

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE	PAGE OF PAGES 1
2. AMENDMENT/MODIFICATION NO. 0001	3. EFFECTIVE DATE 3/30/01	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)		
6. ISSUED BY JACKSONVILLE DISTRICT OFFICE U.S. ARMY CORPS OF ENGINEERS P.O. BOX 4970 JACKSONVILLE, FLORIDA 32232-0019 KATHIE B. DUKE (904-232-3713)	CODE	7. ADMINISTERED BY (If other than Item 6) JACKSONVILLE DISTRICT OFFICE U.S. ARMY CORPS OF ENGINEERS 400 WEST BAY STREET JACKSONVILLE, FLORIDA 32202-4412	CODE		
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				( <input checked="" type="checkbox"/> )	9A. AMENDMENT OF SOLICITATION NO. DACW17-01-B-0003
				( <input checked="" type="checkbox"/> )	9B. DATED (SEE ITEM 11) 02 MAR 2001
					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 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.)

CENTRAL AND SOUTH FLORIDA PROJECT, SPILLWAY 155A, PALM BEACH COUNTY, FLORIDA IS AMENDED AS FOLLOWS:

THE DATE AND TIME SET FOR RECEIPT OF BIDS REMAINS 17 APRIL 2001 AT 2:00 P.M.

SEE CONTINUATION PAGE FOR CHANGES.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		BY (Signature of Contracting Officer)	

SECTION SF-30 BLOCK CONTINUATION SHEET

Central and South Florida Project, Spillway 155A, Palm Beach County,  
Florida

IFB: DACW17-01-B-0003 dated 02 March 2001, Amendment 1.

**SPECIFICATIONS:** Specifications for this project have been updated; the text changes have additions noted with underlined text and deletions noted with line/cross-outs:

1. Section 00010, **Delete** page 00010-3 and **Insert** new Bid Schedule, page 00010-3 (added Bid Item 17 ).
2. Section 00010, **Delete** page 00010-5, 00010-6, and 00010-7 and **Insert** attached revised pages. (updated wage rates)
3. Section 01410 updated.
4. Section 01330, Appendix A, **Delete** page 4 of 38 and **Insert** new Submittal Register sheet (added Eastern Indigo Snake Monitoring Report).

SECTION 00010  
SUPPLIES OR SERVICES AND PRICES/COSTS

Item No.	Description	Quantity	U/M	Unit Price	Amount
	Flood Control Structure 155A on Canal C51 in Palm Beach County, Florida				
0001	Power Line Relocation (4)	1	JB	Lump Sum	\$29,000
0002	Cofferdam	1	JB	Lump Sum	\$ _____
0003	Drainage	1	JB	Lump Sum	\$ _____
0004	Dewatering	1	JB	Lump Sum	\$ _____
0005	Fencing	1	JB	Lump Sum	\$ _____
0006	Guardrail and Handrail	1	JB	Lump Sum	\$ _____
0007	Safety Barrier, Signs, and Other Shop Fabricated Items	1	JB	Lump Sum	\$ _____
0008	Vertical Lift Gates	1	JB	Lump Sum	\$ _____
0009	Gate Operating Machinery	1	JB	Lump Sum	\$ _____
00010	Equipment Building	1	JB	Lump Sum	\$ _____
00011	Electrical Work	1	JB	Lump Sum	\$ _____
00012	Emergency Generator and Transfer Switch	1	JB	Lump Sum	\$ _____
00013	Fuel System	1	JB	Lump Sum	\$ _____
00014	Bedding Stone (Estimated Quantity)	3,738	Ton	\$ _____	\$ _____
00015	Riprap Stone (Estimated Quantity)	6,542	Ton	\$ _____	\$ _____
00016	Geotextile Filter Fabric (Estimated Quantity)	7,778	SY	\$ _____	\$ _____
00017	Excavation (Unclassified) (Estimated Quantity)	87,523	CY	\$ _____	\$ _____
00018	Sheet Pile Wingwalls, Tiebacks and Cutoff Walls (Estimated Quantity)	5,355	SF	\$ _____	\$ _____
00019	Seeding and Landscaping (Estimated Quantity)	2.7	Acre	\$ _____	\$ _____
00020	Reinforced Concrete (Estimated Quantity)	1,074	CY	\$ _____	\$ _____
	TOTAL BID				\$ _____

