

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE	PAGE 1 OF 2 PAGES
2. AMENDMENT/MODIFICATION NO. 0001	3. EFFECTIVE DATE 9/21/01	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)		
6. ISSUED BY U. S. ARMY CORPS OF ENGINEERS GALVESTON DISTRICT OFFICE P. O. BOX 1229 GALVESTON, TEXAS 77553-1229	CODE EC	7. ADMINISTERED BY (If other than Item 6) U. S. ARMY CORPS OF ENGINEERS GALVESTON DISTRICT OFFICE P. O. BOX 1229 GALVESTON, TEXAS 77553-1229		CODE CT	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(√)	9A. AMENDMENT OF SOLICITATION NO. DACW64-01-B-0033
				×	9B. DATED (SEE ITEM 11) 9/4/01
					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  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.)

Sabine-Neches Waterway, Texas, Port Arthur Canal, Junction Area, and Turning Basins in Jefferson County, Texas, Dredging

(See Attached)

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)	

1. The specifications and drawings for Invitation No. DACW64-01-B-0033, Dredging, Port Arthur Canal, Junction Area, and Turning Basins in Jefferson County, Texas, Sabine-Neches Waterway, Texas, advertised 4 September 2001, and for which bids are scheduled to be opened on 4 October 2001, are hereby modified as follows:

(a) **BID OPENING DATE IS HEREBY RESCHEDULED FOR 2:00 PM LOCAL TIME IN THE CONTRACTING DIVISION CONFERENCE ROOM 389C, JADWIN BUILDING, 10 OCTOBER 2001.**

(b) Specifications.

(1) STANDARD FORM 1442, Item 12(b). - Change "5" to "2".

(2) Page 02312-1. - In the title of this SECTION, delete the word "STRIPPING."

(3) SECTION 02482 - DREDGING. - The enclosed SECTION 02482 entitled DREDGING supersedes that issued with this Invitation.

Encl  
SECTION 02482

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**SECTION 02482 - DREDGING****PART 1 - GENERAL****1.1 SCOPE OF WORK.**

1.1.1 Work to be Done. The work in this Section consists of furnishing plant, labor, materials, and equipment and performing the work required by these specifications, schedules, and drawings forming parts thereof for dredging Port Arthur Canal, Junction Area, and Turning Basins in Jefferson County, Texas as follows:

Required Depth Below MLT (Feet)	Required Width (Feet)	From Station	To Station	Distance Between Stations (Feet)
<b>PORT ARTHUR CANAL</b>				
42	500-515	0+00	200+00*	28,954.0
42	515-1,788	290+00	326+24.5*	3,624.5
<b>SABINE-NECHES CANAL</b>				
42	1060+400	0+00	40+00	4,000.0
<b>ENTRANCE CHANNEL TO PORT ARTHUR TURNING BASINS</b>				
42	282-736	0+00	16+00	1,600.0
<b>PORT ARTHUR EAST TURNING BASIN</b>				
42	347-370	0+00	17+65	1,765.0
<b>PORT ARTHUR WEST TURNING BASIN, CONNECTING CHANNEL AND TAYLORS BAYOU TURNING BASIN</b>				
42	1,233-90	16+00	96+00***	8,412.7
			<b>TOTAL</b>	<b>48,356.2</b>

**EQUATIONS IN STATIONING:**

\* Sta. 279+12.8 (Backward) = Sta. 279+58.8 (Forward)  
\*\* Sta. 326+24.5 (Port Arthur Canal) = Sta. 0+00 (Sabine-Neches Canal)  
\*\*\* Sta. 22+10.2 (Backward) = Sta. 17+97.5 (Forward) (Port Arthur West Turning Basin)

1.1.2 The varying bottom width(s) and lengths to be dredged are shown on the drawings referred to in the SPECIAL CONTRACT REQUIREMENTS, STANDARD CLAUSE entitled CONTRACT DRAWINGS AND SPECIFICATIONS. The Contractor shall remove sufficient material to provide the limiting side and end slopes specified in the Paragraph: OVERDEPTH, SIDE AND END SLOPES, below.

