295)
  - 1.3.2 North of the Pipeline Corridor (Y=589,295)
    - 1.3.2.1 Beach Fill North of the Pipeline Corridor (Y=589,295)
    - 1.3.2.2 Breakwater Construction
    - 1.3.2.3 Beach Restoration After 30-Day Stabilization Period
  - 1.3.3 Miami Beach
- 1.4 PUMPING OF BILGES
- 1.5 HISTORICAL PERIOD SHIPWRECK SITES
- 1.6 FINAL CLEANUP
- 1.7 PERMITS AND RESPONSIBILITIES
- 1.8 MEASUREMENT
  - 1.8.1 Maps and/or Drawings
  - 1.8.2 Quality Control Surveys
- 1.9 PAYMENT
  - 1.9.1 Mobilization and Demobilization
  - 1.9.2 Beach Fill
  - 1.9.3 Lighted Aids to Navigation
  - 1.9.4 Noise Control
  - 1.9.5 Dive Reports
  - 1.9.6 Construction/Vibration Controls and Monitoring
  - 1.9.7 Positional Monitoring
  - 1.9.8 Condition Surveys and Monitoring of Hardbottom/Reef Communities and Operational Box
  - 1.9.9 Post-Fill Beach Restoration
  - 1.9.10 Work Violations

PART 2 PRODUCTS

- 2.1 CHARACTER OF MATERIALS

PART 3 EXECUTION

- 3.1 NOTIFICATION OF COAST GUARD
  - 3.1.1 Navigation Aids
  - 3.1.2 Dredging Aids
- 3.2 EXCAVATION

- 3.2.1 General
  - 3.2.1.1 Government Inspector
  - 3.2.1.2 Protection of Offshore Hardbottom/Reef Communities in Vicinity of Borrow Area
- 3.2.2 Magnetic Anomalies
- 3.2.3 Rock Removal
- 3.2.4 Turbidity
- 3.2.5 Dredge Location Control
  - 3.2.5.1 Divers
- 3.2.6 Submerged and Floating Pipeline
  - 3.2.6.1 Submerged Pipeline
  - 3.2.6.2 Floating Pipeline
- 3.2.7 Deduction for Nonconforming Work
- 3.3 TRANSPORT OF EXCAVATED MATERIALS
  - 3.3.1 Protection of Hardbottom/Reef Communities
    - 3.3.1.1 Pre-Condition Survey
    - 3.3.1.2 Monitoring Hardbottom/Reef Communities and Operational Box
    - 3.3.1.3 Post-Construction Survey
  - 3.3.2 Protection of Hardbottom Areas Within the Identified Pipeline Corridors
    - 3.3.2.1 General
    - 3.3.2.2 Boundaries
    - 3.3.2.3 Coral Heads
    - 3.3.2.4 Pipeline Joints
    - 3.3.2.5 Dislodged Coral Heads
  - 3.3.3 Dive Inspection of Pumpout and Pipeline Locations
  - 3.3.4 Work Area
  - 3.3.5 Miami Ocean Dredged Material Disposal Site (MODMDS)
- 3.4 BEACH FILL
  - 3.4.1 General
  - 3.4.2 Construction
  - 3.4.3 Dressing for Payment
  - 3.4.4 Dressing for Final Acceptance
  - 3.4.5 Tolerance
  - 3.4.6 Misplaced Materials
  - 3.4.7 Work Area
- 3.5 NOISE CONTROL
  - 3.5.1 Hauling and Excavating Equipment Other Than Dredges and Booster Pumps
  - 3.5.2 Dredges, Bulk Carriers, and Booster Pumps
- 3.6 QUALITY CONTROL
  - 3.6.1 Preparatory Inspection
  - 3.6.2 Initial Inspection
  - 3.6.3 Follow-up Inspection
- 3.7 LIGHTED AIDS TO NAVIGATION
  - 3.7.1 General
  - 3.7.2 Installation
  - 3.7.3 Operation and Maintenance
  - 3.7.4 Removal
- 3.8 PROTECTION OF EXISTING STRUCTURES FROM CONSTRUCTION ACTIVITIES
  - 3.8.1 Protection Program
  - 3.8.2 Contractor's Responsibility

- 3.8.3 Pre-Construction Structural Survey
- 3.8.4 Vibration Control Program
- 3.8.5 Vibration Control Specialist
- 3.8.6 Post-Construction Structural Survey
- 3.8.7 Qualifications for Structural Inspection/Evaluation and  
Vibration Control Program Personnel
  - 3.8.7.1 Structural Inspection/Evaluation Personnel
  - 3.8.7.2 Vibration Monitoring Personnel, including Vibration  
Control Specialist
  - 3.8.7.3 Approval of New Personnel
- 3.9 DAILY REPORT OF OPERATIONS
- 3.10 DIVERS INSPECTION REPORT

SECTION 02391

BEACH FILL

PART 1 GENERAL

1.1 SCOPE

The work covered by this section consists of furnishing all plant, labor, equipment, supplies and material, and in performing all operations in connection with excavating, transporting, and placing beach fill on the beaches as indicated on the drawings and specified herein.

1.2 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-01 Data

Equipment and Performance Data; FIO.

The Contractor shall furnish proof of electronic positioning equipment calibration to the Contracting Officer/Contracting Officer's Representative (CO/COR).

SD-04 Drawings

Electronic Tracking System Charts; FIO.

The Contractor shall furnish required plotted charts to the CO/COR.

SD-08 Statements

Rock Removal Plan; GA|ED.

Prior to commencement of work, the Contractor shall submit to the CO/COR for approval, a plan detailing the method for removal of rock. The plan shall also include the method for which the quantity of rock removed is measured and the location of rock disposal by coordinates.

Vibration Control Plan; GA|ED.

Within seven (7) calendar days after Notice of Award and prior to mobilization of equipment, the Contractor shall submit a Vibration Control Plan. Approval of the plan will not relieve the Contractor of his responsibility to document preexisting conditions and to avoid damaging existing structures whether or not the structure(s) was determined to be susceptible to vibration damage; this includes but is not limited to damages as a result of equipment impact

and/or vibration induced damages. The Vibration Control Plan shall include, but not be limited to, the following:

- a. Name of Vibration Control Specialist and alternate.
- b. List of structures that are susceptible to vibration damage.
- c. Number of monitors (seismographs) required for the project, monitor locations, and the number of monitors that will operate simultaneously during the project.
- d. Calibration data for each seismograph that will be used on the project. Calibrations shall be current, not older than one year, and follow the manufacturer's recommended procedures.
- e. List of methods and procedures to reduce ground vibrations induced by construction activities to below the pre-determined maximum allowable vibration level for the designated vibration sensitive structure; i.e., reducing equipment speed, changing fill placement method, reducing equipment size, and using manual labor.
- f. Plan for each work area showing the proposed construction equipment in the area, the description of susceptible structure(s) in the work area, monitors in the work area, and the list of methods and procedures in subparagraph e. above.
- g. The minimum safe working distance that vibration producing equipment may operate from each vibration sensitive structure.
- h. The maximum allowable ground vibration level that is permissible without causing threshold damage to each vibration sensitive structure(s).
- i. The Pre-Construction Survey.

Nearshore Hardbottom Protection Plan; GA|PD.

Within seven (7) calendar days after Notice of Award and prior to mobilization of equipment, the Contractor shall submit a Nearshore Hardbottom Protection Plan. Approval of the Plan will not relieve the Contractor of his/her responsibility to document the existing nearshore conditions and avoid damage to the marine environment. The Nearshore Hardbottom Protection Plan shall include, but not be limited to, the following:

- a. Name and qualifications of environmental marine personnel.
- b. List of equipment in operation within the operational box during beach fill placement.
- c. List of methods and procedures to monitor hardbottom areas adjacent to the operational box prior to, during, and post construction.

SD-09 Reports

Monitoring Report; FIO.

The Contractor's Vibration Control Specialist shall submit a written vibration monitoring report (every two weeks) to the CO/COR which details the daily activities of the vibration monitoring program. This report shall include, but not be limited to, location of monitoring equipment; instrument serial number; date and times of readings; magnitude of vibration levels; a sketch for each monitoring station showing the relationship of the monitor to vibration sensitive structures; daily instrument logs - as defined below; instructions transmitted to the Contractor's personnel regarding the modification or stoppage of work operations to keep vibrations below the allowable levels; and, any other information pertinent to the vibration monitoring program.

Monitoring Location Set-Up; FIO.

Submit (every two weeks) photograph (3" x 5") and sketch of each monitoring location after equipment is installed. Show general location of the monitoring site on the sketch.

Daily Instrument Logs; FIO.

Submit (every two weeks) daily instrument logs to document satisfactory performance of the equipment during monitoring periods. Document strip charts daily with monitoring station number, date, operator signature, and instrument serial number.

Post-Construction Structural Survey; FIO.

Submit two copies of the post-construction survey report within two weeks after completion of the inspection.

Pre-Condition Survey Report of Hardbottom/Reef Communities and Operational Box; GA|PD.