**General Decision Number FL010032**

General Decision Number **FL010032**  
 Superseded General Decision No. FL000032

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	03/02/2001
1	03/16/2001

COUNTY(ies):  
 BROWARD                   LEE                                 ST LUCIE  
 COLLIER                   MARTIN  
 DADE                        PALM BEACH

CARP1026D	02/01/1998		
		Rates	Fringes
PILEDRIVERMEN		17.75	3.85
-----			
ELEC0323C	09/05/1993		
		Rates	Fringes
MARTIN, PALM BEACH, AND ST LUCIE COUNTIES			
ELECTRICIANS		15.88	21.5%
-----			
* ELEC0349B	09/01/2000		
		Rates	Fringes
DADE COUNTY			
ELECTRICIANS:			
Electrical contracts including materials that are less than \$2,000,000		19.90	3.10+8%
Electrical contracts including materials that are \$2,000,000 and over		22.14	3.10+8%
-----			
ELEC0728A	09/01/2000		
		Rates	Fringes
BROWARD AND COLLIER COUNTIES			
ELECTRICIANS		22.96	3%+5.43
-----			

ELEC0915B	12/01/2000		
		Rates	Fringes
LEE COUNTY			
ELECTRICIANS		20.09	27%+.25
-----			
ENGI0487B	10/01/2000		
		Rates	Fringes
DADE COUNTY			
POWER EQUIPMENT OPERATORS:			
Backhoes, Bulldozers		17.60	3.40
Cranes		20.78	3.40
Oilers		15.45	3.40
-----			
ENGI0487C	07/01/2000		
		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		20.64	5.50
Cranes with boom length less than 150 ft, Backhoes, and Bulldozers		19.92	5.50
Oilers		17.29	5.50
-----			
PLUM0630A	01/01/2001		
		Rates	Fringes
LEE, MARTIN, PALM BEACH, AND ST LUCIE COUNTIES			
PIPEFITTERS		25.21	5.41
-----			
PLUM0725B	01/16/2001		
		Rates	Fringes
BROWARD AND DADE COUNTIES			
PIPEFITTERS		23.10	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

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01410

ENVIRONMENT PROTECTION

PART 1 GENERAL

- 1.1 SCOPE
- 1.2 QUALITY CONTROL
- 1.3 PERMITS AND AUTHORIZATIONS
- 1.4 SUBMITTALS
- 1.5 SUBCONTRACTORS
- 1.6 NOTIFICATION
- 1.7 TRAINING OF CONTRACTOR PERSONNEL IN POLLUTION CONTROL
- 1.8 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 Erosion and Sedimentation Control Devices
    - 3.1.1.6 Location of Field Offices, Storage, and Other Contractor Facilities
    - 3.1.1.7 Borrow Areas on Government Property
    - 3.1.1.8 Disposal Areas on Government Property
    - 3.1.1.9 Temporary Excavations and Embankments
    - 3.1.1.10 Disposal of Solid Wastes
    - 3.1.1.11 Dispensing of Fuel
    - 3.1.1.12 Disposal of Chemical Waste
    - 3.1.1.13 Disposal of Discarded Materials
  - 3.1.2 Preservation and Recovery of Historic, Archeological, and Cultural Resources
    - 3.1.2.1 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
- 3.1.3.7 Oil Storage Tank Installation
- 3.1.4 Liabilities
- 3.1.5 Protection of Fish and Wildlife Resources
  - 3.1.5.1 Manatee Protection
  - 3.1.5.2 Endangered Species Protection
  - 3.1.5.3 Endangered Species Observer(s)
  - 3.1.5.4 Protection of Migratory Bird Species
  - 3.1.5.5 Protection of Gopher Tortoise (GT) Populations (Gopherus polyphemus)
  - 3.1.5.6 Protection of Eastern Indigo Snake Populations
- 3.1.6 Protection of Air Resources
- 3.1.7 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 DAILY MIGRATORY BIRD MONITORING REPORT
- 3.6 SAMPLE - BIRD MONITOR QUALIFICATION SHEET
- 3.7 TREE PROTECTION PLAN DETAIL
- 3.8 SAMPLE - DAILY MANATEE REPORTING LOG
- 3.9 SAMPLE - MANATEE CAUTION SIGNS

-- End of 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 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.