**1.2 LOCATION.** The work is located near Port Arthur, Texas.

**1.3 OBSTRUCTION OF CHANNEL.** The Government will not undertake to keep the Channel free from vessels or other obstructions, except to the extent of the 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 using a method that will obstruct navigation as little as possible, and if the Contractor's plant does obstruct the Channel and makes the passage of vessels difficult or endangers them, the plant shall be promptly moved on the approach of a vessel as far as may be necessary to afford a practicable passage. Upon completion of the work, the Contractor shall promptly remove its plant, including ranges, buoys, piles, and other marks placed under this contract.

**1.4 TEMPORARY REMOVAL OF AIDS TO NAVIGATION.** The temporary removal or changes in locations of channel markers may be required to facilitate dredging operations. The Contractor shall notify the Contracting Officer at least 21 days prior to the date that the removal or change in location of channel markers will be required so the U.S. Coast Guard can perform the work and so navigation interests may be informed sufficiently in advance of the proposed removal or change in location.

**1.5 NOTIFICATION PRIOR TO COMMENCEMENT OF DREDGING OPERATIONS.** The Contractor shall notify the Area Engineer, Northern Area Office, Port Arthur Station in writing, at least 10 days prior to commencement of dredging operations, the location or locations at which a dredge or dredges will be placed on the work. This information is required in addition to the progress charts and schedules provided for in the CONTRACT CLAUSE entitled SCHEDULE FOR CONSTRUCTION CONTRACTS.

**1.6 UTILITIES ACROSS THE LIMITS OF DREDGING.** There are no known pipelines.

## **1.7 WORK COVERED BY THE CONTRACT PRICE.**

1.7.1 Mobilization and Demobilization. The contract lump sum price for "Mobilization and Demobilization" shall include the costs in connection with mobilization and demobilization of the plant necessary to perform work under the various bid items. The contract price shall include transportation and other costs incidental to delivery of the plant and other equipment to the general work area in condition ready for operation and, after the completion of the work, for removal of the plant and equipment from the work sites.

1.7.2 Dredging. The contract price per cubic yard for "Dredging" shall include the cost of removal and placement of the material as specified in Paragraphs: CHARACTER OF MATERIALS and PLACEMENT OF EXCAVATED MATERIAL below. The contract price(s) for dredging shall also include the costs for placing and handling pipelines to and at the Placement Areas and for design, construction, and maintenance of levees, drop-outlet, and ditches necessary to confine the material within the Areas shown.

1.7.3 Pipelines. The contract lump sum price for "Pipelines" shall include the cost to place, remove, and handle shore pipelines to and at the Placement Areas, for procurement of materials, and for construction of ramps or installation of culvert pipes that may be necessary in connection with placing shore pipelines.

**1.8 CHARACTER OF MATERIALS.** The material to be removed to restore the depths within the limits specified in the Paragraph: DESCRIPTION OF WORK, above, is composed of shoals that have accumulated over a period of time; however, some virgin material may be encountered in the allowable overdepth, and side slope dredging. Bidders are expected to examine the work site and the records of previous dredging, which are available in the Northern Area Office, Port Arthur Project Office and after investigation decide for themselves the character of the materials.

## **1.9 MEASUREMENT.**

1.9.1 Dredging. The total amount of material removed and to be paid for under this Item of the Bidding Schedule shall be measured by the cubic yard in place. The measurements shall be made by computing the volume between the bottom surface shown by fathometer soundings of the last survey made before dredging and the bottom surface shown by the fathometer soundings of a survey made as soon as practicable after the entire work specified in the Paragraph: SECTIONS below, has been completed and included within the limits of the overdepth and side and end slopes specified in the Paragraph: OVERDEPTH, SIDE AND END SLOPES below, less deductions that may be required for misplaced material specified in the Paragraph: PLACEMENT OF EXCAVATED MATERIAL below.

