

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE	OF	PAGES
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2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
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6. ISSUED BY CODE	7. ADMINISTERED BY (If other than Item 6) CODE
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8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)	(X)	9A. AMENDMENT OF SOLICITATION NO.
		9B. DATED (SEE ITEM 11)
		10A. MODIFICATION OF CONTRACT/ORDER NO.
		10B. DATED (SEE ITEM 11)

CODE	FACILITY CODE
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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 _____ 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 your 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 ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	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.)

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

1. The specifications and drawings for Invitation No. DACW64-02-B-0015, Dredging, Main Channel Aransas Bay and Tributary Channel to Aransas Pass in Nueces, Aransas, and San Patricio Counties, Texas, Gulf Intracoastal Waterway, Texas, advertised 19 February 2002, and for which bids are scheduled to be opened on 21 March 2002, are hereby modified as follows:

(a) Specifications.

(1) SECTION 02331, EMBANKMENT CONSTRUCTION. -This Section shall be deleted and the enclosed new SECTION 02331 entitled EMBANKMENT CONSTRUCTION shall be substituted therefor.

(2) SECTION 02482, DREDGING. - This Section shall be deleted and the enclosed new SECTION 02482 entitled DREDGING shall be substituted therefor.

(3) SECTION 02619, PIPE. - This Section shall be deleted.

(4) Page 02700-2, Subparagraph 1.3.4. - This Subparagraph shall be deleted.

(5) Page 02700-2, Subparagraph 2.2.3. - Delete the first sentence and substitute the following: "Galvanizing of steel handrails and grating shall conform to the requirements of ASTM Standard A 123."

(b) Drawings.

(1) Sheet 1 of 21. -The enclosed new Sheet 1 of 23 supersedes that issued with this Invitation. Also, renumber the existing Sheets to read "Sheet 1 of 23" through "Sheet 14 of 23,"and "Sheet 19 of 23."

(2) Sheets 15 of 21 Through 17 of 21. -The enclosed new Sheets 15 of 23 through 17 of 23 supersede Sheets 15 of 21 through 17 of 21 issued with this Invitation.

(3) Sheet 18 of 21. -Renumber this Sheet to read "Sheet 18 of 23." Also, next to the plotted cross sections at STATIONS 0+00 AND 49+45.76, insert 'SEMI-COMPACTED FILL" and draw an arrow to the hatched fill area shown on each cross section.

(4) Sheet 20 of 21. - Renumber this Sheet to read "Sheet 20 of 23." Also, next to the plotted cross sections at STATIONS 0+00 AND 66+80.94, insert 'SEMI-COMPACTED FILL" and draw an arrow to the hatched fill area shown on each cross section.

(5) Sheet 21 of 21. - The enclosed new Sheet 21 of 23 supersedes that issued with this Invitation."

(5) Sheets 22 of 23 and 23 of 23. - The enclosed new Sheets 22 of 23 and 23 of 23 shall be added to and become part of this Invitation.

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2. This amendment shall be attached to and become a part of the specifications.

3 Encls:

1. Section 02331

2. Section 02482

3. Sheet 1 of 23

Sheets 15 of 23
thru 17 of 23, &
21 of 23 thru
23 of 23

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SECTION 02331 - EMBANKMENT CONSTRUCTION

PART 1 - GENERAL

1.1 SCOPE OF WORK. The work covered in this Section consists of furnishing plant, labor, and equipment and performing the operations in connection with construction of levees as shown. Levee construction on Placement Areas Nos. 3 and 5 shall proceed continuously or in an approved staged execution so that the levees are completed to the required elevation and grade prior to commencement of dredging of Dredging Sections 15 through 17 in the Tributary Channel to Aransas Pass. The approved, staged execution is specified in the Paragraph: EMBANKMENT CONSTRUCTION below.

1.2 REFERENCES. The publication listed below forms a part of this specification to the extent referenced. The publication is referred to in the text by basic designation only.

American Society for Testing and Materials (ASTM) Publication.

D 2487-00

Classification of Soils for Engineering Purposes
(Unified Soil Classification System).

1.3 PROTECTION OF EXISTING SERVICE LINES AND UTILITY STRUCTURES. Existing utility lines that are shown or the locations of which are made known to the Contractor prior to excavation and that are to be retained, as well as utility lines constructed during excavation operations, shall be protected from damage during excavation and backfilling and if damaged, shall be repaired by and at the expense of the Contractor. In the event that the Contractor damages existing utility lines that are not shown, or the locations of which are not known to the Contractor, report of this damage shall be made immediately to the Contracting Officer. If it is determined that repairs shall be made by the Contractor, these repairs will be ordered in accordance with the CONTRACT CLAUSE entitled CHANGES.

1.4 CHANGES IN LEVEE ALIGNMENT. The right is reserved to make changes in the levee alignment as may be found necessary before completion of the work, but if it becomes necessary, through no fault of the Contractor, to abandon a line or location on which work has been done, payment for materials placed shall be made as specified in the Paragraph: PAYMENT, below.