1.3 PERMITS AND AUTHORIZATIONS

The Contractor shall comply with all requirements under the terms and conditions set out in all permit(s).

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-08 Statements

Bird Nesting Monitoring Qualifications; GA.

Within 20 calendar days after the date of Notice of Award, the Contractor shall furnish to the Contracting Officer for approval, the qualifications of the bird monitor/observer. Appropriate qualifications for bird monitor/observer shall be a demonstrated ability to find and/or identify bird species, nesting behavior, eggs and nests, and habitat requirements.

Eastern Indigo Snake Observer; G|PD.

Within 20 calendar days after the date of Notice of Award, the Contractor shall furnish to the Contracting Officer for approval, the qualifications of the eastern indigo snake observer.

Environmental Protection Plan; GA.

Within 20 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.

o. Steps to be taken to construct the project in such a manner as not to impact gopher tortoises.

p. A protection and education plan for the Eastern indigo snake.

Eastern Indigo Snake Monitoring Report; FIO.

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.

Logs/Summary of Monitoring; FIO.

Contractor shall submit as specified, logs and summary of monitoring detailing nesting and nesting success.

Final Comprehensive Report; FIO.

Contractor shall submit as specified, a compilation of all data and maps prepared during the surveys and all information regarding relocation of gopher tortoises.

1.5 SUBCONTRACTORS

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

1.6 NOTIFICATION

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

for any such suspension.

#### 1.7 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.

#### 1.8 PAYMENT

No separate payment or direct payment will be made for the work covered under this section; all costs associated with this section shall be included in the contract unit and/or lump sum prices in 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 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 Contracting Officer. 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 indicated and defined on the drawings to be preserved 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 Section 01410 ENVIRONMENT PROTECTION. 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 Government, 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 Contracting Officer.

#### 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 or from storms shall be controlled, retarded, and diverted to protected drainage courses by means of diversion ditches, benches, and by any measures required by area wide plans approved under paragraph 208 of the Clean Water Act.

b. Sediment Basins. Sediment from construction areas shall be trapped in temporary or permanent sediment basins in accordance with basin plans shown on the drawings. The basins shall accommodate the runoff of a local 5-year storm. After each storm, the basins shall be pumped dry and accumulated sediment shall be removed as necessary to maintain basin effectiveness. Overflow shall be controlled by paved weir or by vertical overflow pipe, draining from the surface. The collected topsoil sediment shall be reused for fill on the construction site, and/or conserved (stockpiled) for use at another site(s). The Contractor shall institute effluent quality monitoring programs as required by Federal, State, and local environmental agencies.

#### 3.1.1.5 Erosion and Sedimentation Control Devices

The Contractor shall construct or install all temporary and permanent erosion and sedimentation control features as directed by the Contracting Officer's Representative. 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.

a. Baled Hay or Straw. This work shall consist of construction of baled hay or straw dams to protect against downstream accumulations of silt from construction areas. The baled hay or straw shall be constructed in accordance with the details shown on the contract drawings or the FDOT Roadway and Traffic Design Standards. The dam shall be placed so as to effectively control silt dispersion under conditions present on this project. Alternative solutions and usage of materials may be used, if approved by the Contracting Officer.

b. Temporary Silt Fences. This work shall consist of furnishing, installing, maintaining, and removing temporary silt fences barriers in accordance with the manufacturer's directions, these specifications, and the details required for the erosion control trap. Temporary silt fences shall be erected at locations as shown on the contract drawings.

The filter fabric is to be of nylon, polyester, propylene or ethylene yarn with extra strength--50 lb/lin. inch (minimum)--and with a flow rate of at least 0.3 gal/ft sq/minute. Fabric should contain ultraviolet ray inhibitors and stabilizers and be a minimum of 45" wide. Bury toe of fence approximately 8" deep to prevent undercutting and secure to posts by suitable staples, tie wire, or hog rings. Posts are to be at least 2" x 4", minimum of 4' long. Overlap to next post if fabric joints are necessary.