Within twenty (20) calendar days after receipt of 1st partial Notice to Proceed and prior to mobilization of equipment, the Contractor shall submit a report on the conditions of the hardbottom/reef communities in the vicinity of his/her proposed pumpout location field verifying the Government data. This report shall include, but not be limited to, the Contractor's proposed operational box, audio/visual documentation, drawings showing the limits and conditions of the area inspected, and notes regarding pre-construction conditions.

Monitoring Hardbottom/Reef Communities and Operational Box; FIO.

The Contractor shall furnish weekly reports on the conditions of the hardbottom/reef communities at the pumpout operation area.

Post-Condition Survey Report of Hardbottom/Reef Communities and Operational Box; GA|PD.

The Contractor shall submit a report on the conditions of the hardbottom/reef communities at the pumpout location within twenty (20) calendar days after removal of equipment from the operational box.

#### SD-18 Records

Dive Inspection Log of Pumpout and Pipeline Location; FIO.

A dive inspection log shall be maintained on the project site. After every dive inspection, an entry shall be made into the log. This log shall be made available at all times.

Construction and Grade Staking Inventory Record; GA|AE.

The Contractor shall develop a method of inventory for all stakes used in the construction of the project. This record shall be used by the Contractor to recover all the stakes used on the project.

Buoy and Anchoring Inventory Record; GA|AE.

The Contractor shall develop a method of inventory for all anchors, buoys, buoy cables used in the construction of the project. This record shall be used by the Contractor to recover all buoys and anchoring equipment at the completion of the project.

Notice of Installation of Lighted Aids to Navigation and 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 install lighted aids to navigation and intent 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 30 days prior to the commencement of this operation. A copy of the notification shall be provided to the CO/COR.

Relocation of Navigation Aids; FIO.

The Contractor shall notify the Commander, Seventh Coast Guard District, Miami, Florida, in writing, with a copy to the CO/COR, 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 CO/COR.



Notification of Discovery of Historical Period Shipwreck Sites; FIO.

The Contractor shall immediately notify the CO/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.

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 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 322320019. Reports shall be submitted on a monthly basis with daily reports accompanying the monthly reports and job report.

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

Additionally, one copy of these forms shall be maintained by the Contractor on the dredge(s) for the Government's inspection purpose. Further instructions on the preparation of the report 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.

Qualifications for Structural Inspection/Evaluation and Vibration Monitoring Personnel; GA|ED.

Within two weeks of the Notice of Award, the Contractor shall furnish to the CO/COR, for approval, qualifications of all personnel required to perform all structural inspection and vibration monitoring to be performed during the life of this contract.

Qualifications of Contractor's Personnel for Field Verification of Marine Habitat within the Operational Box; GA|PD.

Contractor shall furnish to the CO/COR, for approval, his/her personnel performing the pre- and post-condition surveys and hardground monitoring shall have a degree in Marine Biology or related field with experience in marine organism identification and benthic monitoring of marine hardbottom habitats in Southeast Florida.

### 1.3 ORDER OF WORK

Completion of the beach fill at Sunny Isles and Golden Beach will be viewed in terms of the segments located north and south of the pipeline corridor (Y=589,295).

#### 1.3.1 South of the Pipeline Corridor (Y=589,295)

Construction of the beach south of the pipeline corridor may occur at any point along the beach and may occur at any time during the contract period. Once filling operations have started, the Contractor shall proceed without intervening gaps. The Contractor shall proceed continuously unless he/she moves the beach filling operation to the segment north of the pipeline corridor.

#### 1.3.2 North of the Pipeline Corridor (Y=589,295)

##### 1.3.2.1 Beach Fill North of the Pipeline Corridor (Y=589,295)

Construction of the beach north of the pipeline corridor shall begin at the pipeline corridor and proceed continuously without intervening gaps until completion except as noted. In order to reduce beach fill losses in the vicinity of the proposed breakwater, the Contractor shall only place beach fill north of the pipeline corridor during the spring and summer months. Specifically, in the area north of the pipeline corridor, the Contractor shall not be allowed to commence filling operations prior to 1 April.

##### 1.3.2.2 Breakwater Construction

Within 14 days following completion of the beach fill north of the pipeline corridor (Y=589,295), the Contractor shall begin construction of the breakwaters. Construction of the breakwater shall proceed continuously without interruption until completion.

##### 1.3.2.3 Beach Restoration After 30-Day Stabilization Period

After completion of the breakwaters, the Contractor shall wait 30 days for the beach fill to stabilize north of the pipeline corridor. After the 30-day beach stabilization period and upon the direction of the CO/COR, the Contractor shall survey the beach, from 1,000 feet north of Monument R-7 to Monument R-9. This information will be used by the CO/COR to determine if the original construction section requires more fill. The Contractor shall add

fill as necessary at the direction of the CO/COR to restore this segment of the beach to the previously constructed section.

### 1.3.3 Miami Beach

Construction of the Miami Beach segment shall not occur until the Sunny Isles segment has been completed and accepted. Once the Sunny Isles segment is accepted, the Contractor may begin placing fill on the beach at any point as long as the operation is continuous without intervening gaps.

### 1.4 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 penalties provided under the referenced act.

### 1.5 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 Department of State, Division of Historical Resources; and that,

b. He will immediately notify the CO/COR.

### 1.6 FINAL CLEANUP

Final cleanup, as stated in the Clause COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK of Section 00800 SPECIAL CONTRACT REQUIREMENTS shall include the removal of ALL of the Contractor's plant and equipment either for disposal or reuse. Plant and/or equipment to be disposed of shall ONLY be disposed of in a manner and at locations approved by the CO/COR. The Contractor shall be responsible for the removal of all debris associated with the Contractor's operations and work area activities. This includes the pipeline corridor, pumpout site, and borrow area. Unless otherwise approved in writing by the CO/COR, the Contractor will not be permitted to abandon pipelines, pipeline supports, pontoons, or other equipment in the disposal area, pipeline access areas, water areas, or other areas adjacent to the work site. Pilings and any other debris removed or created as a result of the execution of this contract shall be disposed of in a manner and at locations approved by the CO/COR.

### 1.7 PERMITS AND RESPONSIBILITIES

The Contractor's attention is directed to the Clause PERMITS AND RESPONSIBILITIES of Section 00700 CONTRACT CLAUSES and paragraph PERMITS AND AUTHORIZATIONS of Section 01410 ENVIRONMENT PROTECTION.

## 1.8 MEASUREMENT

### 1.8.1 Maps and/or Drawings

The maps and/or drawings already prepared (paragraph CONTRACT DRAWINGS, MAPS, AND SPECIFICATIONS of Section 00800 SPECIAL CONTRACT REQUIREMENTS) are believed to represent accurately the existing conditions at the time the surveys were performed, but the depths and elevations shown thereon may be verified and corrected by elevations and soundings taken before commencing the work. Determination of quantities placed and the deductions made therefrom to determine quantities by place measurement to be paid for within a specified reach or section, after having once been made, will not be reopened, except on evidence of collusion, fraud, or obvious error.

a. Beach fill satisfactorily placed will be measured for payment by use of the average end area method. The quantities shall be computed by the Government in accordance with paragraph QUANTITY SURVEYS of Section 00800 SPECIAL CONTRACT REQUIREMENTS.

b. Measurement of quantity placed for pay purposes will be based on original and final cross sections made on the section or reach indicated on the drawings. The Contractor shall give 3 calendar days advance notice, in writing, to the CO/COR of the need to perform the original and final surveys.

### 1.8.2 Quality Control Surveys

Quality Control surveys shall be the responsibility of the Contractor.

## 1.9 PAYMENT

### 1.9.1 Mobilization and Demobilization

Payment for the cost of mobilization and demobilization is included in this contract. Payment therefore will be made in accordance with the paragraph PAYMENT FOR MOBILIZATION AND DEMOBILIZATION of Section 00800 of SPECIAL CONTRACT REQUIREMENTS and all appropriate costs in connection therewith or incidental thereto shall be included in the applicable contract lump sum price for sub-Base Offer Item No. 0001AA, "Mobilization and Demobilization - Beach Fill" and Optional Item A No. 0009, "Mobilization and Demobilization" of the Bidding Schedule.

### 1.9.2 Beach Fill

Payment will be made for materials and work specified in this section connected with barricades and signs, debris removal, rock removal/disposal, pipeline crossing, excavation and transportation of beach fill, constructing the beach profile and final dressing, and all other appropriate costs in connection therewith or incidental thereto shall be included in the applicable contract unit price per cubic yard for Base Offer Item No. 0002 and Optional Item A No. 0010, "Beach Fill" of the Bidding Schedule, which payment shall also include all other items of cost required by these specifications for which a separate payment is not provided for herein. Any beach fill dredged

from unauthorized areas will be subtracted from the net amount used for payment, as specified in subparagraph "Deduction for Nonconforming Work" of paragraph EXCAVATION below.

#### 1.9.3 Lighted Aids to Navigation

Payment for labor, materials, equipment, and all appropriate costs in connection therewith or incidental thereto for the installation, operation, and maintenance of lighted aids to navigation shall be paid for at the contract lump sum price for Base Offer Item No. 0005, "Lighted Aids to Navigation" of the Bidding Schedule. Other markers as required by different sections of this contract shall be included and addressed by that Section.

