

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01500

TEMPORARY CONSTRUCTION FACILITIES

PART 1 GENERAL

- 1.1 SUMMARY
- 1.2 REFERENCES
- 1.3 SUBMITTALS
- 1.4 RESIDENT MANAGEMENT SYSTEM (RMS)

PART 2 PRODUCTS

- 2.1 CONTRACTING OFFICER'S FIELD OFFICE TRAILER
- 2.2 CONSTRUCTION PROJECT SIGNS
 - 2.2.1 Haul Road Traffic and Construction Warning Signs
- 2.3 STORAGE CONTAINERS
- 2.4 RMS-QC HARDWARE AND SOFTWARE REQUIREMENTS

PART 3 EXECUTION

- 3.1 GENERAL REQUIREMENTS
 - 3.1.1 Identification of Employees
 - 3.1.2 Employee Parking
 - 3.1.3 On-Site Information
 - 3.1.4 Janitorial Services
- 3.2 AVAILABILITY AND USE OF UTILITY SERVICES
 - 3.2.1 Lighting
 - 3.2.2 Heating and Cooling
 - 3.2.3 Water
 - 3.2.4 Fire Extinguisher
 - 3.2.5 Utility Lines
 - 3.2.6 Electric Power
- 3.3 BULLETIN BOARD, PROJECT SIGN, AND PROJECT SAFETY SIGN
 - 3.3.1 Bulletin Board
 - 3.3.2 Project and Safety Signs
- 3.4 PROTECTION AND MAINTENANCE OF TRAFFIC
 - 3.4.1 Haul Roads
 - 3.4.2 Barricades
- 3.5 HAUL ROADS
- 3.6 CONTRACTOR'S TEMPORARY FACILITIES
 - 3.6.1 Contractor Field Office
 - 3.6.2 Appearance of Trailer(s)
 - 3.6.3 Storage Area
 - 3.6.3.1 Maintenance of Storage Area

SHORELINE STABILIZATION PROJECT
VIRGINIA KEY, DADE COUNTY, FLORIDA

DACW17-02-R-0023

- 3.6.4 Waste Storage
- 3.6.5 Fuel Storage and Fueling Operations
- 3.7 SECURITY PROVISIONS
 - 3.7.1 Visitors
- 3.8 TEMPORARY PROJECT SAFETY FENCING
- 3.9 CONSTRUCTION FENCING AND DANGER SIGNS
- 3.10 CONTRACTING OFFICER'S FIELD OFFICE
 - 3.10.1 Office Trailer
 - 3.10.2 Office Equipment
- 3.11 PLANT COMMUNICATION
- 3.12 CLEANUP
- 3.13 RESTORATION OF STORAGE AREA
- 3.14 CONSTRUCTION FORMS AND DETAILS

-- End of Section Table of Contents --

SECTION 01500

TEMPORARY CONSTRUCTION FACILITIES

PART 1 GENERAL

1.1 SUMMARY

In addition to Construction Facilities this Section covers:

Temporary Utilities Construction Aids Vehicular Access and Parking
Project Identification

See Section 01355 ENVIRONMENTAL PROTECTION for requirements including silt control, trailer placement, fueling restrictions, dust control, solid waste, and clean-up. Upon completion of project, clean-up and restore area in accordance with Clause CLEAN-UP of Section 00700 CONTRACT CLAUSES.

a. Construction Facilities include, but are not limited to, the following:

(1) Contracting Officer's Field Office(2) Contractor Offices(3) Information Bulletin Board(4) Material and Equipment Storage Area(5) Fueling Area(6) Secured Storage Area(7) Employee Parking Area(8) Debris Container (dumpster)(9) Construction Signage to include Project Sign; Safety Sign; and, Construction Warning Signs

b. Temporary Utilities include, but are not limited to, the following:

(1) Water(2) Electric(3) Sewage(4) Communications(5) Lighting

1.2 REFERENCES

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

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI C2 (1997) National Electrical Safety Code

CORPS OF ENGINEERS JACKSONVILLE REGULATION (CESAJR)

CESAJR 385-1-1 (1998) Safety and Occupational Health Program

ENGINEERING MANUALS (EM)

EM 385-1-1 (1996) Safety and Health Requirements
Manual

FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT)

FDOT (2000) Standard Specifications for Road
and Bridge Construction

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70 (1999) National Electrical Code

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals having an "FIO" designation are for information only. Within 30 days following date of receipt of Notice to Proceed and prior to mobilization to site submit following in accordance with Section 01330
SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Mobilization/Demobilization Plan ; FIO.