#### 3.1.1.6 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 Contracting Officer.

#### 3.1.1.7 Borrow Areas on Government Property

Areas shall be managed to minimize erosion and to prevent sediment from entering nearby watercourses or lakes

#### 3.1.1.8 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.

#### 3.1.1.9 Temporary Excavations and Embankments

Areas for work areas shall be controlled to protect adjacent areas from despoilment.

#### 3.1.1.10 Disposal 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.

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

b. Disposal of Solid Waste on Government Property. Waste materials shall be hauled to the Government landfill site shown on the drawings. The Contractor shall comply with State and local regulations pertaining to the use of landfill areas.

#### 3.1.1.11 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.

#### 3.1.1.12 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.

#### 3.1.1.13 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 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 Contracting Officer 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, tailwater excavation, and 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.

#### 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 Contracting Officer. 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 Contracting Officer 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.

#### 3.1.3.7 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 Contracting Officer for approval prior to installation or use of the storage tank. The following shall also be provided to the Contracting Officer 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.

#### 3.1.4 Liabilities

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

#### 3.1.5 Protection of Fish and Wildlife Resources

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

##### 3.1.5.1 Manatee Protection

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

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

c. Manatee Sighting. If a manatee(s) is sighted within 100 yards of the project area, all appropriate precautions shall be implemented by the Contractor to ensure protection of the manatee. These precautions shall include the operation of all moving equipment no closer than 50 feet of a manatee. If a manatee is closer than 50 feet to moving equipment or the project area, the equipment 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.

d. 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 Section 01410 ENVIRONMENT PROTECTION.

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

<u>Title</u>	<u>Telephone Number</u>	
	<u>Work Hours</u>	<u>After Hours</u>
Corps, Inspector Mr. George Cooper Atlantic Coast Area Resident Engineer, (CESAJ-CO-P)	Will be provided	Will be provided
Dr. Hanley K. Smith, Chief Environmental Branch, Planning Division (CESAJ-PD-E)	904-232-1685	904-745-0632
Mr. Gordon Butler, Jr. Chief, Construction Branch, Construction-Operations Division (CESAJ-CO)	904-232-1122	Will be Provided
Acting 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 at 561-562-3909 for South Florida.

f. Report Submission. The Contractor shall maintain a log detailing sightings, collisions, or injuries to manatees occurring during the contract period. The data shall be recorded on forms provided by the Contracting Officer (sample Daily Manatee Reporting Log is appended to the end of Section 01410 ENVIRONMENT PROTECTION). 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 Contracting Officer. Following project completion, a report summarizing the above incidents and sightings will be submitted to the following:

Department of Environmental Protection	Office of Protected	
Species Management	Mail Station 245	3900 Commonwealth
Boulevard	Tallahassee, Florida 32399	

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

Area Engineer,	U.S. Army Corps of Engineers (CESAJ-CO-P)
Atlantic Coast Area Office	

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

#### 3.1.5.2 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. In addition, the Contractor shall instruct all personnel associated with the project of the potential presence of gopher tortoises and Eastern indigo snakes in the area, and the need to avoid harming these animals. The Contractor shall be held responsible and liable for any of the above-mentioned animals that are harmed, harassed, or killed as a result of construction activities. In the event that a threatened or endangered species is harmed as a result of construction activities, the Contractor shall cease all work and notify the Contracting Officer's Representative. The order of contact of Corps of Engineers personnel shall be the same as for Bird Nesting 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.

3.1.5.3 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.

3.1.5.4 Protection of Migratory Bird Species

The Contractor shall keep construction activities under surveillance, management, and control to prevent impacts to migratory birds and their nests. All construction personnel shall be advised that migratory birds are protected by the Florida Endangered and Threatened Species Act of 1977, Title XXVIII, Chapter 372.072, and the U.S. Fish and Wildlife Service pursuant to the Migratory Bird Treaty Act of 1918 and the Endangered and Threatened Species Act of 1982, as amended. The Contractor may be held responsible for harming or harassing the birds, their eggs or their nests as a result of the construction.