#### 1.9.4 Noise Control

No separate payment will be made for materials and work required by this section for noise control and all appropriate costs in connection therewith or incidental thereto shall be included in the applicable contract unit price per cubic yard for Base Offer Item No. 0002 and Optional Item A No. 0010, "Beach Fill" of the Bidding Schedule.

#### 1.9.5 Dive Reports

No separate payment will be made for materials and work required by this section to provide dive reports for the project, and all appropriate costs in connection therewith or incidental thereto shall be included in the applicable contract unit price per cubic yard for Base Offer Item No. 0002 and Optional Item A No. 0010, "Beach Fill" of the Bidding Schedule.

#### 1.9.6 Construction/Vibration Controls and Monitoring

Payment for labor, materials, equipment, and all appropriate costs in connection therewith or incidental thereto for protection of existing structures from construction activities and monitoring shall be paid for at the applicable contract lump sum price for Base Offer Item No. 0004 and Optional Item A No. 0012, "Construction/Vibration Control and Monitoring" of the Bidding Schedule.

#### 1.9.7 Positional Monitoring

No separate payment will be made for installation, operation, or maintenance of the electronic positioning equipment. All appropriate costs in connection therewith or incidental thereto shall be included in the applicable contract unit price per cubic yard for Base Offer Item No. 0002 and Optional Item A No. 0010, "Beach Fill" of the Bidding Schedule.

#### 1.9.8 Condition Surveys and Monitoring of Hardbottom/Reef Communities and Operational Box

No separate payment will be made for the condition surveys and monitoring of hardbottom/reef communities, operational box and all appropriate costs in connection therewith or incidental thereto for the protection of the

hardbottom/reef communities and monitoring thereto shall be included in the applicable contract unit price per cubic yard for Base Offer Item No. 0002 and Optional Item A No. 0010, "Beach Fill" of the Bidding Schedule.

#### 1.9.9 Post-Fill Beach Restoration

Payment for labor, materials, equipment, and all appropriate costs in connection therewith or incidental to the restoration of the beach in the vicinity of the breakwaters after the initial construction is covered in this contract. The cost for restoring the beach 1,000 feet north of Monument R-7 to Monument R-9 after the initial construction shall be paid for at the contract unit price per cubic yard for Base Offer Item No. 0008, "Post-Fill Beach Restoration" of the Bidding Schedule.

#### 1.9.10 Work Violations

Work done in violation of these specifications or a verbal or written stop order of the CO/COR 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

The character of the materials within the offshore borrow area and the breakwater placement is indicated on the core boring logs and laboratory data appended to the end of Section 01000 GENERAL REQUIREMENTS. The sand within the borrow areas consists primarily of poorly graded, fine to medium grained, slightly silty, carbonate fragments, shell and quartz sand. Gravel sized shell and coral fragments are relatively common, as indicated on the logs. Rock fragments and shell larger than 1 inch are interspersed within the sand in the borrow area. Dredging experience from previously used borrow areas similar to the borrow area indicates that up to ten percent rock fragments, by volume, occur within the sand. Rock fragments from one inch up to three feet in diameter have been recovered. The size and quantity of the rock fragments are not well described on the core borings and laboratory data, due to the two- and three-inch diameter of the sampling equipment. This material shall be removed and is described separately under subparagraph "Rock Removal" of paragraph EXCAVATION below.

The materials characterizing the area of the breakwater placement consist of approximately 6 feet of a medium dense, fine to medium grained, shelly sand, overlying up to a 3-foot thick layer composed of soft peat (PT), and/or hard gravelly clay (CH), and/or hard, gravelly clayey sand (SC). The top of rock identified by the core borings and wash probes varied from elevation -16.5 to -22.9 feet MLW.

### 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 to 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 EXCAVATION

##### 3.2.1 General

All excavation for beach fill shall be performed by a hopper dredge equipped with dragarms within the limits and depths of the borrow area shown on the drawings. Only one dredge will be allowed to work on site. The Contractor shall have divers determine the exact locations and condition of the marine hardgrounds adjacent to the borrow area prior to any dredging. The Contractor shall set a line of lighted marker buoys, U.S. Coast Guard approved, at or inside the permitted limits of the borrow area as specified in paragraph LIGHTED AIDS TO NAVIGATION below. Existing conditions of the borrow area are represented on the hydrographic survey and core boring logs appended to the end of Section 01000 GENERAL REQUIREMENTS. Excavation shall be performed in a uniform and continuous manner so as to avoid creating multiple holes, valleys, or ridges. Anchoring of the hopper dredge to excavate at a specific location shall not be performed. To minimize the concentration of sedimentation on the adjacent hardground/reef areas, the Contractor shall dredge primarily in straight-line traverses along the length of the borrow area. If continuous reaches of rock are encountered in the borrow area, the Contractor shall change the location and depth of excavation within the borrow limits when necessary to provide the best fill material available at no additional cost to the Government. The Contractor shall dredge no deeper than the maximum elevation shown on the plans for each area of the borrow area. The location of unsuitable material encountered within the borrow area shall be noted on the Contractor's Quality Control Report (QCR) (copy appended to the end of Section 01451 CONTRACTOR QUALITY CONTROL). If the CO/COR determines the quality of beach fill is being adversely affected, that location shall be avoided in future passes of the dredge. Marine hardgrounds occur parallel to both the east and west sides of the borrow areas. Encroachment on the hardgrounds by anchors, cables, or dragheads is prohibited. The Contractor

shall insure that the dragheads have been raised to a height that will clear the reefs adjacent to the borrow area prior to the dredge moving outside the borrow area limits.

#### 3.2.1.1 Government Inspector

A Government inspector will be present during all dredge operations. No dredge operations shall be performed without the presence of a Government inspector on board the dredge. Work quarters on board the dredge shall be provided for the Government inspector at no additional cost. A suitable launch for transporting a Government inspector to and from the dredge shall be provided, on demand, at no additional cost to the Government. Estimate three (3) shifts per day.

#### 3.2.1.2 Protection of Offshore Hardbottom/Reef Communities in Vicinity of Borrow Area

Dade County Department of Environmental Resources Management (DERM) will be monitoring the hardbottom/reef communities in the vicinity of the borrow area for signs of sedimentation and stress from the Contractor's dredging activities. The CO/COR will notify the Contractor if his operations have been identified by DERM to be causing stress to the reef communities. The Contractor shall take corrective action to prevent further damage, including moving to another location of the borrow area or cessation of operations.

#### 3.2.2 Magnetic Anomalies

A magnetometer survey was conducted in the borrow site. A significant magnetic anomaly is shown on the drawings.

#### 3.2.3 Rock Removal

It is anticipated that rock will be encountered in the borrow area. The Contractor should expect approximately ten (10) percent rock by volume, ranging in size up to about 36 inches in diameter, interspersed in the sand within the borrow area.

a. Dredging shall be restricted to the borrow area limits shown on the plans. The Contractor is put on notice that materials outside the borrow area contain a higher percentage of rock fragments within the sand and continuous rock surfaces.

b. The Contractor shall remove all fractions of the fill material of sufficient size to be retained on a grizzly with parallel bars spaced to provide openings no wider than 1 inch or equivalent. The material retained will include rock fragments, whole and broken shell, and coral.

c. The method by which the Contractor removes the rock shall be of his own design and shall be constructed so as to insure removal of all such rock. The Contractor's method of rock removal shall be submitted for approval prior to commencement of work.



d. All material greater than 1 inch shall be separated at the offshore plant and transported and disposed at the offshore disposal area shown on the drawings. The dredged material greater than 1 inch shall not be separated at the draghead or intake pipe nor be dumped or allowed to remain in the borrow area. Crushing of the rock and dispersing in the fill material shall not be allowed.

e. The location and purpose of the rock disposal site is to, over time, accumulate sufficient rock in the area to provide relief and associated hardbottom habitat for fish and other marine organisms. Therefore, rock disposal shall occur in as small an area as possible over the centerpoint of the rock disposal area. Rock disposal shall not occur outside the rock disposal area as shown on the drawings.

f. Each rock disposal operation shall be reported on the Contractor's QCR (copy appended to the end of Section 01451 CONTRACTOR QUALITY CONTROL) along with an accurate measurement of the quantity of rock to be disposed and the percent of the total dredged material that produced the rock. The Contractor shall make a statement on the QCR that the percentage of rock is or is not as defined in subparagraph "Rock Removal" of paragraph EXCAVATION above. The Contractor's method of measuring the quantity of rock shall preclude measuring sand with the rock. Sand shall not comprise more than five (5) percent of the rock quantity. The Contractor's method of measurement shall be submitted for approval prior to commencement of dredging. The Contractor shall mark the disposal area with lighted buoys, U.S. Coast Guard approved.

#### 3.2.4 Turbidity

Excavation and filling operations shall be done in a manner that will minimize turbidity of the water at the excavation site and at the discharge from the fill area. If monitoring shows turbidity exceeds the background at the compliance stations by more than 29 NTU's, construction activities shall cease immediately and not resume until corrective measures have been taken and turbidity has returned to acceptable levels.