Plan shall include, but not be limited to, the following:

a. Mobilization Requirements:

(1) Methods, equipment and materials (2) Connection of utilities (3) Placement of site facilities and temporary controls (4) Construction of facilities

b. Demobilization Requirements:

Methods, equipment and materials required to clean-up and restore site at project conclusion:

(1) Collection, recycle and disposal of solid waste (2) Contract-generated material (3) Utility disconnection (4) Removal of Contractor facilities (5) Repair and restoration of site (i.e., fences, roads, or permanent facilities)

Security Plan ; FIO.

Prepare a Security Plan for Contracting Officer describing site security as follows:

- a. Day and night security
- b. Weekend and holiday security
- c. General security duties

1.4 RESIDENT MANAGEMENT SYSTEM (RMS)

Contractor shall use Contracting Officer furnished Resident Management

System (RMS) software for construction information management (CIM). RMS will be the latest version of "RMS-QC" which is personal computer based. Additional information will be provided to the Contractor at the Preconstruction Conference. Refer to Section 01312 RESIDENT MANAGEMENT SYSTEM (RMS).

PART 2 PRODUCTS

2.1 CONTRACTING OFFICER'S FIELD OFFICE TRAILER

Trailer in first class condition, not greater than two years old, with a minimum total space of 600 square feet.

2.2 CONSTRUCTION PROJECT SIGNS

Refer to paragraph BULLETIN BOARD, PROJECT SIGN, AND PROJECT SAFETY SIGN below and APPENDIX A at the end of this Section.

2.2.1 Haul Road Traffic and Construction Warning Signs

1/2 inch HDO plywood, or aluminum sheet, conforming to FDOT Section 700 Uniform Traffic Manual Standard Signs, non-standard signage high visibility orange with black lettering. Orange fabric mesh acceptable for temporary survey crew use.

2.3 STORAGE CONTAINERS

Welded steel construction, locking, shipping containers or equal.

2.4 RMS-QC HARDWARE AND SOFTWARE REQUIREMENTS

Refer to Section 01312 RESIDENT MANAGEMENT SYSTEM (RMS).

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

3.1.1 Identification of Employees

The Contractor shall be responsible for furnishing to each employee, and for requiring each employee engaged on the work to display, identification as approved and directed by the Contracting officer. Prescribed identification shall immediately be delivered to the Contracting Officer for cancellation upon release of any employee. When required, the Contractor shall obtain and provide fingerprints of persons employed on the project. Contractor and subcontractor personnel shall wear identifying markings on hard hats clearly identifying the company for whom the employee works.

3.1.2 Employee Parking

- a. Park employee's vehicles in areas designated by Contractor, away from construction traffic, within reasonable walking distance of site. Maintain area free of ruts, mud holes and puddles. Place gravel where

required by deteriorated conditions.

b. Provide Contracting Officer six gravel parking spaces at Contracting Officer's Field Office. Place parking signs reserved for use of Contracting Officer and visitors. Contractor shall maintain these spaces clear of other vehicles.

c. Contractor should protect unattended equipment as it may be subject to vandalism.

d. Storage trailers and storage area with Government material should be locking type with lighting.

3.1.3 On-Site Information

Keep copy of contract drawings, specifications, and other contract documents at Contractor's Office on site, available for use at all times.

3.1.4 Janitorial Services

- a. Daily -- Sweep; empty wastebaskets; service toilets
- b. Weekly -- Mop floors; sanitize toilet seats
- c. Monthly -- Wash floors, windows (inside and out)
- d. Cut grass as needed to keep below 3 inches high

3.2 AVAILABILITY AND USE OF UTILITY SERVICES

Install temporary facilities and utilities in accordance with ANSI C2, CESAJR 385-1-1, EM 385-1-1, NFPA 70. Obtain necessary construction, building, zoning, or soil erosion and sediment control approvals required by local authorities and utility companies. Equip trailer(s) with wind tie downs in accordance with local wind and building code requirements.

3.2.1 Lighting

Electric light, non-glare type luminaries to provide a minimum illumination, level of 30-foot candles at desk height level. Comply with temporary lighting, wiring and Ground Fault Circuit Interrupter (GFCI) requirements found in EM 385-1-1.

3.2.2 Heating and Cooling

Adequate equipment to maintain internal ambient air temperature of 75 degrees F in 105 degrees F and 70 degrees F in 30 degrees F. Equip trailer(s) with smoke alarms. If bottled gas is used to heat, equip trailer(s) with carbon monoxide alarms.