1.5 MEASUREMENT.

1.5.1 Embankment and Fill Materials. Un-compacted and semi-compacted levee embankment materials shall not be measured for payment.

1.5.2 Stripping and Clearing of new and existing levees, foundation areas, and borrow areas and placement of stripped material and the costs in connection therewith shall be included in the contract lump sum price for "Levees, Drop-outlets, and Ditches."

1.5.3 Borrow Area Excavation for un-compacted fill shall not be measured for payment.

1.5.4 Borrow Area Excavation for semi-compacted fill shall be measured by the cubic yard for payment. The quantity shall be measured based on cross sections of the Borrow Area to be taken by the Contractor after stripping and again after completion of excavation. The cross sections shall be taken at a minimum 50-foot intervals in flat areas. Additional sections shall be taken across mounds or other uneven areas to allow for accurate quantity determination. The Contracting Officer shall be notified of the schedule of these surveys to allow for inspection or for taking Quality Assurance check surveys by the Government. As specified below, unsatisfactory material excavated from the borrow pit shall be disposed in abandoned portions of the borrow pit and the surfaces of this disposed, unsatisfactory material shall be surveyed, along with the excavated surfaces in the Borrow Area for quantity calculations. Additionally, satisfactory material used for construction of haul roads, staging areas or fill construction other than the required levees shall be surveyed and the calculated quantity subtracted from the quantity for payment. Additionally, unsatisfactory material disposed outside abandoned portions of the Borrow Area shall also be surveyed and the calculated quantity deducted from the payment quantity.

1.6 PAYMENT.

1.6.1 Mobilization and Demobilization. Payment for mobilization and demobilization of the Contractor's plant and equipment will be included in the contract lump sum prices entitled "MOBILIZATION AND DEMOBILIZATION (Sec. Nos. 1 thru 14)" and "MOBILIZATION AND DEMOBILIZATION (Sec. Nos. 15 thru 17)".

1.6.2 Drainage and Foundation Preparation. No separate payment will be made for drainage or foundation preparation.

1.6.3 Un-compacted Fill Levee Construction. Payment for excavation and placement for the un-compacted fill levee construction shall be included in the contract lump sum price for "Levees, Drop-outlets, and Ditches" which shall include the cost of labor, material, and equipment associated with the construction.

1.6.4 Semi-compacted Fill Levee Construction. Payment for excavation and placement of the semi-compacted fill levee construction shall be at the contract unit price

per cubic yard for "Borrow Excavation (Placement Area No. 5)," which shall include the cost of labor, material, and equipment associated with the construction.

PART 2 - PRODUCTS

2.1 EQUIPMENT.

2.1.1 Crawler-type Tractors used for spreading and compacting shall weigh not less than 18,000 pounds, shall exert a unit tread pressure of not less than 15 pounds per square inch and shall not be operated at a speed to exceed 5 miles per hour.

2.1.2 Power-driven Tampers. Compaction of material in areas where it is impracticable to use a tractor shall be performed by the use of approved power-driven tampers of the rammer type having a static weight of at least 70 pounds or by approved hydraulic actuated tractor-mounted tampers.

2.1.3 Miscellaneous Equipment. Scarifiers, disks, motorized graders, spreaders, and other equipment shall be of approved types, suitable for construction of levee embankment. Trucks, scrapers, and other types of earth-hauling equipment, if used, shall be of approved types suitable for construction.

2.2 MATERIALS.

2.2.1 Satisfactory Materials Satisfactory materials for the construction of the uncompacted and semi-compacted embankments shall consist of cohesive materials, including clay and sandy or silty clays and clayey silts classified as CH, CL, SC, SP, SM, MH, or ML in accordance with ASTM D 2487.

2.2.2 Unsatisfactory Materials. Materials considered unsatisfactory for fill construction shall be disposed in abandoned portions of the borrow areas.

PART 3 - EXECUTION

3.1 DRAINAGE. The foundation areas and partially completed fill shall be kept continuously drained. Prior to placement of fill, the areas shall be completely drained of ponded water and allowed to dry so that the surface will allow the operation of equipment thereon. Once drainage of the Placement Area and sufficient drying of the foundation surfaces has been accomplished, additional excavation, and levee construction can proceed.

3.2 FOUNDATION PREPARATION. No embankment foundation preparation other than specified clearing and stripping shall be required for levee construction.