#### 3.2.5 Dredge Location Control

The Contractor is required to have electronic positioning equipment that will locate the dredge when operating in the borrow area, the rock disposal area, and at the pumpout location. The Contractor is required to calibrate the equipment as required by the manufacturer or as required by the CO/COR. Proof of calibration shall be submitted to the CO/COR. Continuous locations of the dredge shall be made at all times during dredging, dumping, and transporting operations. The reason the dredge is outside the borrow area limits shall be annotated on the position chart and on the QCR for each occurrence. The location of the dredge is to be by computed coordinates with a probable range error not to exceed 10 feet and furnished daily as part of the dredge reports, along with a real-time drawing of the track of the dredge in relation to the borrow area. Data collected while the dredge is in the vicinity of the borrow area, rock disposal area, and at the pumpout location shall be plotted in chart form in 200-foot intervals with date and time. The charts shall show

the track and draft of the dredge approaching, traversing, and leaving the work areas in question. Charts shall also be annotated to show when the hopper doors open and close during rock disposal within the rock disposal area. Plotted charts shall be organized and maintained at a central work location for inspection on a daily basis by the CO/COR. Plotted charts shall be organized as directed, bound, and submitted weekly to the CO/COR for permanent file record. The Contractor's method of location of the dredge shall be submitted for review. The Contractor is also required to have a depth of dredging indicator for each dragarm accurate to within one foot. The instrument used shall indicate the depth of dredging at all times and draghead depth when the dredge is outside the borrow area limits. The instrument may be a graph type paper or electronic recorder or an indicator which uses a pointer and scale. The paper or depth record produced by this instrument shall be submitted daily with the daily dredge report. The reason the dredge is outside the borrow area limits shall be annotated on the depth record and the draghead depth shall be highlighted. Flagging or marking the winch cables are not an acceptable option to fulfill this instrument requirement. The indicators shall be in plain view of drag tenders, quality control and Government inspectors.

#### 3.2.5.1 Divers

Certified divers shall assist in the placement of anchors or spuds for monobuoys or spud barges so that anchoring or spudding down does not occur within 150 feet at the nearshore and 400 feet at the borrow area of any hardbottom/reef community.

#### 3.2.6 Submerged and Floating Pipeline

##### 3.2.6.1 Submerged 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 project depth for any navigation channel in which the submerged pipeline is placed. Should the Contractor elect to use a pipeline material which is buoyant or semibuoyant, 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, regardless of pipe material, 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. Pipeline corridors over hardbottom areas have been identified in the plans. The Contractor shall not relocate these corridors.

##### 3.2.6.2 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 CO/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.

### 3.2.7 Deduction for Nonconforming Work

Beach fill that is obtained from unauthorized areas will not be paid for under this contract. Excavation in such area(s) is a violation of State of Florida Permits for this work. The Government will perform pre-dredge and after-dredge surveys in the borrow areas. If it is determined that dredging has been performed outside the borrow area(s) or below the limiting elevation within the borrow area(s), the quantity of the material dredged from these areas will be computed and subtracted directly from the pay quantity of material placed on the beach.

### 3.3 TRANSPORT OF EXCAVATED MATERIALS

The method of transporting the fill from the offshore borrow area to the fill area shall be by hopper dredge or barge with pump-out capabilities. Overflow at the borrow site during loading will be permitted to the extent that turbidity and water quality standards as required by this section and Section 01410 ENVIRONMENT PROTECTION are met. The Contractor shall limit the loading to partial loads, if necessary, to meet turbidity and water quality requirements permitted at the borrow site. No overflow or spillout will be permitted during transport to the discharge site. Failure to repair leaks or change method of operations which result in spillage that exceeds turbidity and water quality standards during loading or any overflow during transport to the discharge site will require suspension of dredging operation. The prevention of overflow or spillage shall be a prerequisite to the resumption of dredging. The Contractor shall provide and maintain barricades, warning signals, and flagmen to insure public safety in the vicinity of the pipe pumpout operations. Any damages to private or public property resulting from the Contractor's operations shall be repaired by the Contractor at his expense.

#### 3.3.1 Protection of Hardbottom/Reef Communities

The boundary of the operational box(es) is designed to be at least 150 feet away from known hardgrounds based upon side scan survey from February 2000 to March 2000. The area inside the box(es) has been ground verified by DERM biologist for the presence of hardgrounds; however, neither the Corps nor DERM guarantees that the area within the operational box(es) to be completely free of small patches of hardbottom or significant habitat. Prior to placement of equipment, it will be the responsibility of the Contractor to verify the existence of these resources in areas where equipment will be placed so they are not impacted by the placement of equipment.

When placing equipment within the operational box, the Contractor shall ensure that any hardground resource that may be present within the operational box is not impacted. Anchors, pilings, spuds, etc., shall be placed in sandy areas only at least 150 feet away from any hardground resources. The Contractor shall ensure that anchors are placed so that there is no potential for the anchor to be pulled over hardground resources. Anchors shall also be placed so that anchor cables do not extend over hardground resources or be in a position to damage these resources in case the cable becomes slack or breaks.

Prior to placement of any equipment in the nearshore area, the Contractor shall field verify the data provided by the Government. After this inspection, the Contractor shall file a pre-condition survey report to the CO/COR regarding the consistency of the operational box with the Government data. After the operational box location has been verified for use, the Contractor shall push his equipment into the project area versus towing when within 1.5 miles of the shoreline to avoid potential cable drags across hardbottom/reef communities. The Contractor shall visually inspect all submerged or floating hoses prior to installation to confirm the structural integrity of the hoses. The connection of the dredge to floating pipeline shall be made as necessary to complete the hookup. The dredge shall not start pumping sand until the floating line and the connection are within the limits of the operational box shown on the drawings. The limits of the operational box shall be shown on a real time display. If at any time any portion of the flexible pipe or its connection to the dredge is outside the operational box, the dredge will immediately cease pumping sand and pump only water until the dredge connection is back within the parameters of the operational box. Once the dredge is back within the limits of the operational box, the dredge may resume pumping sand to the beach. This shall be verified by an electronic monitoring device that is installed on the dredge. This electronic monitoring device shall record the density of the material going through the pump and the position of the dredge connection during pumpout operations. This information shall be recorded and reported in accordance with paragraph "Recording Charts for Hopper Dredges" of Section 01410 ENVIRONMENT PROTECTION.

#### 3.3.1.1 Pre-Condition Survey

The Contractor shall perform a pre-condition survey of the pumpout operational area(s). The report filed by the Contractor shall include, but not be limited to, an audio/visual record, notes, and drawings similar to the plan drawings of the existing conditions of the nearshore operational area. The Government furnished data along with the Contractor's findings shall be noted on the drawings. Any discrepancies with the Government furnished data on the location of hardbottom/reef communities in the vicinity of these areas shall be clearly identified if greater than 10 feet. Based upon this data as approved by the CO/COR, the Contractor shall layout his/her operational box. This area shall then become the operational box.

#### 3.3.1.2 Monitoring Hardbottom/Reef Communities and Operational Box

The Contractor shall provide weekly reports on the condition of the hardbottom/reef communities in the vicinity of operational box. The

Contractor may use the Diver's Inspection Report form appended to the end of this Section.

#### 3.3.1.3 Post-Construction Survey

The Contractor shall perform a post-condition survey of the pumpout operational area(s). This report shall document, as the pre-condition survey does, the conditions of the work areas after the Contractor has completed the beach fill operations. Any areas of mechanical damage or sedimentation shall be noted in the report.

#### 3.3.2 Protection of Hardbottom Areas Within the Identified Pipeline Corridors

##### 3.3.2.1 General

The Contractor shall not use floating pipeline to traverse the hardbottom areas within the pipeline corridor. The Contractor shall ensure that the submerged pipeline is placed to minimize impact to the hardbottom and to avoid large coral heads to the greatest extent possible. The Contractor shall coordinate his operations with DERM who will be monitoring the pipeline corridors in compliance with the State of Florida Department of Environmental Protection (FDEP) permit conditions. The Contractor shall utilize the buoys placed by Dade County marking the location of pipeline boundaries and large/hard coral heads as visual guides in placing the pipeline.

##### 3.3.2.2 Boundaries

The boundaries of the pipeline corridors shall be marked by DERM with buoys using a Differential Global Positioning System (DGPS) prior to pipeline positioning. The north and south boundaries of the corridor shall be marked with surface buoys. DERM will permanently mark the corridors by drilling stainless steel eyebolts into the hardbottom at 500-foot intervals along the corridor. The eyebolts shall be marked with subsurface buoys to allow repeated, accurate relocation of the corridor.

##### 3.3.2.3 Coral Heads

In order to provide maximum avoidance of large coral heads during pipeline placement, all coral heads greater than or equal to 1 meter in diameter that exist within the corridor shall be marked by DERM with a surface buoy prior to positioning of the pipeline. This shall provide visual guidance for the Contractor placing the pipeline. The position of each marked coral head shall be recorded using DGPS. When possible, DERM shall relocate the coral heads out of the path of the pipeline prior to positioning.