3.2.3 Water

Non-potable well water may be used to flush toilets, dish and hand washing. Provide bulk potable water storage tanks or provide bottled water for drinking.

3.2.4 Fire Extinguisher

Refer to EM 385-1-1. Non-toxic, dry chemical, fire extinguisher meeting Underwriters Laboratories, Inc., approval for Class A, Class B, and Class C fires with a minimum rating of 2A; 10B; and 10C.

3.2.5 Utility Lines

Install, connect and modify temporary lines as coordinated with owning utility. Conform requirements in accordance with ANSI C2 and NFPA 70 for Temporary Electric Lines. Remove temporary line at completion of project.

3.2.6 Electric Power

Provide Contracting Officer's Field Office sufficient continuous power and electric supply to assure operation of systems, including computer, light and HVAC. Provide electrical service and transformers sufficient to operate heating/air conditioning units. Electrical power shall be purchased directly by Contractor.

3.3 BULLETIN BOARD, PROJECT SIGN, AND PROJECT SAFETY SIGN

3.3.1 Bulletin Board

Immediately upon beginning of work, the Contractor shall provide a weatherproof glass-covered bulletin board not less than 36 by 48 inches in size for displaying the Equal Employment Opportunity poster, a copy of the wage decision contained in the contract, Wage Rate Information poster, and other information approved by the Contracting Officer. The bulletin board shall be located at the project site in a conspicuous place easily accessible to all employees, as approved by the Contracting Officer. Legible copies of the aforementioned data shall be displayed until work is completed. Upon completion of work the bulletin board shall be removed by and remain the property of the Contractor.

3.3.2 Project and Safety Signs

The requirements for the signs, their content, and location shall be as indicated in APPENDIX A appended to the end of this Section. The signs shall be erected within 15 days after receipt of the Notice to Proceed. The data required by the safety sign shall be corrected daily, with light colored metallic or non-metallic numerals. [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.] Upon completion of the project, the signs shall be removed from the site.

3.4 PROTECTION AND MAINTENANCE OF TRAFFIC

During construction the Contractor shall provide access and temporary relocated roads as necessary to maintain traffic. The Contractor shall maintain and protect traffic on all affected roads during the construction period except as otherwise specifically directed by the Contracting Officer. Measures for the protection and diversion of traffic, including the provision of watchmen and flagmen, erection of barricades, placing of lights around and in front of equipment and the work, and the erection and

maintenance of adequate warning, danger, and direction signs, shall be as required by the State and local authorities having jurisdiction. The traveling public shall be protected from damage to person and property. The Contractor's traffic on roads selected for hauling material to and from the site shall interfere as little as possible with public traffic. The Contractor shall investigate the adequacy of existing roads and the allowable load limit on these roads. The Contractor shall be responsible for the repair of any damage to roads caused by construction operations.

3.4.1 Haul Roads

The Contractor shall, at its own expense, construct access and haul roads necessary for proper prosecution of the work under this contract. Haul roads shall be constructed with suitable grades and widths; sharp curves, blind corners, and dangerous cross traffic shall be avoided. The Contractor shall provide necessary lighting, signs, barricades, and distinctive markings for the safe movement of traffic. The method of dust control, although optional, shall be adequate to ensure safe operation at all times. Location, grade, width, and alignment of construction and hauling roads shall be subject to approval by the Contracting Officer. Lighting shall be adequate to assure full and clear visibility for full width of haul road and work areas during any night work operations. Upon completion of the work, haul roads designated by the Contracting Officer shall be removed.

3.4.2 Barricades

The Contractor shall erect and maintain temporary barricades to limit public access to hazardous areas. Such barricades shall be required whenever safe public access to paved areas such as roads, parking areas or sidewalks is prevented by construction activities or as otherwise necessary to ensure the safety of both pedestrian and vehicular traffic. Barricades shall be securely placed, clearly visible with adequate illumination to provide sufficient visual warning of the hazard during both day and night.