1.9.2 Electronic Positioning. In using electronic positioning the Government will make a corrective adjustment, if applicable, in the volume computation process to compensate for the repeatability tolerance of the electronic positioning equipment,

between "before-dredging" and "after-dredging" surveys. The amount of this adjustment will be limited to a shift of plus or minus 3 meters on an azimuth from the baseline normal to the centerline of the cut, of the "after-dredging" survey with respect to the "before-dredging" survey. Adjustments made in "after-dredging" cross sections will also result in a similar adjustment to the "before-dredging" cross sections in the area not dredged. The horizontal control points shown are the control points the Government will use to perform electronic surveys on the Waterway. The Government does not guarantee permanent access to these control points; therefore, it may be necessary for the Contractor to establish its own network of survey points from these survey points or from other U.S. Coast and Geodetic Survey (USCGS) monuments. Location and description of the horizontal control points, which the Government plans to use to perform electronic surveys on the Port Arthur Canal project, are available at the Port Arthur Project Office. The Contractor shall be responsible for establishing its own reference line to conduct hydrographic surveys and dredging operations if electronic positioning equipment is not used.

1.9.3 Drawings. The drawings already prepared as specified in the SPECIAL CONTRACT REQUIREMENTS, STANDARD CLAUSE entitled CONTRACT DRAWINGS AND SPECIFICATIONS represent conditions existing as of the date of their preparation. However, to reflect anticipated shoaling occurring between the dates of preparation of the maps and drawings and the dates of the "before-dredging" sections, the estimated dredging quantities shown in the Bidding Schedule have been adjusted accordingly. The depths and elevations shown thereon will be verified and corrected by fathometer soundings taken by the Government before dredging. Determination of quantities removed and the deductions made therefrom to determine quantities by in-place measurement to be paid for in the area specified, after having once been made will not be reopened, except on evidence of collusion, fraud, or obvious error.

## **1.10 PAYMENT.**

1.10.1 Mobilization and Demobilization. Payment for this item will be made pursuant to the conditions of the SPECIAL CONTRACT REQUIREMENTS, STANDARD CLAUSE entitled PAYMENT FOR MOBILIZATION AND DEMOBILIZATION.

1.10.2 Dredging. Monthly partial payments for "Dredging" will be based on approximate quantities determined by fathometer soundings or sweepings taken behind the dredge.

1.10.3 Pipelines. Monthly partial payments for "Pipelines" will be made based on estimates of the work completed during the period.

## **PART 2 - PRODUCTS**

**2.1 BRIDGE-TO-BRIDGE RADIOTELEPHONE EQUIPMENT.** Dredge and self-propelled attendant floating plant shall be radiotelephone equipped to comply with the provisions of the Vessel Bridge-to-Bridge Radiotelephone Act (Public Law 92-63). This will require, as a minimum, the radiotelephone equipment capable of transmitting and receiving on 156.65 MHz (Channel 13). Multi-channel equipment will also require

156.8 MHz (Channel 16). Dredge tugs and tenders will be considered towing vessels within the meaning of the Act.

### **PART 3 - EXECUTION**

#### **3.1 ESTIMATED QUANTITIES.**

3.1.1 Dredging Prism. The total estimated quantity of material necessary to be removed from the required dredging prism, exclusive of allowable overdepth, to complete the work specified in the Paragraph: DESCRIPTION OF WORK above, is 2,882,000 cubic yards, place measurement, including anticipated shoaling occurring prior to the dates of the "before-dredging" sections.

3.1.2 Overdepth Dredging. The maximum amount of allowable overdepth dredging is estimated to be 633,000 cubic yards, place measurement, including anticipated shoaling occurring prior to the dates of the "before-dredging" sections.