##### 3.3.2.4 Pipeline Joints

The Contractor shall provide a collar or a pipeline joint every 100 feet along the pipeline. The collar or pipeline joint shall extend a minimum of 8 inches outward from the pipe to provide for minimal pipe contact with the hardbottom/reef habitat.

### 3.3.2.5 Dislodged Coral Heads

Immediately after pipeline placement, fragments of coral heads or dislodged coral heads shall be stabilized by DERM using appropriate scientifically accepted methods. Coral heads that are shaded by the pipeline shall be transplanted by DERM to suitable locations.

### 3.3.3 Dive Inspection of Pumpout and Pipeline Locations

a. A dive inspection will be performed by the Contractor at the commencement of the initial pumpout operations. The first loads will be pumped out during daylight hours. At the outset, divers will inspect all hose, pipeline, and connections from the dredge to any boosters and from the booster all the way to the shore, as the dredge pumps clear water. Upon completion of the inspection and confirmation of no apparent leaks, the discharge of sand into the pumpout system will commence. Divers will perform a reinspection of all hose, pipeline, and connections from the dredge to the booster and from the booster to all the way to the shore.

b. Every day that weather conditions permit, a dive team will dive on the flexible pipe (hose) used in the pumpout operation. In accordance with subparagraph d. of subparagraph "Construction" of paragraph BEACH FILL below, a visual inspection of the remaining pipeline will be performed daily for signs of slicks, plumes, boils, or other surface anomalies that would indicate leaks, seepage, or failures.

c. Any time that the weather precludes the dive team from diving, the Contractor will perform a visual inspection of the floating pipe and the pipeline to the booster during pumping operations. Should any turbulence or siltation be found in the water along the pipeline route during this inspection, the dredge will immediately cease pumping sand and pump water until the pipeline is cleared. At this point, the dredge will shut down until a dive team can inspect the pipeline.

### 3.3.4 Work Area

The Contractor shall inventory all anchors, buoys, and buoy cables deployed in the prosecution of the work in a manner acceptable to the CO/COR. The Contractor shall use this information to account for and recover these items at the completion of the project.

### 3.3.5 Miami Ocean Dredged Material Disposal Site (MODMDS)

In case of emergency, whereby material in the hopper dredge or barge with pumpout capability cannot be transported to the beach, the Contractor shall notify the CO/COR and obtain authorization to transport the material to the MODMDS. The material shall be pumped at the center point of the site given by the following coordinates:

Latitude = 25°45'00"      Longitude = 080°03'22"

Disposal of the material must be in accordance with the disposal monitoring requirements described in the MODMDS Site Management and Monitoring Plan (SMMP). Disposal monitoring consists of the following for each trip to the MODMDS:

- a. Date
- b. Time
- c. Vessel Name
- d. Captain of vessel
- e. Number of scows
- f. Vessel position and draft at specified time (no more than every 2 minutes):
  - (1) When within the borrow area
  - (2) Between the borrow area and the MODMDS; and,
  - (3) When within the MODMDS
- g. Volume of material disposed
- h. Disposal technique

### 3.4 BEACH FILL

#### 3.4.1 General

All beach fill sand excavated from the borrow area shall be transported to and deposited on the beach within the lines, grades, and cross section shown on the drawings except as may be modified by the provisions of subparagraph b. of subparagraph "Construction" below. Except as specified in subparagraph b. of subparagraph "Construction" below, the Contractor shall maintain and protect the fill in a satisfactory condition at all times until acceptance of the work. Any fill sand which is lost in transit or permitted to flow into the offshore waters or onto the upland from the point the sand is discharged on the beach will not be subject to payment. The fill shall be free of clay lenses, rock or silt pockets. Any such material remaining in the fill shall be removed and disposed of by the Contractor as approved by the CO/COR. Any existing signs, buoys or other structures within the work lines shall be protected and/or removed and later replaced by the Contractor as directed. The Contractor shall provide sand ramp walkways across the beach pipeline at intervals not greater than 200 feet.

#### 3.4.2 Construction

a. Prior to placement of fill, the Contractor shall remove from the site of the work all snags, driftwood, and similar debris lying within the foundation limits of the beach fill section. All materials removed shall be disposed of in areas provided by and at the expense of the Contractor and approved by the CO/COR. Any groins within the fill area shall be adequately ramped over by the Contractor to prevent damage thereto by the Contractor's equipment. Grading and other construction equipment will not be permitted outside the easement lines shown on the drawings except for designated ingress and egress to and from the site. Mobile equipment of any type operating within 50 feet of any seawall, building, groins, or other structure as determined by the CO/COR shall be rubber wheeled. Tracked equipment shall not be permitted to operate within 50 feet of any seawall, building, groin, or

other structure as determined by the CO/COR. Hand tools may be required in these areas.

b. The excavated material shall be placed and brought to rest on the beach to the lines, grades, and cross section indicated on the drawings, unless otherwise provided for herein or directed by the CO/COR. The Contractor shall not stockpile pipe or any other equipment or debris on private property which is west (landward) of the Erosion Control Line as shown on the drawings, or west (landward) of the high water line (+2.6 feet, MLW, approximately) elsewhere. The Contractor is advised that access and operations west (landward) of the high water line are not allowed along the Golden Beach shorefront, which is approximately the northern 1,000 feet of the project fill area. Pipe shall be placed parallel to shore and landward as far as possible without compromising the dune system. Temporary storage of pipe on the beach shall be kept to a minimum between 15 April and 31 October. The beach is subject to changes and the elevations on the beach at the time the work is done may vary from the elevations shown on the drawings. The CO/COR reserves the right to vary the width and grade of the berm from the lines and grades shown on the plans in order to establish a uniform beach for the entire length of the project. The beach fill cross sections shown on the drawings are for the purpose of estimating the theoretical amount of fill needed and will be used by the CO/COR in making any change in the lines and grades. The Contractor will not be required to dress the fill below the mean high water to the slopes shown but will be required to do the dressing specified in subparagraph "Dressing" of paragraph BEACH FILL below.

c. Construction staking on the beach shall be made of steel pipe or other material that can and will be removed intact after filling as verified during final walk-through inspection. The Contractor shall inventory all the construction staking used on the project in a manner acceptable to the CO/COR.

d. The Contractor shall maintain a tight discharge pipeline for the pumpout operations at all times. The joints shall be so constructed as to preclude spillage and leakage. The pipeline corridor shall be visually inspected by the Contractor daily during period of active pumpout operations for signs of slicks, plumes, boils, or other surface anomalies that would indicate leaks, seepage, ruptures, or failures. All occurrences shall be indicated in the Contractor's daily quality control reports. The development of a leak shall be promptly repaired and the pumpout operations shall be shut down until complete repair has been made to the satisfaction of the CO/COR. Any areas of seepage, leakage, or failure shall be marked and DERM notified (Mr. Brian Flynn at 305-372-6850) as soon as possible. The location should remain marked until inspected by DERM. The inspection will occur on the next working day after notification, weather permitting. Marine hardgrounds may be present at the selected offshore mooring buoy site for direct pumpout operations. The Contractor shall employ divers to locate and position anchors for a mooring buoy site to prevent damage to hardgrounds from cables, anchors, or dredges. No anchoring shall occur within 150 feet of the hardbottom/reef areas at the monobuoy site. The Contractor shall be required to maintain barricades, warning signals, and flagmen to insure public safety in the vicinity of the pipe discharge. Any damages to private or public property



resulting from the Contractor's operations shall be repaired by the Contractor at his expense.

e. Grade stakes and any other stakes for any purpose shall be made of steel pipe that can and will be removed intact after filling to cross sections accepted by or as directed by the CO/COR. All stakes shall have sufficient length above grade so they may not be accidentally covered by fill.

f. Temporary longitudinal dikes and spreader and/or pocket pipe shall be used to prevent gullying and erosion of the beach and fill and to retain the fill on the beach and within the limits of the fill cross section. As the work progresses, dikes or mounds shall be constructed along the beach to direct the pipeline discharge longitudinally along the beach to avoid transverse gullying directly from the discharge point to the ocean, and to build the new berm to design grade. Longitudinal dikes shall initially be 500 feet long in advance of filling operations. They may need to be lengthened to meet water quality standards. Shorter lengths may be subsequently used if approved by the CO/COR. More than one series of longitudinal dikes may be required to meet water quality standards, to build to the required lines and grades, and to keep material within the toe-of-fill. The Contractor will not be held responsible for erosion caused by waves after the beach fill has been satisfactorily placed. No undrained pockets shall be left in any fill during or upon completion of the work. The Contractor shall not permit wastewater to flow landward of the fill section or water to pond between the fill and upland. Groins, bulkheads, revetments, seawater pipe structures, and other structures within the fill section shall be protected by the Contractor to prevent damage thereof by the Contractor's operations. Any damages assessed as a result of any of the above items shall be at the Contractor's expense.

g. Mechanical operations may be needed to place material to the required lines and grades. Stockpiling, additional longitudinal dikes, and/or other special handling may be needed. It is the Contractor's responsibility to place material to the specified lines and grades within the fill crossed section.

h. Any material that is rehandled or moved and placed in its final position by methods other than hydraulic shall be placed in horizontal layers not exceeding three (3) feet in thickness. Compaction of the layers will not be required. The Contractor shall schedule his operations to take advantage of the tide so that filling is done in the dry or as directed.