a. Monitoring of Construction Area. In order to meet these responsibilities, the Contractor shall conduct monitoring of the construction area beginning 1 April through 31 August, if construction activities occur during that period. Daily monitoring using the attached forms will be conducted during the dawn or dusk time frames by a bird monitor approved by the Contracting Officer or the Contracting Officer's Representative. (Caution will be taken by the monitor to avoid disturbance to the nesting birds.) The Contractor shall maintain a daily log detailing monitoring and nesting activity. Within 30 days after completion of construction, a summary of monitoring shall be submitted to the Corps detailing nesting and nesting success/failure including species, number of nests created, location, number of eggs, number of offspring generated during the project and reasons for nesting success or failure, if known.

b. Nesting Activity Notification. Any nesting activity observed by the Contractor will be reported immediately to the Contracting Officer or the Contracting Officer's Representative who shall have sole authority for any work stoppages, creation of the buffer area, or restart of construction activities. In addition, the following personnel will be notified:

<u>Title</u>	<u>Telephone Number</u>	
	<u>Work Hours</u>	<u>After Hours</u>
Corps, Inspector Mr. George Cooper Atlantic Coast Area Engineer, (CESAJ-CO-P)	Will be provided	Will be provided
Dr. Hanley K. Smith, Chief Environmental Branch, Planning Division (CESAJ-PD-E)	904-232-1685	904-745-0632
Mr. Gordon M. Butler, Jr. Chief, Construction Branch, Construction-Operations Division (CESAJ-CO)	Will be provided	Will be Provided
Acting Chief, Construction-Operations Division (CESAJ-CO)	904-232-3765	Will be Provided

c. Nesting Within Construction Area.

1) Should nesting begin within the construction area, a temporary, 200-foot buffer will be created around the nests and marked to avoid entry (the Contracting Officer will provide signs). The area will be left undisturbed until nesting is completed or terminated, and the chicks fledge. The decision to allow construction in a former nesting site will be determined by the Contracting Officer in consultation with the U.S. Fish and Wildlife Service and the Florida Game and Freshwater Fish Commission. Access to the nesting sites by humans (except limited access when accompanied by the bird monitor or Contracting Officer), equipment or pets under control of the Contractor is prohibited.

2) If nesting occurs within the construction area, a bulletin board will be placed and maintained by the Contractor in the contracting shed with the location map of the construction site showing the bird nesting areas and a warning, clearly visible, stating that "BIRD NESTING AREAS ARE PROTECTED BY THE FLORIDA THREATENED AND ENDANGERED SPECIES ACT AND THE FEDERAL MIGRATORY BIRD TREATY ACT".

3) Birds will find the top of the dike or the flat interior desirable nesting habitat. If construction activity ceases for any period of time, nesting may occur before work can resume. Any stoppage of activity could induce nesting, subsequently, construction could be altered or stopped to avoid impacting the

birds unless the State of Florida and the U.S. Fish and Wildlife Service authorizes the interruption of nesting and/or destruction of the eggs. (NOTE: This authorization is highly unlikely.) Areas which are potentially suitable for nesting can be altered to make the area undesirable. One approved method is the placement of stakes at 10- to 15-foot intervals and tie flagging between the stakes in a web fashion. This may dissuade bird nesting until construction can be resumed. In addition, the disposal area basin can be flooded prior to the beginning of nesting season to the elevation required for displacement from the disposal of dredged material in order to make the basin undesirable for bird nesting.

d. Bird Monitoring Qualifications. The Contractor's Environmental Protection Plan shall contain the qualifications of the bird monitor and the steps to be taken to construct the project in such a manner as not to impact migratory birds or induce their nesting. The qualifications of the bird monitor are a demonstrated ability to identify bird species, general and nesting behavior characteristics, nests and eggs, and a knowledge of habitat requirements. In addition, references must be provided to verify non-educational experience.

e. Work Delay. Delays in work due to the fault of 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 Clause SUSPENSION OF WORK of Section 00700 CONTRACT CLAUSES.