3.1.3 Estimated Quantities. Within the limit of available funds, the Contractor will be required to excavate the entire quantity of material necessary to complete the work specified in the Paragraph: DESCRIPTION OF WORK above, be it more or less than the amounts above estimated. The work is to be done in accordance with this contract and at the contract price or prices, subject to the provisions of NON-REGULATED SPECIAL CONTRACT REQUIREMENTS CLAUSE entitled VARIATIONS IN ESTIMATED QUANTITIES - DREDGING.

3.1.4 Restriction. No more than one (1) dredge shall be allowed to pump into the given Placement Area at one (1) time.

**3.2 QUALITY CONTROL.** The Contractor shall establish and maintain a Quality Control System for dredging operations to assure compliance with contract requirements and record its inspections and tests under this System including, but not limited to, the following:

3.2.1 Discharge Effluent. The Contractor shall sample the effluent from each spillway and the corresponding receiving water at least daily. When the effluent density exceeds 8 grams per liter more than the corresponding density of the receiving body of water, the Contractor shall immediately provide additional pumping capacity by raising the spillway invert, as necessary, or shall discontinue dredge placement operations into the Placement Area until the effluent density returns to the acceptable 8 grams per liter differential. The minimum frequency of sampling at the weir shall be increased when the effluent density increases or nears the maximum specified limit. Base samples of the receiving body of water shall be taken upstream or opposite to the direction of tidal flow where the discharge effluent enters the Port Arthur Canal or Sabine-Neches Canal.

3.2.2 Weir Samples. Each sample at the weir shall be made up by partially filling, without overflow, a 1-quart container with the mixture flowing over the weir at not less than three (3) different places in the length of the weir and combining the mixture in a bucket or other suitable container submerged to a depth of not over 2 feet.

When settled solids are not present in the weir sample, the density shall be determined by the hydrometer method. When settled solids are present in the weir sample, both the hydrometer method and the weight-volume method shall determine the density.

3.2.2.1 Hydrometer Method. When the hydrometer method is used for density determination, an approved hydrometer, graduated to read in grams/liter of suspension, shall be used. The water sample shall be thoroughly mixed and transferred to a 1,000-ml laboratory cylinder and the hydrometer used as specified by the manufacturer.

3.2.2.2 Weight-Volume Method. When the weight-volume method is used for density determination, the total sample shall be measured to obtain volume in liters and weight in grams. Measurements shall be made with a 1,000 ml laboratory cylinder and a scale or balance capable of weighing the sample and cylinder to the nearest gram. The unit weight shall then be obtained by dividing the total weight in grams by the total volume in liters.

3.2.3 Inspecting and Sampling. Government inspectors plan to inspect and take water samples no less than once a week. The Contractor shall provide assistance necessary to the Government inspectors and shall construct and maintain a hand-railed walkway from the levee to each Drop-outlet Structure and along the entire weir length when in use.

3.2.4 Records. A copy of the records of inspections and tests, as well as records of corrective action taken, shall be submitted as directed.

**3.3 SECTIONS.** For the purpose of acceptance, the dredging work item in the Bidding Schedule is divided into Sections, as follows:

Station No.	From Station	To Station	Length of Section (Feet)	(1)(2) Prescribed Depth (CY)	(2) Allowable Overdepth (CY)	(2) Total Estimated (CY)
<b>PORT ARTHUR CANAL</b>						
1	0+00	50+00	5,000	153,000	58,000	211,000
2	50+00	100+00	5,000	142,000	48,000	190,000
3	100+00	150+00	5,000	154,000	39,000	193,000
4	150+00	200+00	5,000	123,000	45,000	168,000
5	200+00	260+00	6,000	182,000	69,000	251,000
6	260+00	300+00*	4,000	179,000	47,000	226,000
7	300+00	326+24.5**	2,624.5	924,000	108,000	1,032,000
<b>SUBTOTALS</b>			<b>32,578.5</b>	<b>1,857,000</b>	<b>414,000</b>	<b>2,271,000</b>