3.3 EMBANKMENT CONSTRUCTION.

3.3.1 Placement Area No. 3. Levees in Placement Area No. 3 shall be raised to +16.0 MLT using suitable material from side-ditch cast borrow excavation, as shown. Levees shall have minimum 1 Vertical to 3 Horizontal slopes. Placement Area No. 3 shall be constructed to a minimum 10-foot crown width as shown. When borrowing material adjacent to the levees in the Placement Area, a minimum berm of 50 feet shall be provided between the toe of the levee and borrow area. Borrow areas and areas to receive fill shall be stripped of vegetation to ensure proper bonding of material. The borrow areas shall have minimum side slopes of 1 Vertical to 3 Horizontal. The levees shall be constructed utilizing satisfactory borrow materials at their natural moisture content. However, if in the Contracting Officer's opinion, the material becomes excessively wetted or dried, the Contractor shall take the steps necessary to dry or wet the material before continuing with construction of the levees. Levee and spillway work required at the Placement Area shall be completed and accepted prior to commencement of placement operations in the Area. Confined areas shall be maintained in operational condition until completion and acceptance of the work under this contract. Costs for maintaining the levees once construction has been completed and accepted shall be included in the contract price for items to which it pertains.

3.3.2 Placement Area No. 5. Levees in Placement Area No. 5 shall be raised to +17.0 MLT using suitable material from hauled Borrow Area excavation, as shown. Levees shall have minimum 1 Vertical to 3 Horizontal slopes. Placement Area No. 5 shall be constructed to a minimum 10-foot crown width as shown. When borrowing material adjacent to the levees in the Placement Area, a minimum berm of 50 feet shall be provided between the new toe of the levee and the borrow area. Borrow areas and areas to receive fill shall be stripped of vegetation to ensure proper bonding of material. The borrow areas shall have minimum side slopes of 1 Vertical to 3 Horizontal. Borrow excavation depth shall be to no less than +5.0 MLT. When borrowing material, the Contractor shall begin excavation at the North end of the Borrow Area and proceed in a continuous Southerly direction parallel with the levee alignment. Unsatisfactory material encountered during excavation may be stockpiled in abandoned portions of the Borrow Area as approved. The levees shall be constructed utilizing satisfactory borrow materials at their natural moisture content. However, if in the Contracting Officer's opinion, the material becomes excessively wetted or dried, the Contractor shall take the steps necessary to dry or wet the material before continuing with construction of the levees. Levee and Drop-outlet work required at the Placement Area shall be completed and accepted prior to commencement of placement operations in the Area. Confined areas shall be maintained in operational condition until completion and acceptance of the work under this contract. Costs for maintaining the levees once construction has been completed and accepted shall be included in the contract price for items to which it pertains.

3.3.3 Placement Area No 131. Levees in Placement Area No. 131 shall be raised to +25.0 MLT using suitable material from side-ditch cast borrow excavation , as shown. Levees shall have minimum 1 Vertical to 3 Horizontal slopes. Placement Area No. 131 shall be constructed to a minimum 10-foot crown width as shown. When borrowing material adjacent to the levees in the Placement Area, a minimum berm of 50 feet shall be provided between the toe of the levee and borrow area. Borrow areas and areas to receive fill shall be stripped of vegetation to ensure proper bonding of material. The borrow areas

shall have minimum side slopes of 1 Vertical to 3 Horizontal. The levees shall be constructed utilizing satisfactory borrow materials at their natural moisture content. However, if in the Contracting Officer's opinion, the material becomes excessively wetted or dried, the Contractor shall take the steps necessary to dry or wet the material before continuing with construction of the levees. Levee and Drop-outlet work required at the Placement Area shall be completed and accepted prior to commencement of placement operations in the Area. Confined areas shall be maintained in operational condition until completion and acceptance of the work under this contract. Costs for maintaining the levees once construction has been completed and accepted shall be included in the contract price for items to which it pertains.

3.3.4 Un-compacted Fill. Satisfactory material obtained from excavation of the side-ditch borrow areas shall be used for levee construction at the locations shown. Material shall be excavated using draglines, dozers or other suitable equipment and carried, pushed, relayed or otherwise transported to the levee lines and placed in layers not exceeding 2 feet in thickness. The layers so placed shall be spread, distributed, and otherwise manipulated during placement to the extent that voids in the fill will be eliminated. After placement of sufficient material, shaping of the levee surface may be accomplished using a crawler-type tractor or dragline bucket. When borrowing material adjacent to the levee, a minimum 25-foot length of undisturbed earth shall be left at intervals of approximately 400 feet. Side-ditch borrow area excavation shall be extended toward the interior of the Placement Area as required to obtain sufficient cast fill.

3.3.5 Semi-compacted Fill. The semi-compacted fill levee embankment shall be constructed to the required template using satisfactory materials and those obtained from the borrow area, as shown. Satisfactory material obtained from areas outside of the limits of the designated Borrow Area may be used provided the Contractor obtain specific, advance approval. Fill material shall be placed and spread in maximum 12-inch thick layers prior to compaction. The moisture content of each layer of material shall be suitable to obtain the maximum compaction with the equipment used. If the fill material is either too wet or too dry to obtain compaction, it shall be disked and aerated until dry or moistened and disked to distribute moisture throughout each layer. When the moisture of the fill material is satisfactory, each layer shall be compacted by not less than three (3) coverages of a crawler-type tractor conforming to the requirements of the Paragraph: EQUIPMENT above. In areas where soft foundation material exists, the initial layer of the semi-compacted fill shall be advanced across the foundation area using a method which forces displaced soft foundation material progressively outward from the center of the embankment to prevent trapping soft material within the embankment fill.