#### 3.1.5.5 Protection of Gopher Tortoise (GT) Populations (*Gopherus polyphemus*)

The Contractor shall keep construction activities under surveillance, management, and control to prevent impacts to GTs and their burrows. All construction personnel shall be advised that GTs are listed by the State of Florida as a Species of Special Concern and protected by the Florida Administrative Code, Chapter 39-27.002(4). The Contractor may be held responsible for taking, harming, or harassing the tortoises, their eggs or their burrows as a result of the construction. The destruction of GT burrows constitutes taking under this law except as authorized by specific permit.

a. General. The Contractor shall stay at least 25 feet from entrances of individual burrows.

b. Relocation Permit Requirements. If five or fewer tortoises will be affected and adequate habitat will exist on the site following construction, tortoises may be captured and released back onto the site in an area where they can move freely. A special permit is required. If more than five (5) GTs are to be relocated, a capture/release/relocation permit is required from the Florida Game and Fresh Water Fish Commission (FG&FWFC); contact the FG&FWFC for a list of GT relocation contacts.

c. State Permit Applications. Pursuant to the requirements of Rules 39-25.002 and 39-27.002 of the Wildlife Code of the State of Florida

(Title 39, F.A.C.), a permit for a GT capture/relocation/release project must be secured from the FG&FWFC prior to initiating any relocation work. Applications shall be submitted at least 30 days prior to the time needed from Office of Environmental Services, Division of Wildlife, Florida Game and Fresh Water Fish Commission, 620 S. Meridian Street, Tallahassee, Florida 32399-1600, ATTN: Mr. Don Wood, Endangered Species Coordinator, telephone 850-488-3831. Permits to capture and release GTs on site will be issued by regional Division of Wildlife or Office of Environmental Services personnel based on telephone requests (field verifications may be conducted by FG&FWFC personnel if deemed necessary).

d. Relocation Window. GT relocation within the State of Florida can occur year-round in the geographic area below State Highway 50. Relocation of GTs between State Highway 50 and the counties bordering the State of Georgia, excluding Duval and Suwannee Counties, can only occur between 1 March and 1 December. Relocation within the counties bordering the State of Georgia, including Duval and Suwannee Counties, can only occur between 1 April and 1 October.

e. Application Information. The application will contain, but not be limited to, aerial photography of the donor and recipient sites, a detailed map showing the location of the active and inactive burrows sites, the location and number of acres of GT habitat, the carrying capacity of the recipient site and any management plans for the recipient site.

f. Applicant Qualifications. Applicants for relocation permits shall be suitably trained or experienced in such work. Copies of applicant credentials demonstrating such shall be appended to applications. A list of qualified individuals may be obtained from the FG&FWFC.

g. Temporal Considerations. During summer months, releases shall not be made during the hottest part of the day at sites where shade is limited.

h. Donor Site Surveys. No more than four weeks prior to relocation, all potential GT habitat on a given development site shall be thoroughly and systematically surveyed using appropriate, biologically sound methodology. Permit applicants are to submit preliminary estimates of the total number of tortoises on a subject site, size of that portion of the site which is potential tortoise habitat, and a general characterization of the habitat. Recommended survey techniques for estimating population density and classification systems for GT habitat types are available from the FG&FWFC.

1) All burrows found to be "active" or "inactive" shall be plotted on maps to facilitate efficient future relocation. Criteria for determining the status of GT burrows may be obtained from the FG&FWFC.

i. Recipient Site Selection and Treatment. Sites selected to receive relocated tortoises shall be either of similar habitat character and quality as corresponding donor sites, or demonstrated to be otherwise

suitable for GT occupancy.

1) Sites already occupied by tortoises at or near carrying capacity shall not be selected as recipient sites. In some instances, especially at sites of marginal habitat quality, certain habitat manipulation measures (such as burning) could be employed to improve habitat quality and thereby increase carrying capacity, rendering the site acceptable as a recipient site. In those cases, continuous, periodic management treatments would normally be necessary to maintain carrying capacity at the elevated levels. Permit applications opting for this course shall append their applications with a proposed long-term management plan for recipient sites. Carrying capacity may be determined by the FG&FWFC.

2) Relocation of 20 or fewer tortoises shall be to recipient sites already occupied. Relocation of more than 20 should be to recipient sites either vacant or occupied at population levels substantially below carrying capacity. Carrying capacity criteria may be obtained from FG&FWFC.

3) Recipient sites shall be situated any distance east or west of donor sites, but no more than 50 miles north or south of donor sites unless appropriately justified.