3.5 HAUL ROADS

Whenever practical, one-way haul roads shall be used on this contract. Haul roads built and maintained for this work shall comply with the following:

- a. One-way haul roads for off-the-road equipment; e.g., belly dumps, scrapers, and off-the-road trucks shall have a minimum usable width of 25 ft. One-way haul roads for over-the-road haulage equipment only (e.g., dump trucks, etc.) may be reduced to a usable width of 15 feet. When the Contracting Officer determines that it is impractical to obtain the required width for one-way haul roads (e.g., a road on top of a levee), a usable width of not less than 10 feet may be approved by the Contracting Officer, provided a positive means of traffic control is implemented. Such positive means shall be signs, signals, and/or signalman and an effective means of speed control.
- b. Two-way haul roads for off-the-road haulage equipment shall have a usable width of 60 feet. Two-way haul roads for over-the-road haulage

equipment only may be reduced to a usable width of 30 feet.

c. Haul roads shall be upgraded and otherwise maintained to keep the surface free from potholes, ruts, and similar conditions that could result in unsafe operation.

d. Grades and curves shall allow a minimum sight distance of 200 feet for one-way roads and 300 feet for two-way roads. Sight distance is defined as the centerline distance an equipment operator (4.5 feet above the road surface) can see an object 4.5 feet above the road surface. When conditions make it impractical to obtain the required sight distance (e.g., ramps over levees), a positive means of traffic control shall be implemented.

e. Dust abatement shall permit observation of objects on the roadway at a minimum distance of 300 feet.

f. Haul roads shall have the edges of the usable portion marked with posts at intervals of 50 feet on curves and 200 feet maximum elsewhere. Such markers shall extend 6 feet above the road surface, and for nighttime haulage, be provided with reflectors in both directions.

3.6 CONTRACTOR'S TEMPORARY FACILITIES

3.6.1 Contractor Field Office

Provide on-site field office of sufficient size and staff capability to manage project activities. Provide communications and computer capabilities to manage the work, including implementing RMS-QC (refer to Section 01312 RESIDENT MANAGEMENT SYSTEM (RMS)), facsimile, electronic mail, reproduction, to schedule and cost tracking. Contractor's field office should include a conference area with table and chairs to accommodate a minimum of 8 people. Provide handicap access with a 1 on 12 ramp and gravel parking spot marked with handicap parking sign.

3.6.2 Appearance of Trailer(s)

Trailer(s), used for both office and material storage purposes, shall be clean, neat exterior appearance and in good repair. Trailer(s) requiring exterior painting or maintenance will not be allowed on site until determined satisfactory by Contracting Officer.

3.6.3 Storage Area

Provide temporary six-foot high chain link fence for storage containers, trailers or sheds containing Government property. Fence posts may be driven. Ground chain link fence against lightning. Store Contracting Officer's property, owned materials and equipment within fenced storage area. Store small size Government property, equipment, tools, materials in locked steel containers. No Government property and materials shall be stockpiled outside fence in preparation for next day's work. Park mobile equipment, tractors, wheeled lifting equipment, cranes, trucks, and like equipment, within fenced areas on weekends.

3.6.3.1 Maintenance of Storage Area

Fencing shall be kept in a state of good repair and proper alignment. Should the Contractor elect to traverse, with construction equipment or other vehicles, grassed or unpaved areas which are not established roadways, such areas shall be covered with a layer of gravel as necessary to prevent rutting and the tracking of mud onto paved or established roadways; gravel gradation shall be at the Contractor's discretion. Grass located within the boundaries of the construction site shall be mowed for the duration of the project. Grass and vegetation along fences, buildings, under trailers, and in areas not accessible to mowers shall be edged or trimmed neatly.

3.6.4 Waste Storage

Provide dumpsters or suitable debris containers. Prevent wind blown trash; cover as needed. Dispose of offsite when needed. Refer to Section 01355 ENVIRONMENTAL PROTECTION.

3.6.5 Fuel Storage and Fueling Operations

Refer to Section 01355 ENVIRONMENTAL PROTECTION. Provide light when fueling at night.

3.7 SECURITY PROVISIONS

Provide site security person at all times when there are no on-site activities. Maintain 24-hour security during weekends and holidays. Site security shall include, but not be limited, to:

- a. Limit vehicular access to authorized vehicles and personnel only.
- b. Limit public access to travel along access road only. Access road shall be kept closed at all times except for passage of authorized personnel and vehicles.
- c. Maintain a list of authorized personnel and subcontractors available at site offices.
- d. Maintain a sign-in log documenting visitors, deliveries, and security incidents. Include date, name, address, company, time in and time out for each employee and visitor.
- e. Check fenced areas, equipment, trailers on a daily basis. If damage is observed or vandalism is found report to Contracting Officer.

3.7.1 Visitors

No visitors will be allowed on site without knowledge of Contractor and permission of Contracting Officer. Direct visitors to report upon arrival to Contractor's Field Office for site safety and accident prevention briefing. Provide visitors appropriate protective equipment (i.e., ear plugs, safety glasses, etc.).