Station No.	From Station	To Station	Length of Section (Feet)	(1)(2) Prescribed Depth (CY)	(2) Allowable Overdepth (CY)	(2) Total Estimated (CY)
(Cont'd)						
<b>SABINE-NECHES CANAL</b>						
8	0+00	40+00	4,000	372,000	54,000	426,000
<b>ENTRANCE CHANNEL AND PORT ARTHUR EAST AND WEST TURNING BASINS</b>						
9	0+00	31+09.8***	3,522.5	371,000	66,000	437,000
9A	0+00	17+65	1,765	112,000	27,000	139,000
<b>SUBTOTALS</b>			<b>5,287.5</b>	<b>483,000</b>	<b>93,000</b>	<b>576,000</b>
<b>WEST TURNING BASIN, CONNECTING CHANNEL AND TAYLORS BAYOU TURNING BASINS</b>						
10	31+09.8	96+00	6,490.2	170,000	72,000	242,000
<b>TOTALS</b>			<b>48,356.2</b>	<b>2,882,000</b>	<b>633,000</b>	<b>3,515,000</b>
<b>EQUATIONS IN STATIONING:</b>						
* Sta. 279+12.5 (Backward) = Sta. 279+58.8 (Forward)						
** Sta. 326+24.5 (Port Arthur Canal) = Sta. 0+00 (Sabine-Neches Canal)						
*** Sta. 22+10.2 (Backward) = Sta. 17+97.5 (Forward) (Port Arthur West Turning Basin)						
(1) The term "prescribed depth" is synonymous with the term "required depth" and "required dredging prism" used elsewhere in these specifications.						
(2) Includes anticipated shoaling.						

**3.4 ORDER OF WORK.** The dredging order of work order shall be performed in the following order:

- (1) The Contractor shall perform the levee and miscellaneous work in Placement Area No. 8 and shall dredge Sections 9, 9A, and 10.
- (2) The remaining Sections may be dredged in any order desired.

**3.5 PLACEMENT OF EXCAVATED MATERIAL**

3.5.1 General. The Contractor shall inspect the proposed Placement Areas to ensure that using the Areas for placement operations will not place it in violation of the applicable Federal, State, or local statutes concerning fish and wildlife. Particular statutes, which the Contractor shall consider include, but are not limited to, the Federal Migratory Bird Treaty Act and the Endangered Species Act of 1973. The material excavated shall be transported and deposited in the Placement Areas shown. Except as otherwise noted, material will not be deposited or allowed to flow into project channels, a bayou or stream tributary to the Waterway, an existing drainage outlet ditch, canal,

water intake, or outlet facility, nor shall materials be allowed to flow onto improved areas including highways and roads in or adjacent to the Placement Areas. In the event a stream, bayou drainage outlet, ditch, canal, water intake or outlet facility becomes shoaled as a result of the dredging or placement operations, the Contractor shall promptly remove these shoals and the material shall be placed in the Placement Area(s). Dragging or washing operations to remove the shoals will not be permitted. Holes dug on the banks for deadmen or anchorage shall be filled. The Contractor shall adequately inspect its placement operations in the Placement Areas daily to reduce the possibility of accidental breaching of levees and Drop-outlet Structure with resulting spillage of dredged materials outside the Area. If levee failures occur while materials are being pumped into the Placement Areas, dredging operations shall be stopped immediately, and deposit of the material in the Area shall not be resumed until the confining structures have been restored to an approved condition. Materials shall be deposited so that no water is impounded and natural drainage is not obstructed. Once placement operations are completed in a confined area for which the Placement Area is being used, the boards on the Drop-outlet Structure of that Placement Area shall be removed at a proper rate to allow drainage of the Area. Every effort has been made to give the pertinent details on the location of utility pipelines, structures, and other facilities, which may be encountered in performing the levee and Drop-outlet Structure work. The data shown are substantially correct. However, the Contractor shall investigate existing conditions and satisfy itself as to the existence of additional construction, which may interfere with the work herein specified. In confined areas, levee and spillway work required shall be completed and accepted prior to placement operations in that Area. Confined areas shall be maintained in operational condition until completion and acceptance of the work in this contract. The NON-REGULATED SPECIAL CONTRACT REQUIREMENTS CLAUSE entitled DAMAGE TO WORK is only applicable to damage of levees and other non-dredging items.