4) Recipient sites should not overlap or abut sites supporting genetically unique or discrete tortoise populations, or sites supporting populations which otherwise merit protection from genetic swamping. Genetically unique or discrete populations will be determined by the FG&FWFC. In instances where such a potential exists, the FG&FWFC shall be consulted for a determination as to the site's acceptability.

5) Recipient sites already occupied by tortoises shall be thoroughly surveyed prior to relocation and all encountered burrows plotted on maps and categorized as "active," "inactive" or "old" per the criteria of the FG&FWFC.

j. Capture Methodology. Tortoises will be excavated from burrows (i.e., with backhoe), trapped, or otherwise captured by non-harmful means. If trapped, five-gallon pitfall bucket traps will be buried at burrow entrances, shaded and covered with paper or cheesecloth overlain with a thin layer of soil. A hole at least one inch in diameter should be drilled into the bottom of each bucket for drainage. Each bucket shall be checked at least once per day for at least 28 consecutive days. Capture methodology may be modified on persistently wet sites or during periods of heavy rainfall.

k. Transport and Release Methodology. Captured tortoises must be transported without undue delay and under shaded and sanitary conditions. Care shall be taken to avoid any physical damage (i.e., abrasion) to tortoises in transit.

1) Prior to release, each relocated tortoise shall be sexed

(adults only), measured and permanently and uniquely marked by scute-notching. Criteria for marking and measuring relocated GTs may be obtained from the FG&FWFC.

2) On unoccupied recipient sites, relocated individuals shall be released in groups of no more than 20 in the same general vicinity with access to shade nearby. On already occupied sites, relocated tortoises shall be distributed throughout the site and, when possible, individuals shall be released at "old" or "inactive" burrows, criteria of which is available through the FG&FWFC.

1. Reporting. Any tortoise mortality or debilitating injury occurring during the capture, relocation and release phases of a relocation is to be reported to:

Order of Contact of Corps Personnel to Report Gopher Tortoise Activities

<u>Title</u>	<u>Telephone Number</u>	
	<u>Work Hours</u>	<u>After Hours</u>
Corps, Inspector Mr. George Cooper Atlantic Coast Area Engineer, (CESAJ-CO-P)	Will be provided	Will be provided
Dr. Hanley K. Smith, Chief Environmental Branch, Planning Division (CESAJ-PD-E)	904-232-1685	904-745-0632
Mr. Gordon M. Butler, Jr., Chief, Operations Branch, Construction-Operations Division (CESAJ-CO)	Will be provided	Will be provided
Acting Chief, Construction-Operations Division (CESAJ-CO)	904-232-3765	Will be Provided
Mr. Michael Abbott, Florida Game and Fresh Water Fish Commission 1239 SW 10 <sup>th</sup> Street Ocala, FL 34474	904-732-1225	Will be Provided

m. Report Submission. Within 30 days of the final survey, a detailed and comprehensive final report is to be prepared and submitted to the Division of Wildlife, FG&FWFC and U.S. Army Corps of Engineers (Dr. Hanley K. Smith, Chief, Environmental Branch, P.O. Box 4970, Jacksonville, Florida 32232-0019), such report to include a compilation of all data and all maps prepared during the surveys and all information regarding relocation of the GTs.

n. Qualifications. The Contractor's Environmental Protection Plan shall contain the qualifications of the GT survey/relocation contract and the steps to be taken to construct the project in such a manner as not to impact GTs.

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.

### 3.1.5.6 Protection of Eastern Indigo Snake Populations

a. Monitoring of Construction Area. The requirements of this paragraph only apply if Eastern indigo snakes (indigo snakes) are observed in the construction area. The Contractor shall coordinate with the Jacksonville District Corps of Engineers, Environmental Studies Section (CESAJ-PD-ES) and the U.S. Fish and Wildlife Service's (FWS) South Florida Field Office during the establishment and implementation of an indigo snake protection/education plan.

b. Qualified Observer. A qualified observer shall be present on site to watch for indigo snakes during all construction and clearing phases of the project. The name(s) and qualifications of the proposed observer shall be submitted to the Contracting Officer for approval. The information submitted should indicate what experience the individual has that would qualify the person to act as an indigo snake observer.