3.3.6 Staged Execution. The Contractor may endeavor to construct the levees at Placement Areas Nos. 3 and 5 to full elevation and grade or may elect to construct the levees using a staged operation to obtain the benefit of additional dredging or drying of selected fill materials prior to shaping to final grade. If, at the beginning of construction or at some point during construction the Contractor elects to pursue staged execution, a detailed plan and schedule of the proposed staged construction shall be provided for approval prior to execution of the plan. The plan and schedule for staged construction

shall ensure completion of the levees to full grade prior to commencement of dredging in Sections 15 through 17.

3.4 GRADE TOLERANCES AND SHRINKAGE ALLOWANCES FOR EMBANKMENTS. Except as otherwise specified herein, levees shall be constructed to the net grades and cross sections shown, without the addition of allowance for shrinkage of the fill. At all points an allowance of 5/10 of 1 foot above the prescribed grade will be permitted in the final dressing, provided that there are no abrupt humps or depressions in the sloped surfaces or bulges in the width of the crown.

3.5 HAUL ROADS. Whenever practical, one-way haul roads shall be used on this contract. Construction of haul roads shall be as specified in the SECTION entitled TEMPORARY CONSTRUCTION FACILITIES.

3.6 EROSION AND SLIDES. In the event of erosion or sliding of any part of the levee during its construction, or after its completion but prior to its acceptance, the Contractor shall, upon written order of the Contracting Officer, rebuild that portion of the levee. If the slide is caused through fault of the Contractor, the foregoing operations shall be performed without cost to the Government. If the slide or erosion is due to no fault of the Contractor the yardage replaced will be paid for as specified in the Paragraph: PAYMENT, above, in addition to payment due the Contractor for materials previously placed. Where settlement of the embankment due to weak foundation conditions develops to an extent that will make inadvisable, in the opinion of the Contracting Officer, continuation of placement of additional materials, the Contracting Officer will have the right to omit further work on these portions of the embankment and to accept it as completed.

3.7 CONTRACTOR QUALITY CONTROL.

3.7.1 Compliance Inspection. The Contractor shall inspect for compliance with the contract requirements and record the inspection of operations including, but not limited to, the following:

- (1) Materials - Unsatisfactory materials
- (2) Foundation Preparation - Drainage of water and drying; stripping
- (3) Levee Construction - Layer thickness; surveys, lines, and grades; and proper compaction.

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

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SECTION 02482 - DREDGING

PART 1 - GENERAL

1.1 SCOPE OF WORK.

1.1.1 Work to be Done. The work covered 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 this project as follows:

Required Depth Below MLT (Feet)	Required Width (Feet)	From Station	To Station	Distance Between Stations (Feet)
<u>MAIN CHANNEL ACROSS ARANSAS BAY</u>				
16	125	830+000	833+700	3,700
16	125-238	833+700	834+000	300
16	238	834+000	836+200	2,200
16	238-125	836+200	836+500	300
16	125	836+500	900+000	63,500
			SUBTOTAL	70,000
<u>TRIBUTARY CHANNEL TO ARANSAS PASS</u>				
16	175	185+00	245+00	6,000
16	175-125	245+00	250+00	500
16	125	250+00	321+19	7,119
16	125-433	321+19	324+42	323
			SUBTOTAL	13,942
			TOTAL	83,942

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 SUBMITTALS shall be in accordance with provisions as specified herein.

1.3 LOCATION. The Main Channel across Aransas Bay reach to be dredged extends from vicinity of Rockport, Texas to Aransas Pass, Texas. The Tributary Channel to Aransas Pass extends from the Aransas Pass Turning Basin in Aransas Pass, Texas to the Corpus Christi Ship Channel near Port Aransas, Texas.

1.4 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.

1.5 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.

1.6 NOTIFICATION PRIOR TO COMMENCEMENT OF DREDGING OPERATIONS. The Contractor shall notify the Area Engineer, at the Southern Area Office, 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.

1.7 UTILITIES ACROSS THE LIMITS OF DREDGING. The following bridge, tunnels, overhead lines, and submerged lines cross the areas to be dredged:

Approximate Station	Description	Owner
<u>MAIN CHANNEL ACROSS ARANSAS BAY</u>		
870+336	One 8-inch Pipeline	Channel Industries Gas Co.
884+863	One 6-inch Pipeline	Channel Industries Gas Co

TRIBUTARY CHANNEL TO ARANSAS PASS		
230+85	One 3-inch Pipeline	Mobile Oil Corp.
231+44	One 3-inch Pipeline	Mobile Oil Corp.