#### 3.4.3 Dressing for Payment

Immediately following placement of the new beach fill the Contractor shall grade, level and dress the beach fill to meet the required elevations and dimensions indicated on the drawings. The dressing for payment shall include the removal of humps, depressions, undrained pockets, excavated material at locations of swales for drainage culverts, and vehicle access ramps, etc., prior to final pay survey being taken of an area of Acceptance Section.

#### 3.4.4 Dressing for Final Acceptance

Immediately upon the completion of beach fill placement and removal of equipment and materials from the beach fill area, the final dressing shall be accomplished by the Contractor for final acceptance. This final dressing is a requirement as part of the post-construction cleanup and prior to the sand compaction measurements required by Section 01410 ENVIRONMENT PROTECTION of the contract. The bank caused by wave forces shall be graded down to slope not steeper than 1 vertical on 10 horizontal for the project. Grade stakes shall be removed intact and any excavation required to remove the stakes shall be backfilled.

#### 3.4.5 Tolerance

A tolerance of five-tenths (0.5) of 1 foot below and five-tenths (0.5) of 1 foot above the prescribed berm grade and slopes, above the wave zone, will be permitted in the final surface. Any material placed above the prescribed tolerance may be left in place at the discretion of the CO/COR; however, this material will not be included in the pay quantities.

#### 3.4.6 Misplaced Materials

If any material is deposited other than in places designated or approved, the Contractor may be required to remove such misplaced material and redeposit it where directed at his expense.

#### 3.4.7 Work Area

The construction easements and borrow area limits available to the Contractor for accomplishing the work are shown on the drawings. At the fill site, the Contractor may only operate outside the work areas shown on the drawings within the pipeline corridor. No anchoring shall occur within 150 feet of the hardbottom areas except within the pipeline corridor. The Contractor shall exclude the public from the work areas in the immediate vicinity of his dredging, transporting, and disposal operations. The Contractor shall prevent public access to the discharge end of his pipeline. The Contractor shall erect, maintain, and move as necessary, a restrictive barrier around the discharge of the hydraulic pipeline used for beach disposal. The barrier shall be constructed so as to prevent the public from approaching the discharge from any direction closer than 40 feet. The Contractor shall post signs in a conspicuous manner stating "DANGER - HIGH PRESSURE DISCHARGE FROM DREDGE". 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 CO/COR. Construction access is provided as shown on the drawings. Procurement of additional access routes for ingress and egress to the construction area shall be obtained by and at the expense of the Contractor. Additionally, the Contractor shall place a safety person at the discharge end of the disposal pipeline. The safety person shall be present at all times during discharge operations and will maintain radio communication between the dredge and the disposal operation.

### 3.5 NOISE CONTROL

#### 3.5.1 Hauling and Excavating Equipment Other Than Dredges and Booster Pumps

All hauling and excavating equipment, other than dredges and booster pumps, 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.

a. Sound pressure measurements shall be made with a sound level meter and shall be reported to the CO/COR under provisions for the Contractor Quality Control.

b. Sound pressure measurements shall be made at distances of 50 feet, 100 feet, 300 feet, and 500 feet from each major piece of equipment such as draglines, dump trucks, dewatering pumps, pneumatic drills, bulldozers, etc., at locations approved by the CO/COR. The measurements shall be made by personnel qualified to make such measurements and whose credentials have been verified by the CO/COR. The measurements shall be taken during operations every 4 weeks. Temperature, atmospheric pressure, and general weather conditions shall also be recorded with the measurements.

#### 3.5.2 Dredges, Bulk Carriers, and Booster Pumps

Dredges and booster pumps used on this work shall be equipped with satisfactory mufflers or other sound abatement devices to reduce engine noise. The Contractor shall conduct his operations so as to comply with all Federal, State, and local laws pertaining to noise. The use of horns, the use of whistle signals, and handling of dredge pipelines shall be held to the minimum necessary in order to insure as quiet an operation as possible. Sound pressure measurements shall be made by the Contractor at 50-foot, 100-foot, 200-foot, and 300-foot distances from the (1) dredge, (2) booster pumps, if any, and (3) dredge pipeline at locations approved by the CO/COR. The measurements shall be made by personnel qualified to make such measurements and whose credentials have been verified by the CO/COR. These measurements shall be taken during pumping operations every 4 weeks. The sound pressure measurements and type of material being dredged at the time measurements are taken shall be reported to the CO/COR. Sound pressure measurements shall be made twice at the direction of the CO/COR during the first 4 weeks of use of whistle signals and drill barges in operation at 50-foot, 100-foot, 200-foot, and 300-foot distances. Temperature, atmospheric pressure and general weather conditions shall also be recorded with the measurements. The sound pressure measurements shall be reported to the CO/COR under provisions for the Contractor Quality Control.

### 3.6 QUALITY CONTROL

The Contractor shall establish and maintain quality control for operations under this section to assure compliance with contract requirements and maintain records of his quality control for materials, equipment, and construction operations, including but not limited to the following:

### 3.6.1 Preparatory Inspection

(To be conducted prior to commencing work.)

- a. Check location of borrow area, offshore pumpout area, and conditions of beach areas to be filled.
- b. Discuss plan of action for dredging, transporting, and placing fill on beach.
- c. See that all equipment is approved and is in satisfactory working condition.
- d. Check safety requirements and, particularly, public safety.
- e. Check the beach site for structures that could be susceptible to damage or which could have further damage caused by the Contractor's activity.

### 3.6.2 Initial Inspection

(To be conducted after a representative sample of the work is complete.)

- a. Check for proper lines, grades, and elevations.
- b. See that diking and fill discharge is satisfactory.
- c. Check grades and slopes of fill placement.
- d. Check finished area for proper dressing and elimination of undrained pockets and abrupt humps.
- e. Check any adjacent structures to search for damage by Contractor's equipment.

### 3.6.3 Follow-up Inspection

(To be conducted daily to assure compliance with results of initial inspection.)

- a. Check items mentioned in preparatory and initial inspection.
- b. Damage or defects.

A copy of these records, as well as results of corrective action taken, shall be furnished the Government as directed by the CO/COR.

### 3.7 LIGHTED AIDS TO NAVIGATION

#### 3.7.1 General

Lighted aids to navigation as specified in this section and shown on the contract drawings are required to meet State permit conditions. The lighted aids to navigation shall be installed prior to any dredging equipment entering the borrow area. The aids to navigation shall be lighted for 24-hour operation. The Contractor shall use a standard aids to navigation scheme. Light characteristics for the aids shall be flashing yellow. If buoys are used they shall be yellow with reflective international orange square patches or stripes. If pile structures are used, they should display yellow dayboards with reflective international orange borders. The aids may be lettered. The Contractor shall notify the U.S. Coast Guard in accordance with subparagraph "Notice of Installation of Lighted Aids to Navigation and Intent to Dredge" of paragraph SUBMITTALS above.

#### 3.7.2 Installation

Lighted buoys shall be located at or inside the permitted limits of the borrow area at least 400 feet from any hardground areas to mark the limits of dredging. The buoys shall be placed at a distance of no greater than 400 feet apart and at every change in direction of the borrow area limits. The buoys shall be sufficiently weighted to prevent movement by normal wave action and vessel wakes.

#### 3.7.3 Operation and Maintenance

The Contractor shall operate and maintain the lighted aids to navigation. The buoy arrangement shall be checked daily for missing buoys. Missing buoys shall be replaced within 8 hours. The positions of the buoys shall be checked weekly using GPS and all buoys which are out of position shall be relocated to the correct position immediately. The buoy position check report shall be appended to the daily QC report.

#### 3.7.4 Removal

The Contractor shall remove all his lighted aids to navigation, piles, chains, anchors, etc., from the project area upon completion of this project that were required by this section.

### 3.8 PROTECTION OF EXISTING STRUCTURES FROM CONSTRUCTION ACTIVITIES

#### 3.8.1 Protection Program

The Contractor shall implement a protection program that will protect existing structures from damages that result from construction equipment operations and vibrations. The protection program shall consist of a Pre-Construction Structural Survey, a Vibration Control Plan, a Vibration Control Program, and a Post-Construction Survey.

a. Existing structures adjacent to the Erosion Control Line are either residential, commercial, or public properties. Existing structures comprised of buildings, patios, slabs, swimming pools, pool decks, bulkheads, seawalls, wooden walkways, etc. The purpose of the program is to avoid damages and potential claims that allege damages were caused by construction activities.

### 3.8.2 Contractor's Responsibility

The Contractor shall assume all responsibility for damages to existing structures within and bordering the project boundaries that may be attributed to project activities. The Contractor shall also be responsible for any work stoppage that results from monitoring, inspection, damages, damage claims and/or damage avoidance activities.