3.5.2 Confined Placement Area No. 8. Levees and ditches shall be constructed to the templates shown and as specified in the SECTION entitled EMBANKMENT CONSTRUCTION. Both existing Drop-outlet Structures shall be repaired as necessary, as a minimum, replacing damaged or missing weir boards. The Contractor shall take precautionary measures to ensure boards are not removed by the general public using the adjacent levee roadway. Laying pipelines to the Placement Area will require crossing the Texas Department of Transportation roadway, Highway 82, and the City of Port Arthur's T.B. Ellison Roadway, which parallels the Waterway. Crossing shall be made through the existing culverts shown. The Contractor shall conduct discharge operations in the following sequence:

- (1) Sections 1, 2, and 3 shall be pumped to the discharge corridor located at the culvert crossing No. 6, as shown on the Contract Plan Sheet No. 14.
- (2) Sections 4, 5, and 6 shall be pumped to the discharge corridor located at the culvert crossing No. 5, as shown on the Contract Plan Sheet No. 14.

- (3) Sections 7, 8, 9, 9A and 10 shall be pumped to the discharge corridor located at the culvert crossing No. 4, as shown on the Contract Plan Sheet No. 14.

Culverts shall be cleaned out as specified herein and in the SECTION entitled CLEARING AND REMOVAL OF DEBRIS.

3.5.2.1 Levee Volume. The following "neatline volumes" have been used by the U.S. Army Corps of Engineers to prepare this Government estimate. These are estimated volumes only and it is the Contractor's responsibility to interpret the volume numbers used to prepare an estimate for bid opening. "Neatline volumes" is defined as the unadjusted, raw quantities computed from the levee templates. The percentage for items including overbuilding, compaction, settlement, foundation displacement, and construction waste shall be the responsibility and decision of the Contractor. The volume figures for the various Placement Areas in this contract are as follows:

<b>PLACEMENT AREA NO.</b>	<b>LEVEE VOLUMES</b>
8	1,320,000 Cubic Yards

3.5.3 Pipelines.

3.5.3.1 Pipeline Right-of-way. The dredge pipeline routes to the Placement Area shall follow closely the locations shown. Detail right-of-way drawings showing the location of the pipeline routes with respect to property lines are available for inspection at the Port Arthur Project Office.

3.5.3.2 Location Details. Every effort has been made to give pertinent details on the locations of utility pipelines and other facilities, that may be encountered in trenching or jacking operations. The data shown are substantially correct. However, the Contractor shall investigate existing conditions and satisfy itself as to the existence of additional construction, that may interfere with pipeline lying herein specified.

3.5.3.3 Submerged Pipeline Sections. If the Contractor elects to use a submerged section in the dredge discharge pipeline for crossing a navigable channel it may do so without the formality of obtaining a Department of the Army permit for work on structures in navigable waters. However, three (3) copies of detailed plans of the submerged section shall be submitted and approved prior to use of the submerged section. The plans shall indicate clearly the width and depth of the navigation opening and the method used to mark it by day and by night for the safety of navigation. The minimum bottom width of the submerged section shall not be less than 400 feet wide for channels whose authorized width is greater than 400 feet. The minimum bottom width of the submerged section for channels whose authorized width is less than 400 feet shall be the width of the authorized Federal Channel. The highest point on the pipe or ball connection occurring across the bottom width of a submerged section shall not be higher than 44 feet below Mean Low Tide in the Sabine Pass Channel. Lighted buoys,

meeting the requirements of U.S. Coast Guard Regulation 33 C.F.R. 62.25, shall be provided by the Contractor to mark the navigation opening. A red buoy exhibiting a quick flashing red light shall be used to mark the right side of the opening and a black buoy exhibiting a quick flashing green light shall be used to mark the left side of the opening. The frequency of the flashes shall be not less than 60 per minute. "Right side" and "left side" of the opening shall be in conformance with the lateral system of buoyage established by the U.S. Coast Guard. Requirements for the lighted buoys and description of the lateral system will be found in the U.S. Coast Guard publication CG 208 entitled "Aids to Navigation." Lights to be displayed on pipelines shall be in accordance with U.S. Coast Guard Regulation 33 C.F.R. 80.23.