3.8 TEMPORARY PROJECT SAFETY FENCING

As soon as practicable, but not later than 15 days after the date established for commencement of work, the Contractor shall furnish and erect temporary project safety fencing at the work site. The safety fencing shall be a high visibility orange colored, high density polyethylene grid or approved equal, a minimum of 42 inches high, supported and tightly secured to steel posts located on maximum 10 foot centers, constructed at the approved location. The safety fencing shall be maintained by the Contractor during the life of the contract and, upon completion and acceptance of the work, shall become the property of the Contractor and shall be removed from the work site.

3.9 CONSTRUCTION FENCING AND DANGER SIGNS

a. The Contractor shall furnish, install, and maintain barbed wire fencing along the entire right-of-way lines. The fence shall be installed prior to construction. The fence shall contain a minimum of four strands of barbed wire and be at least 4 feet in height. Access gates (size and quantity determined by the Contractor) shall be provided to permit movement of machinery and equipment. The fence shall be grounded to reduce possibilities of electrical shock. The fence shall be maintained to restrain the public until completion of construction.

b. The Contractor shall furnish 28 danger signs, as indicated on the sketch appended to the end of this Section, and post them on the fence at locations directed by the Contracting Officer. The signs shall be of the format, style, and minimum size 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. [For work in Puerto Rico and the Virgin Islands, Contractor is required to post both the English and Spanish version of the sign. The signs shall be posted together.]

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

3.10 CONTRACTING OFFICER'S FIELD OFFICE

Supply and maintain lockable field office separate from Contractor for use by Contracting Officer.

3.10.1 Office Trailer

a. An all metal exterior, sides and roof; double-insulated walls, floor, and roof; electric baseboard heat; self-contained, built-in air conditioning; and 110 volt wall outlets.

b. Security guard screens, screens, and blinds for all windows.

c. Toilet facility -- A separately enclosed room properly ventilated and complying with applicable sanitary codes including hot and cold running water and flush type toilet.

d. Installed during site mobilization.

3.10.2 Office Equipment

Provide following furnishings:

- 2 - Office desks with five lockable drawers (60 inches by 30 inches, laminated top) and swivel chair for each (desks should be designed for use with PCs)
- 1 - Conference Table with eight chairs
- 1 - First aid kit, wall mounted
- Intercom connection to Contractor's secretarial station
- 1 - Fire resistant, five drawer, legal size lockable filing cabinet
- 2 - Five drawer, letter size lockable filing cabinets
- Telephone answering machine with remote answering capability and voice time/day stamp
- 1 - Table to support FAX and printer
- 2 shelf sets - Four shelves high by 12 inches deep by 3 feet long (attachable to wall)
- 2 - 3' x 6' Cork Bulletin Boards
- 3 - 3' x 6' Dry Erase Boards
- 3 - Waste baskets
- 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 - Vertical filing plan rack sufficient for contract drawings
- 1 - Seven cubic foot refrigerator with freezer
- 1 - Microwave oven
- 1 - Water cooler/dispenser with minimum 3 gallon capacity

3.11 PLANT COMMUNICATION

Whenever the Contractor has the individual elements of its plant so located that operation by normal voice between these elements is not satisfactory, the Contractor shall install a satisfactory means of communication, such as telephone or other suitable devices. The devices shall be made available for use by Government personnel.

3.12 CLEANUP

Construction debris, waste materials, packaging material and the like shall be removed from the work site daily. Any dirt or mud which is tracked onto paved or surfaced roadways shall be cleaned away. Materials resulting from demolition activities which are salvageable shall be stored within the fenced area described above or at the supplemental storage area. Stored material not in trailers, whether new or salvaged, shall be neatly stacked when stored. Refer to Section 01355 ENVIRONMENTAL PROTECTION for solid waste and post construction clean-up.

3.13 RESTORATION OF STORAGE AREA

Upon completion of the project and after removal of trailers, materials, and equipment from within the fenced area, the fence shall be removed and will become the property of the Contractor. Areas used by the Contractor for the storage of equipment or material, or other use, shall be restored to the original or better condition. Gravel used to traverse grassed areas shall be removed and the area restored to its original condition, including top soil and seeding as necessary.

3.14 CONSTRUCTION FORMS AND DETAILS

From the Jacksonville District Home Page, click the links ORGANIZATIONS, ENGINEERING, then CONSTRUCTION FORMS AND DETAILS. See web site address www.saj.usace.army.mil/cadd/end/construction_forms_and_details.htm

-- End of Section --