### 3.8.3 Pre-Construction Structural Survey

The Contractor shall inspect existing structures within 200 feet from the beach fill limit as to their potential susceptibility to vibration damage from construction equipment induced ground vibration. Visible structural and/or cosmetic damage to buildings, exterior walls, foundations, decks, pools, bulkheads, seawalls, etc., shall be documented by photographs, sketches, and field notes. Copies of all documentation shall be provided to the CO/COR before commencement of any work on shore involving heavy equipment capable to produce vibrations.

a. Factors to consider in determining potential susceptibility shall include but not be limited to: foundation design; foundation conditions; soils testing data; changes in structural loads and local water levels due to beach fill placement; structural condition including construction materials, past damage history and existing stresses; magnitude, frequency, and duration of predicted vibrations from construction equipment; and distance from fill placement.

b. The Contractor shall inspect all existing structures that are determined to be vibration sensitive. Any damage found shall be documented thoroughly by photographs (supplemented with video as necessary), sketches of visible structural and/or cosmetic damage, and field notes. Photographs shall be at least 3 1/2" x 5" and shall provide a detailed visual explanation of the damage. Include a reference scale in each close-up photograph. Sketches shall show the general damage location and extent. All inspection items shall be indexed and cross referenced and shall use the stationing and locations shown on the contract drawings. Include hotel/motel names and addresses where applicable. Structural damage shall be additionally documented by measuring crack or damage size, width, and length. Every effort shall be made to inspect and document the condition of the building's interior where the building has been determined to be extremely susceptible to vibration damage. Structures determined not to be susceptible to vibration damage shall be noted as such.

#### 3.8.4 Vibration Control Program

The Contractor shall use the results of the Pre-Construction Survey to develop the Vibration Control Plan. The Vibration Control Program shall use the plan to monitor and adjust daily mobilization, demobilization, and fill placement operations, as necessary. The program shall use the appropriate tolerable vibrations to monitor each structure that has been determined to be susceptible to vibration damage. Should ground vibrations equal or exceed the predetermined maximum vibration level(s), construction operations shall be halted and corrective measures taken in accordance with the approved Vibration Control Plan.

a. The minimum safe working distance that vibration producing equipment may operate from each vibration sensitive structure shall be documented in the Vibration Control Plan.

b. The maximum allowable ground vibration level that is permissible without causing threshold damage to each vibration sensitive structure shall be documented in the Vibration Control Plan. Threshold damage is defined as the occurrence of cosmetic damage.

c. Each seismograph shall have the capability to measure peak particle velocity and frequency and shall be equipped with an alarm system to alert the on site Vibration Control Specialist that ground vibrations are approaching the maximum tolerable ground vibration level.

#### 3.8.5 Vibration Control Specialist

The Contractor's personnel responsible for implementation of the Vibration Control Plan is hereafter called Vibration Control Specialist. The Vibration Control Specialist shall be on the site during mobilization, demobilization, and operation of fill placement equipment. The pre-approved alternate may serve in the event of the Vibration Control Specialist's absence. Periods of absence shall not exceed one week at any one time and not more than 15 workdays during a calendar year. The requirements for the alternate are the same as for the designated Vibration Control Specialist.

3.8.6 Post-Construction Structural Survey. After completion of work, the Contractor shall conduct a post-construction inspection of the structures previously inspected under the preconstruction structural survey. Documentation procedures shall be identical to those performed under the preconstruction inspection. Changes or deviations from the preconstruction inspection conditions in any structure shall be identified and described in the inspection documentation. Copies of all documentation shall be provided to the CO/COR not later than 15 calendar days after completion of the work on each segment.

### 3.8.7 Qualifications for Structural Inspection/Evaluation and Vibration Control Program Personnel

The Contractor shall provide personnel for structural inspections and vibration monitoring which meet at least the following minimum qualifications outlined below. The Contractor shall provide documentation verifying the qualifications to the CO/COR for approval within two weeks after the date of Notice of Award. The CO/COR reserves the right to reject any individual(s) not meeting the qualifications specified and to request resubmittal of other personnel at no cost to the Government.

#### 3.8.7.1 Structural Inspection/Evaluation Personnel

Structural inspections shall be performed by structural engineers registered in the State of Florida with a minimum of 3 years of demonstrated experience in structural condition inspections.

#### 3.8.7.2 Vibration Monitoring Personnel, including Vibration Control Specialist

Personnel responsible for the Vibration Control Program and Plan shall be registered in the State of Florida with a background in geotechnical and structural engineering and shall have a minimum of 3 years of demonstrated experience in vibration monitoring and related work.

#### 3.8.7.3 Approval of New Personnel

The Contractor shall obtain approval of new personnel that replace personnel that were approved as part of any submitted Vibration Control Plan. Approval requests shall include the same requirements as specified for the original personnel.

### 3.9 DAILY REPORT OF OPERATIONS

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

### 3.10 DIVERS INSPECTION REPORT

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

-- End of Section --



REPORT OF OPERATIONS—PIPELINE, DIPPER OR BUCKET DREDGES						REPORTS CONTROL SYMBOL ENG CW-0-13	
THRU:		TO:		FROM:		REPORT NO.	
CHARACTER OF REPORT	<input type="checkbox"/> MAINTENANCE <input type="checkbox"/> NEW WORK <input type="checkbox"/> DAILY <input type="checkbox"/> STATUS <input type="checkbox"/> COMPLETION <input type="checkbox"/> ANNUAL					DATE OR PERIOD	
	NAME AND TYPE			SIZE	PIPELINE	DIPPER OR BUCKET	
DREDGE	HORSEPOWER OF		DREDGE PUMP	SUCTION PIPE JET	CUTTER OR BUCKET	PROPULSION	
	NUMBER OF CREW MEMBERS		DREDGE	SHORE	OTHER PLANT	TOTAL	WORK SCHEDULE
						SHIFTS PER DAY	DAYS PER WEEK
PROJECT AND BAR	NAME			AUTH DIMENSIONS	WIDTH	DEPTH	OVERDEPTH
	LOCATION (include station numbers)						
CHARACTER OF MATERIAL	ABSOLUTE DENSITY		IN PLACE DENSITY		VOIDS RATIO		
	GRAIN SIZE		GEOLOGICAL CLASSIFICATION				
CONTRACT OR DREDGING ORDER	NUMBER			<input type="checkbox"/> CONTRACTOR <input type="checkbox"/> HIRED LABOR		TOTAL NO. OF DAYS ON WHICH WORK WAS DONE	
	AVERAGE DEPTH	BEFORE DREDGING	AFTER DREDGING	MINIMUM SOUNDING	BEFORE DREDGING	AFTER DREDGING	
RIVER STAGE	MINIMUM	TIME	MAXIMUM	TIME	GAGE LOCATION		
	WEATHER CONDITION				VISIBILITY	WIND (maximum velocity & direction)	
WORK PERFORMED				DISTRIBUTION OF TIME			
ITEM	UNIT	QUANTITY		EFFECTIVE WORKING TIME (chargeable to cost of work)		HOURS	MIN.
AVERAGE WIDTH OF CUT	FEET			PUMPING OR DREDGING			
TOTAL ADVANCE THIS PERIOD	FEET			PCT. OF EFFECTIVE RENTAL TIME		%	
TOTAL ADV. PREVIOUS TO THIS PERIOD	FEET			BOOSTER (in line)		Hrs.	Min.
TOTAL ADVANCE TO DATE	FEET			NON-EFFECTIVE WORKING TIME (chargeable to cost of work)			
FLOATING PIPE:	SHORE PIPE:				HANDLING PIPE LINES		
TOTAL LENGTH OF DISCHARGE PIPE	FEET			HANDLING ANCHOR LINES			
AVERAGE LIFT	FEET			CLEARING PUMP AND PIPE LINE			
AVERAGE PUMP SPEED	R.P.M.			CLEARING CUTTER OR SUCTION HEAD			
AVG. DREDGED PER PUMP. HR, GROSS	CU.YDS.			WAITING FOR SCOWS			
SCOWS LOADED	NUMBER			TO AND FROM WHARF OR ANCHORAGE			
AVERAGE LOAD PER SCOW	CU.YDS.			CHANGING LOCATION OF PLANT ON JOB			
CUBIC YARDS REMOVED				LOSS DUE TO OPPOSING NATURAL ELEMENTS			
AMOUNT DREDGED THIS PERIOD:				LOSS DUE TO PASSING VESSELS			
(1) GROSS (computed amount)				SHORE LINE AND SHORE WORK			
(2) CREDITED (pay place)				WAITING FOR BOOSTER			
AMOUNT PREVIOUSLY REPORTED:				MINOR OPER. REPAIRS (explain in remarks)			
(1) GROSS (computed amount)				WAITING FOR ATTENDANT PLANT			
(2) CREDITED (pay place)				PREPARATION AND MAKING UP TOW			
TOTAL AMOUNT DREDGED TO DATE:				TRANSFERRING PLANT BETWEEN WORKS			
(1) GROSS (computed amount)				LAY TIME OFF SHIFT AND SATURDAYS			
(2) CREDITED (pay place)				SUNDAYS AND HOLIDAYS			
ATTENDANT PLANT				FIRE DRILL			
ITEM	NAME OR NUMBER		HOURS	MISCELLANEOUS (explain in remarks)			
				TOTAL NON-EFFECTIVE WORKING TIME			
				PCT. OF NON-EFFECTIVE RENTAL TIME		%	
				TOTAL EFFECTIVE AND NON-EFFECTIVE TIME (chargeable to cost of work)			
				PCT. OF TOTAL TIME IN PERIOD		%	
				LOST TIME (not chargeable to cost of work)			
				MAJOR REPAIRS AND ALTERATIONS			
				CESSATION			
				COLLISIONS			
				MISCELLANEOUS (explain in remarks)			
NUMBER OF INSPECTIONS	BY DISTRICT PERSONNEL		BY DIV & OCE PERSONNEL		TOTAL LOST TIME		
					PERCENTAGE OF TOTAL TIME		%
CONTRACT USE ONLY	HAS ANYTHING DEVELOPED WHICH MIGHT LEAD TO A CHANGE ORDER OR CLAIM? <input type="checkbox"/> NO <input type="checkbox"/> YES (If "YES", explain under remarks on back)			TOTAL TIME IN PERIOD			