EVERY EFFORT HAS BEEN MADE TO GIVE ALL PERTINENT DETAILS ON THE LOCATION OF THE PIPELINES. THE DATA FURNISHED ON THE PLANS ARE BELIEVED TO BE SUBSTANTIALLY CORRECT. HOWEVER, THE EXACT LOCATIONS MAY VARY FROM THAT SHOWN: THEREFORE THE CONTRACTOR SHALL COOPERATE WITH THE RESPECTIVE OWNERS TO ESTABLISH THE ACTUAL POSITION OF THE PIPELINES. THE U.S. ARMY CORPS OF ENGINEERS PERMITS OF THE RESPECTIVE PIPELINES AND PREVIOUS SURVEYS ARE AVAILABLE IN THE SOUTHERN AREA OFFICE.

THE FOLLOWING IS FURNISHED FOR INFORMATION TO VERIFY PIPELINE OWNERSHIPS:

Texas Excavation Safety System
(Dig-Tess) 1-800-344-8377.

1.8 WORK COVERED BY THE CONTRACT PRICE.

1.8.1 Mobilization and Demobilization. The contract price for "Mobilization and Demobilization (Sec. Nos. 1 thru 14)" and "Mobilization and Demobilization (Sec. Nos. 15 thru 17)" 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.

1.8.2 Dredging. The contract price per cubic yard for "Dredging (Sec. Nos. 1 thru 14)" and "Dredging (Sec. Nos. 15 thru 17)" 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 for dredging shall also include the costs for placing and handling pipelines to and at the Placement Areas.

1.9 CHARACTER OF MATERIALS.

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

1.9.2 Debris. Other materials, including scrap, rope, wire cable, snag, and stumps may be encountered in the specified limits and overdepth dredging. No separate payment will be made for removal and disposal of this debris.

1.10 MEASUREMENT.

1.10.1 Dredging. The total amount of material removed 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: OVERDEPTHS, SIDE AND END SLOPES below, less deductions that may be required for misplaced material specified in the Paragraph: PLACEMENT OF EXCAVATED MATERIAL below.

1.10.2 Ledge Rock. If ledge rock is present, the amount removed and to be paid for will be measured by the cubic yard in-place by computing the volume between the top surface of the rock as shown by the probings of the last survey made before drilling and blasting and the bottom surface shown by a probing survey made before drilling and blasting and the bottom surface shown by a probing survey made as soon as practicable after completion of the work and included within the limits of the overdepth, side and end slopes specified in the Subparagraph: Table of Allowable Overdepth, Side and End Slopes below, less deductions that may be required for misplaced materials specified in the Paragraph: PLACEMENT OF EXCAVATED MATERIAL, below. The quantity of material other than ledge rock removed and to be paid for will be determined by subtracting the quantity of ledge rock as measured above, from the total quantity of material removed and to be paid for.

1.10.3 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 Gulf Intracoastal Waterway project is available at the Southern Area Office, Corpus Christi Location. 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.

1.10.4 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 (average existing conditions). However, to reflect anticipated shoaling or scour occurring between the dates of preparation of the 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.

1.11 PAYMENT.

1.11.1 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.

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

1.11.3 Drop-outlet Structures. Costs in connection with the Drop-outlet work shall be included in the contract lump sum price for "Levees, Drop-outlets, and Ditches."

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 Required Dredging Prism. The total estimated quantities 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, in cubic yards in-place measurement, including anticipated shoaling occurring prior to the dates of the "before-dredging" sections are as follows:

MAIN CHANNEL ACROSS ARANSAS BAY	1,175,000	Cubic Yards
TRIBUTARY CHANNEL TO ARANSAS PASS	227,000	Cubic Yards
TOTAL	1,402,000	Cubic Yards

3.1.2 Overdepth. The maximum amount of allowable overdepth dredging is estimated in cubic yards in-place measurement, including anticipated shoaling occurring prior to the dates of the "before-dredging" sections are as follows:

MAIN CHANNEL ACROSS ARANSAS BAY	666,000	Cubic Yards
TRIBUTARY CHANNEL TO ARANSAS PASS	160,000	Cubic Yards
TOTAL	826,000	Cubic Yards

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.