#### 3.5.4 Unauthorized Placement of Material.

3.5.4.1 Misplaced Excavated Material. Excavated material that is deposited other than in places designated or approved will not be paid for and the Contractor may be required to remove the misplaced excavated material and deposit it where directed at Contractor's expense.

3.5.4.2 Debris Disposal. During the progress of the work, the Contractor shall not deposit worn out discharge pipe, wire rope, scrap metal, timbers, other rubbish or obstructive material in the Placement Area, except as specified herein, or along the banks of the navigable waters. This material, together with scrap, rope, wire cable, piles, pipe, or other obstructive material which may be encountered during the dredging operations, shall be disposed by the Contractor at approved locations.

3.5.5 Easements. Permits authorizing the laying of shore pipe, and for placement of dredged material in the Placement Area, are on file and available for examination in the office of the U. S. Army Corps of Engineers, Jadwin Building, 2000 Fort Point Road, Galveston, Texas and the Port Arthur Project Office. The instruments authorizing the laying of shore pipelines may contain certain restrictions relative to specific route, location, and general use of the land. These instruments form a part of these specifications and the Contractor shall strictly comply with the terms thereof.

#### 3.5.6 Preservation of Public and Private Property.

3.5.6.1 Damages. Fences, roads, ditches, private or public grounds, and other structures or improvements damaged as a result of the Contractor's operations herein specified shall be repaired or rebuilt by the Contractor at its expense. The areas used by the Contractor in laying and maintaining pipelines shall be restored to the same or as good a condition as existed prior to commencement of the work. Upon completion of the work, the ends of culverts shall be fully closed with wooden bulkheads and trenches and bank cuts shall be backfilled to original ground level.

3.5.6.2 Liability and Restoration. The Contractor shall preserve and protect the existing informational and directional signs, camp facilities, water wells and tanks, station markers, mile markers, and mooring piles that have been established along either bank of the Waterway within the reaches of the dredging operations covered herein. The Contractor shall be liable for and will be required to replace or restore at its

expense the signs, camp facilities, water wells and tanks, markers, and mooring piles damaged or destroyed as a result of dredging operations herein specified.

### 3.5.7 Alternate Placement Area(s) Proposed by Contractor After Award of Contract.

3.5.7.1 Alternate Placement Area(s). If, after award of the contract, a placement area(s) other than that specified herein is proposed, its acceptance will be subject to approval of the Contracting Officer. The Contractor shall furnish written permission from the owners for the use of the substitute placement area(s) and written permission from the owners of the properties involved in obtaining access to the substitute placement area(s). The Contractor shall coordinate the use of the substitute placement area(s) with Federal and State Natural Resource Agencies and shall submit, with its proposal, documentation that demonstrates compliance with the applicable laws and regulations pertinent to designation and coordination of dredged material placement area(s). The Galveston District shall be consulted for specific requirements. Expenses incurred in connection with providing and making available another placement area(s) shall be borne by the Contractor. Materials deposited thereon and operations in connection therewith shall be at the Contractor's risk.

3.5.7.2 Data Submittal. The award of the modification will be subject to the approval of the proposed Contractor-furnished placement area(s) and unless the foregoing required data are furnished with the Contractor's request, the modification for the use of the proposed substitute placement area(s) will not be considered.

## **3.6 OVERDEPTH, SIDE, AND END SLOPES.**

3.6.1. Overdepth. To cover inaccuracies of the dredging process, material actually removed from within the specific areas to be dredged to depths as specified in the Subparagraph: Table of Allowable Overdepth, Side and End Slopes below, will be estimated and paid for at contract price or prices.