c. Indigo Snake Protection/Education Plan. An indigo snake protection/education plan shall be developed for all construction crews to follow. The plan shall be provided to the Contracting Officer for review and approval at least 30 days prior to any construction or clearing activities. The educational materials for the plan could consist of a combination of posters or videos, pamphlets, and lectures and should include the following information:

(1) Description of the indigo snake, its habits, and protection under Federal Law;

(2) Instructions not to injure, harm, harass or kill this species;

(3) Directions to notify the qualified observer(s) if an indigo snake is sighted;

(4) Directions to cease construction activity, notify the qualified observer, and allow the indigo snake sufficient time to move away from the site on its own before resuming construction (only a qualified individual, who has been either authorized by a Section 10(a)(1)(A) permit issued by the FWS, or designated as an agent of the State of Florida by the FF&WCC for such activities, is permitted to come in contact with an indigo snake); and,

(5) Telephone numbers of pertinent agencies to be contacted if a dead indigo snake is encountered.

(6) Instructions that, if necessary, indigo snakes shall be held in captivity only long enough to transport them to a release site; at no time shall two snakes be kept in the same container during

transportation.

d. Gopher Tortoise Burrows. If gopher tortoise burrows are present, refer to subparagraph "Protection of Gopher Tortoise (GT) Populations (Gopherus polyphemus)" above. If gopher tortoise burrows are present, the requestor should coordinate with the FF&WCC for information on the relocation program for gopher tortoises. As a part of the relocation program, the FF&WCC reviews and approves preserve areas for gopher tortoises. These same areas may be used for the release of indigo snakes. Therefore, prior to any construction or clearing activities in areas where gopher tortoise burrows have been identified the following measures should be incorporated into the indigo snake plan:

(1) A qualified individual should map and flag the locations of all gopher tortoise burrows on the site. Prior to actual clearing, the qualified individual should update that initial survey no more than two weeks prior to clearing. These maps should be made available to all construction crews.

(2) In some circumstances, an underground camera may be needed to investigate gopher tortoise burrows for indigo snakes. If an indigo snake is found, and the burrow will be destroyed by construction activity then the burrow should be carefully excavated with a backhoe while monitoring the snake's position and condition with the underground camera. In burrows that are suitable for camera use, the burrow will be carefully excavated with a combination of backhoe and hand excavation. Before excavating any burrow, it is recommended that a strong, flexible tube or hose be inserted into the burrow to the end to mark the course of the entire burrow in case it collapses during excavation. If a backhoe is used, the bucket should be equipped with a straight blade, not a blade with teeth. The excavation must be done with caution to prevent potential injury to an indigo snake.

(3) An indigo snake found in a burrow may be captured and released (by a qualified individual who has been either authorized by a Section 10(a)(1)(A) permit issued by the FWS, or designated as an agent of the State of Florida by the FF&WCC for such activities) immediately into a FF&WCC approved preserve area for gopher tortoises near a marked inactive or abandoned gopher tortoise burrow. Indigo snakes shall be held in captivity only long enough to transport them to a release site; at no time shall two snakes be kept in the same container during transportation. A map of marked inactive or abandoned burrow should be made available to the qualified individual. This will allow for prompt release of an indigo snake.

e. Reporting. Refer to subparagraph "Protection of Gopher Tortoise (GT) Populations (Gopherus polyphemus)" above. Reporting of indigo snake mortality or debilitating injury occurring during the capture, relocation and release phases of a relocation will be reported as required in referenced subparagraph.

### 3.1.6 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) Commonwealth Territorial and all Federal emission and performance laws and standards.

### 3.1.7 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 DAILY MIGRATORY BIRD MONITORING REPORT

See APPENDIX A at the end of this Section (3 pages).

### 3.6 SAMPLE - BIRD MONITOR QUALIFICATION SHEET

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

### 3.7 TREE PROTECTION PLAN DETAIL

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

### 3.8 SAMPLE - DAILY MANATEE REPORTING LOG

See APPENDIX D at the end of this Section (1 page).

### 3.9 SAMPLE - MANATEE CAUTION SIGNS

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

-- End Of Section --

-- End of Section --