3.2 SECTIONS. For the purpose of acceptance, the dredging work Items on the Bidding Schedule are divided into Sections, as follows:

Section No.	From Station	To Station	Length of Section (Feet)	(1)(2) Prescribed Depth (CY)	(2) Allowable Overdepth (CY)	(2) Total Estimated (CY)
<u>MAIN CHANNEL ACROSS ARANSAS BAY</u>						
1	830+000	835+000	5,000	78,000	56,000	134,000
2	835+000	840+000	5,000	170,000	58,000	228,000
3	840+000	845+000	5,000	155,000	46,000	201,000
4	845+000	850+000	5,000	102,000	46,000	148,000
5	850+000	855+000	5,000	53,000	46,000	99,000
6	855+000	860+000	5,000	65,000	46,000	111,000
7	860+000	865+000	5,000	92,000	46,000	138,000
8	865+000	870+000	5,000	90,000	46,000	136,000
9	870+000	875+000	5,000	76,000	46,000	122,000
10	875+000	880+000	5,000	81,000	46,000	127,000
11	880+000	885+000	5,000	62,000	46,000	108,000
12	885+000	890+000	5,000	35,000	46,000	81,000
13	890+000	895+000	5,000	63,000	46,000	109,000
14	895+000	900+000	5,000	53,000	46,000	99,000
SUBTOTAL			70,000	1,175,000	666,000	1,841,000
<u>TRIBUTARY CHANNEL TO ARANSAS PASS</u>						

15	185+00	230+00	4,500	78,000	47,000	125,000
16	230+00	280+00	5,000	53,000	50,000	103,000
17	280+00	324+42	4,442	96,000	63,000	159,000
SUBTOTAL			13,942	227,000	160,000	387,000
TOTAL			83,942	1,402,000	826,000	2,228,000
<p>(1) The term "prescribed depth" is synonymous with the term "required depth" and "required dredging prism" used elsewhere in these specifications.</p> <p>(2) Includes anticipated shoaling.</p>						

3.3 ORDER OF WORK. The Contractor shall complete the work in the following order:

- (1) Construction shall be commenced at Placement Areas Nos. 3, 5, and 131 first. These three confined Areas shall be under construction simultaneously. Placement Area No. 131 shall be completed before 1 September 2002.
- (2) Secondly, Dredge Sections Nos. 14 through 1 shall be completed with Sections 1 through 6 completed before 1 October 2002. Discharge of material from Sections Nos. 1 and 2 into Placement Area No. 131 shall be done by 1 October 2002 while discharge from Sections Nos. 5 and 6 into Placement Area No. 134 shall be done from 1 September 2002 to 1 October 2002..
- (3) The Contractor may dredge Sections Nos. 15 through 17 in any order.

3.4 PLACEMENT OF EXCAVATED MATERIAL

3.4.1 **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 Gulf Intracoastal 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 Areas. 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 Structures 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 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 Placement Areas, levee and Drop-outlet Structure work required shall be completed and accepted prior to commencement of placement operations. Borrow material shall be clean and free of objectionable materials. 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.

3.4.2 Placement Areas.

3.4.2.1 Confined Placement Area No. 3. The perimeter levee and training levee of the Placement Area shall be raised and maintained to the full required constructed elevation as shown. Side slopes shall be constructed and maintained at no steeper than 1 Vertical to 3 Horizontal. Crown width of the levees shall be constructed and maintained to a 10-foot width. Construction and maintenance of levees shall conform as specified in the SECTION entitled EMBANKMENT CONSTRUCTION. Placement shall commence at the discharge points shown. Material may be mounded within the boundaries of the Discharge Zone shown without overtopping or breaching the adjacent levees. When placing material into Placement Area No. 3, the Contractor will assure at all times that a minimum 3 feet of freeboard exists above the ponded water level throughout the entire levee perimeter. No dredge slurry shall be drained or allowed to drain over or to breach the levee. Drainage shall be provided and no ponds allowed to form between the discharge mounds and the levee. Plastic liners shall be installed at the discharge points and at other areas where the water current may erode the existing levees. During placement operations, the Contractor shall take the precautions necessary to prevent erosion of the levee. Discharge points shall be placed at a sufficient distance from the Drop-outlet being utilized to ensure that the Water Quality Control requirement is met. The Drop-outlet shall be managed closely to assure proper water quality. Damage or scouring of the levees due to the Contractor's operations, shall be repaired to original condition at no additional cost to the Government. The Contractor shall inspect placement operations in the Placement Area continuously to prevent the possibility of accidental breaching of levees and Drop-outlet. If levee failure does occur while material is being pumped into the Placement Area, dredging operations into the Placement Area shall cease and placement operations shall not be

resumed until the containing structure has been restored to an approved condition. The existing Drop-outlet Structure shall be raised to the elevation shown. Materials for Drop-outlet construction shall conform to the SECTION entitled DROP-OUTLET STRUCTURES. The Contractor shall furnish and install sufficient Drop-outlet boards needed to raise the weir elevations to within 2 feet of top-of-levee elevations. Drop-outlet lumber shall conform to details specified in the SECTION entitled DROP-OUTLET STRUCTURES.