3.6.2. Side and End Slopes. Material actually removed from within approved limits, to provide for final side and end slopes as specified in the Paragraph: OVERDEPTHS, SIDE AND END SLOPES above, but not in excess of the amounts originally above these limiting side and end slopes will be estimated and paid for, whether dredged in original position or by dredging space below the pay slope plane at the bottom of the slope for upslope material capable of falling into the cut. In computing the limiting amount of side and end slopes dredging, net dimensions, without allowance for overdepth, will be used.

3.6.3 Excessive Dredging. Material taken from beyond the limits as extended in the Subparagraph: Overdepth, and Side and End Slopes, above, will be deducted from the total amount dredged as excessive overdepth dredging or excessive side or end slope dredging, for which payment will not be made. Nothing herein shall be construed to prevent payment for the removal of shoals performed in accordance with the applicable provisions of either the NON-REGULATED SPECIAL CONTRACT REQUIREMENTS

CLAUSES entitled FINAL EXAMINATION AND ACCEPTANCE or SHOALING.

3.6.4 Table of Allowable Overdepth, Side and End Slopes.

From Station	To Station	Allowable Overdepth (Feet Below Required Depth)	Final				Above Plane (Feet Below MLT)
			Side Slope		End Slope		
			Grade		Grade		
			Vertical	Horizontal	Vertical	Horizontal	
<b>PORT ARTHUR CANAL</b>							
00+00	---	---	---	---	1	2	42
00+00	326+24.5**	1	1	2	---	---	42
<b>SABINE-NECHES CANAL</b>							
00+00	40+00	1	1	2	---	---	42
40+00	---	---	---	---	1	2	42
<b>ENTRANCE CHANNEL AND WEST TURNING BASIN</b>							
00+00	96+00***	1	1	2	1	2	42
40+00	---	---	---	---	1	2	42
<b>EAST TURNING BASIN</b>							
00+00	17+65	1	1	2	---	---	42
17+65	---	---	---	---	1	2	42
* Sta. 279+12.8 (Backward)= Sta. 279+58.8 (Forward) ** Sta. 326+24.5 (Port Arthur Canal)= Sta. 0+00 (Sabine-Neches Canal) *** Sta. 22+10.2 (Backward)= Sta. 17+97.5 (Forward)(Port Arthur West Turning Basin)							

**3.7 REPORTING REQUIREMENTS.** The Contractor shall prepare and maintain a daily Dredging Report using the Galveston District's automated Contractor's Daily Report database. This database replaces SWG Form 89. The program will be provided to the Contractor using 3.5-inch diskettes at the pre-construction conference. Instructions and demonstration on the installation and use of this software will also be provided at the pre-construction conference. The Contractor will need an IBM

compatible with a minimum of a 486/66 processor with 8 Mb of RAM running Microsoft Windows 3.11 or Microsoft Windows 95, Y2K compliant. Hard drive space needed to install the program and accommodate the data will be approximately 15 MB. Printing will be best accomplished with either a LaserJet or Inkjet Printer on 8.5- by 11-inch paper in the portrait mode. Modem settings will be automatically handled at the point of transmission, but the Contractor is required to know what serial communications (COM) port it used for the modem (for example: COM1, COM2, or COM3). A telephone number for transmitting the data by modem to the District server will also be provided at the pre-construction conference. The Contractor will however have the option of submitting the data either by diskette or by modem. If the Contractor elects to submit the data by modem, the data shall be submitted on a daily basis. If the Contractor elects to submit the reports by diskette, the data will still be submitted on a daily basis when possible. Coordination on delays shall be made with the Area Engineer or its designated representative. The Contractor will be required to print and sign reports and submit the original hard copies to the Area Engineer to verify authentication. The District Office using the reporting features of the database will generate monthly reports. If technical problems arise, the point-of-contact for this matter will be Tim Baumer at (409) 766-3874.

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