ENG FORM 4267  
JAN 70

REPLACES ENG FORM 28 (Costs), 1 MAR 53, AND ENG FORM 29 (Costs),  
1 JAN 62, WHICH ARE OBSOLETE. (ER 1125-2-304)

(Signature and Remarks  
required on reverse side.)

02391-A1

**SUMMARY OF COSTS**

ITEMS	COST
<b>DIRECT PLANT OPERATING COSTS</b>	
UNIFORM DAILY RATE BASIS <i>(To be completed when submitting Status and Completion reports.)</i>	
CHARGES: _____ DAYS AT \$ _____ PER DAY <i>(Item 19, ENG Form 22 (Costs) - adjusted to exclude plant increment cost.)</i>	
▶ OR ◀	
ACTUAL PLANT COSTS <i>(To be completed when submitting Annual report.)</i>	
PAYROLLS <i>(gross)</i> .....	\$ _____
SUBSISTENCE & QUARTERS OR PER DIEM & MILEAGE.....	\$ _____
FUEL _____ BARRELS AT \$ _____ PER BARREL.....	\$ _____
WATER.....	\$ _____
LUBRICANTS.....	\$ _____
PLANT OWNERSHIP COSTS <i>(as computed below)</i> .....	\$ _____
INSURANCE.....	\$ _____
ATTENDANT PLANT.....	\$ _____
MISCELLANEOUS.....	\$ _____
SUBTOTAL—UNIFORM DAILY RATE OR ACTUAL COSTS.....	\$ _____
SUBTOTAL—PLANT UNIT COST \$ _____ PER CUBIC YARD.	_____
<b>SHORE WORK</b>	
SUBTOTAL—SHORE WORK COSTS.....	\$ _____
SUBTOTAL—SHORE WORK UNIT COSTS \$ _____ PER CUBIC YARD.	_____
<b>OTHER COSTS</b>	
SURVEYS.....	\$ _____
INSPECTION AND SUPERVISION.....	\$ _____
OVERHEAD.....	\$ _____
OTHER INDIRECT COSTS.....	\$ _____
SUBTOTAL—OTHER COSTS.....	\$ _____
SUBTOTAL—OTHER UNIT COST \$ _____ PER CUBIC YARD.	_____
<b>GRAND TOTAL—ALL COSTS</b> .....	
<b>GRAND TOTAL—ALL UNIT COSTS \$ _____ PER CUBIC YARD.</b>	

OPERATING SUPPLIES				ANNUAL REPORT DATA <i>(complete when submitting Annual report)</i>		
COMMODITIES	CONSUMED		INVENTORY		COST PER RENTAL MINUTE <i>(Based on total operating cost)</i> .....	per min.
	UNIT	QUANTITY	QUANTITY	VALUE		
FUEL <i>(oil)</i>	BBLs				\$ _____	
LUBRICANT <i>(oil)</i>	GAL				TOTAL COST OF PLANT <i>(End of F.Y. reporting period)</i> .....	\$ _____
LUBRICANT <i>(grease)</i>	LBS				BOOK VALUE <i>(End of F.Y. reporting period)</i> .....	\$ _____
WATER	GAL				BALANCE IN PLANT ACCOUNT <i>(End of F.Y. reporting period)</i> .....	\$ _____
					PLANT OWNERSHIP COSTS <i>(Actual for F.Y. reporting period):</i>	
					DEPRECIATION.....	\$ _____
					REPAIRS <i>(Adjusted)</i> .....	\$ _____
					CESSATION OF WORK.....	\$ _____
					SMALL TOOLS, ETC.....	\$ _____
SUBSISTENCE SUPPLIES.....						
MISCELLANEOUS SUPPLIES.....						
<b>TOTAL</b> .....				\$ _____	<b>TOTAL</b> .....	\$ _____

REMARKS

SUBMITTED BY <i>(Name, title, and signature)</i>	RECOMMENDED BY <i>(Name, title, and signature)</i>	APPROVED BY <i>(Name, title, and signature)</i>
--	--	---

**DAILY REPORT OF OPERATIONS—HOPPER DREDGES**

REPORTS CONTROL SYMBOL  
ENG-CWO-13

DISTRICT			DREDGE		
EXACT LOCATION OF WORK			<input type="checkbox"/> MAINTENANCE <input type="checkbox"/> NEW WORK		DATE
AV. LENGTH OF CUT	FT.	CHARACTER OF MATERIAL		HOPPER CAPACITY	CU. YDS.
AV. WIDTH OF CUT	FT.	DENSITY OF MAT. IN PLACE	GMS/LITER	AV. VOL. OF BIN WATER	CU. YDS.
AV. DIST. TO DUMP	MILES	DENSITY OF WATER	GMS/LITER AT °F	AV. UNFILLED CAPACITY	CU. YDS.

NAVIGATION AND OTHER DREDGING AIDS (Describe and include statement on adequacy and recommendations)

<b>WORK PERFORMED</b>				DRAFT FOR LOAD NO. <small>(for one load only)</small>	
DREDGING AND HAULING			AGITATING	FORWARD	LIGHT
NO. OF LOADS	TOT. CU. YDS.	DISPOSAL AREA	TOT. CU. YDS.	AFT	LOADED
				DRAG DEPTH	MAX. MIN.
				INDICATORS LAST CHECKED ON	
				GAS EJECTORS USED % OF PUMPING TIME	

**DISTRIBUTION OF TIME AND MILES RUN**

EFFECTIVE WORKING TIME	AGITATING (Minutes)	DREDGING AND HAULING (Minutes)	MILES RUN (Stat. Miles)
PUMPING			
TURNING			
TO DUMP			
DUMPING			
TO CUT			
TOTALS			
<b>NON-EFFECTIVE WORKING TIME</b>			
TAKING ON FUEL AND SUPPLIES			
TO AND FROM WHARF OR ANCHORAGE			
LOSS DUE TO NATURAL ELEMENTS			
LOSS DUE TO TRAFFIC AND BRIDGES			
MINOR OPERATING REPAIRS			
TRANSFERRING BETWEEN WORKS			
LAY TIME			
FIRE AND BOAT DRILLS			
MISCELLANEOUS			
TOTALS			
<b>LOST TIME</b>			
MAJOR REPAIRS AND ALTERATIONS			
CESSATION			
COLLISIONS			
TOTAL LOST TIME			
TOTAL TIME IN PERIOD			

AVERAGE SPEED OF DREDGE		MINUTES RADAR IN USE	
LOADING	FEET/MINUTE	TIDE DATA WAS OBTAINED BY MEANS OF	
AGITATING		WEATHER	
GALS. OF FUEL OIL CONSUMED		NUMBER OF INSPECTIONS BY SUPERVISORY PERSONNEL	
GALS. OF WATER CONSUMED		FIELD	OFFICE

REMARKS

SUBMITTED BY

(SEE REVERSE SIDE)



DIVERS INSPECTION REPORT

REPORT NUMBER: \_\_\_\_\_

DATE: \_\_\_\_\_

DIVERS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TIME IN: \_\_\_\_\_ AM PM

OUT: \_\_\_\_\_ AM PM

WEATHER: \_\_\_\_\_  
\_\_\_\_\_

VISIBILITY: \_\_\_\_\_

CONDITION OF REEF AREA: (LOCATE BY COORDINATES DAMAGE TO THE CORAL REEF ON THE LOCATION MAP BELOW. DESCRIBE DAMAGE: SIZE, SHAPE, CAUSE, ETC.)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

LOCATION OF DREDGING OPERATIONS BY COORDINATES SINCE LAST REPORT:  
(SHOW ON MAP BELOW)

\_\_\_\_\_  
\_\_\_\_\_

VERIFY LOCATION OF BUOYS BY COORDINATES:

\_\_\_\_\_  
\_\_\_\_\_

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_