3.4.2.2 Confined Placement Area No. 5. The perimeter levee and training levee of the Placement Area shall be raised and maintained to the full required constructed elevation as shown. Side slopes shall be constructed and maintained at no steeper than 1 Vertical to 3 Horizontal. The crown width of the levees shall be constructed and maintained to a 10-foot width. Construction and maintenance of levees shall conform as specified in the SECTION entitled EMBANKMENT CONSTRUCTION. Placement shall commence at the discharge points shown. Material may be mounded within the boundaries of the Discharge Zone shown without overtopping or breaching the adjacent levees. When placing material into Placement Area No. 5, the Contractor will assure at all times that a minimum 3 feet of freeboard exists above the ponded water level throughout the entire levee perimeter. No dredge slurry shall be drained or allowed to drain over or to breach the levee. Drainage shall be provided and no ponds allowed to form between the discharge mounds and the levee. Plastic liners shall be installed at the discharge points and at other areas where the water current may erode the existing levees. During placement operations, the Contractor shall take every precaution to prevent erosion of the levees. Discharge points shall be placed at a sufficient distance from the Drop-outlet Structure being utilized to ensure that the Water Quality Control requirement is met. The Drop-outlet Structure shall be managed closely to assure proper water quality. Damage or scouring of the levees due to the Contractor's operations, shall be repaired to original condition at no additional cost to the Government. The Contractor shall inspect placement operations in the Placement Area continuously to prevent the possibility of accidental breaching of levees and Drop-outlet Structure. If levee failure does occur while material is being pumped into the Placement Area, dredging operations into the Placement Area shall cease and placement operations shall not be resumed until the containing structure has been restored to an approved condition. The existing Drop-outlet Structure shall be raised to the elevation shown. Materials for the Drop-outlet Structure rehabilitation shall conform to the SECTION entitled DROP-OUTLET STRUCTURES. The Contractor shall furnish and install sufficient Drop-outlet boards needed to raise the weir elevations to within 2 feet of top-of-levee elevations. Drop-outlet lumber shall conform to details specified in the SECTION entitled DROP-OUTLET STRUCTURES.

3.4.2.3 Confined Placement Area No. 131. The perimeter levee and training levee at this Placement Area shall be raised and maintained to the full required constructed elevation as shown. Side slopes shall be constructed and maintained at no steeper than 1 Vertical to 3 Horizontal. Crown width of the levees shall be constructed and maintained to a 10-foot width. Construction and maintenance of levees shall conform to details specified in the SECTION entitled EMBANKMENT CONSTRUCTION. Placement shall commence at the discharge points shown. Material may be mounded

within the boundaries of the Discharge Zone shown without overtopping or breaching the adjacent levees. When placing material into Placement Area No. 131, the Contractor will assure at all times that a minimum 3 feet of freeboard exists above the ponded water level throughout the entire levee perimeter. No dredge slurry shall be drained or allowed to drain over or to breach the levees. Drainage shall be provided and no ponds allowed to form between the discharge mounds and the levees. Plastic liners shall be installed at the discharge points and at other areas where water current may erode the existing levees. During placement operations the Contractor shall take the precautions necessary to prevent erosion of the levees. Discharge points shall be placed at a sufficient distance from the Drop-outlet Structure being utilized to ensure that the Water Quality Control requirement is met. The Drop-outlet shall be managed closely to assure proper water quality. Damage or scouring of the levees due to the Contractor's operations, shall be repaired to original condition at no additional cost to the Government. The Contractor shall inspect placement operations in the Placement Area continuously to prevent the possibility of accidental breaching of levees and the Drop-outlet Structure. If levee failure does occur while material is being pumped into the Placement Area, dredging operations into the Placement Area shall cease and placement operations shall not be resumed until the containing structure has been restored to an approved condition. The existing Drop-outlet Structure shall be repaired and raised to the elevation shown. Materials for the Drop-outlet Structure repairs shall conform to details specified in the SECTION entitled DROP-OUTLET STRUCTURES. Drop-outlet lumber shall conform to details specified in the SECTION entitled DROP-OUTLET STRUCTURES.

3.4.2.4 Open Water Placement Area No. 133. The limiting lines of discharge within this Placement Area shall be prominently marked by the Contractor with conspicuous buoys or stakes at each corner at the location shown. No material shall be placed outside of these limiting lines of discharge. Material deposited beyond these limiting lines of discharge shall be removed by the Contractor at no additional cost to the Government. The dredged material shall be deposited over or beyond the crests of existing dumping grounds wherever they exist. The Contractor shall perform operations using a method that will prevent the material from flowing back into the Channel. The discharge end of the discharge pipe shall be held at or near the bottom during placement operations to confine the material within the designated area. A spreader shall be used at the submerged end of the discharged pipe to distribute the material evenly and reduce scouring. The point of discharge shall be relocated as often as necessary to prevent a build-up of the excavated material in excess of +2 feet above MLT. Except for natural runoff, material deposited beyond the limiting lines of discharge shall be removed by the Contractor and placed within the Placement Area at no additional cost to the Government.

3.4.2.5 Partially Emergent Placement Area No. 134. Placement operations will be conducted only between 1 September thru 1 October. Initial discharge shall take place directly onto the emergent Island. Discharge shall continue on the Island until the maximum elevation at the discharge point is +6 feet above MLT. When +6 feet MLT elevation is attained at the discharge point, the end of the pipe shall be moved elsewhere on the Island. Placement will then proceed inside the cross-hatched

discharge zone shown. No discharge shall take place outside this discharge corridor. This placement operation will maximize retention of the Channel material. The Government will make periodic inspections of the placement operations. The Contracting Officer may direct the Contractor to move the point of discharge. Use of a spreader on the end of the discharge pipe will be required. No personnel or equipment will be allowed on or across the emergent island at anytime. Existing brushy or woody vegetation on the Island will be preserved. Discharge of material onto this vegetation is prohibited.

3.4.2.6 Open Water Placement Area Nos. 135, 136, 137, 138, 139, and 140.

The Placement areas shall be prominently marked by the Contractor with conspicuous buoys or stakes at each corner. Material will be deposited within the limiting lines of the Placement Areas. The dredged material shall be deposited over or beyond the crests of existing dumping grounds wherever they exist. The Contractor shall perform operations using a method that will prevent the material from flowing back into the Channel. Material deposited beyond the limiting lines of discharge shall be removed by the Contractor at no additional cost to the Government. The discharge end of the discharge pipe shall be held at or near the bottom during placement operations to confine the material within the designated area. A spreader shall be used at the submerged end of the discharge pipe to distribute the material evenly and reduce scouring. The point of discharge shall be relocated as often as necessary to prevent a build-up of the excavated material. Dredged material shall not be deposited beyond the limiting lines of discharge shown. Except for natural runoff, material deposited beyond the limiting lines of discharge shall be removed by the Contractor at no additional cost to the Government.

3.4.2.7 Levee Volume. The following “neat-line volumes” have been used by the U.S. Army Corps of Engineers to prepare the Government estimate. The volumes are estimated only and the Contractor is responsible to interpret the volume numbers used to prepare an estimate for bid opening. “Neat-line Volumes” is defined as the unadjusted, raw quantities computed from the levee templates. The percentage for items including overbuilding, compaction, settlement, foundation displacement, or construction waste is the responsibility and decision of the Contractor. The volume figures for the various Placement Areas in this contract are as follows:

<u>PLACEMENT AREA NO.</u>	<u>LEVEE VOLUMES</u>
3	43,200 cubic yards
5	35,000 cubic yards
131	88,000 cubic yards

3.4.2.8 Distribution of Dredged Material. The material dredged from the Channel sections specified in this contract shall be distributed in the Placement Areas designated according to the TABLE OF DISTRIBUTION OF DREDGED MATERIAL below:

TABLE OF DISTRIBUTION OF DREDGED MATERIAL

STARTING CHANNEL STATION	ENDING CHANNEL STATION	SECTION NOS. OF CONTRACT	PLACEMENT AREA NOS
MAIN CHANNEL ACROSS ARANSAS BAY			
830+000	837+000	1,2	131
837+000	850+000	2, 3, 4	133
850+000	860+000	5, 6	134
860+000	870+000	7,8	135
870+000	875+000	9	136
875+000	885+000	10,11	137,138
885+000	890+000	12	138
890+000	895+000	13	139
895+000	900+000	14	140
TRIB. CHANNEL TO ARANSAS PASS			
185+000	230+000	15	3
230+000	324+42	16,17	5

3.4.3 Pipelines.

3.4.3.1 Location Details. Every effort has been made to give pertinent details on the locations of utility pipelines and other facilities which may be encountered in trenching or jacking operations. The data shown are substantially correct. However, the Contractor shall investigate the existing conditions and confirm that no additional construction exists that may interfere with the pipeline laying herein specified.

3.4.3.2 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 200 feet wide for channels whose authorized width is greater than 200 feet. The minimum bottom width of the submerged section for channels whose authorized width is less than 200 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 14 feet below Mean Low Tide in the Gulf Intracoastal Waterway project. 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.

3.4.4 Unauthorized Placement of Material.

3.4.4.1 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 without cost to the Government.

3.4.4.2 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 Areas, 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.

3.4.5 Easements. Permits authorizing the laying of shore pipe, and for placement of dredged material in the Placement Areas, are on file and available for examination in the offices of the U. S. Army Corps of Engineers, Southern Area Office, 1920 North Chaparral, Corpus Christi, Texas and in the Galveston District Office, Jadwin Building, 2000 Fort Point Road, Galveston, Texas. 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.

3.4.6 Preservation of Public and Private Property.

3.4.6.1 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.

3.4.6.2 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 which 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.

3.4.7 Alternate Placement Area Proposed by Contractor After Award of Contract.

3.4.7.1 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. 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.

3.4.7.2 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.

3.5 OVERDEPTH, SIDE, AND END SLOPES.

3.5.1. 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.

3.5.2. 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.

3.5.3 Excessive Dredging. Material taken from beyond the limits as extended in the Subparagraphs: 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 SPECIFIC PROJECT REQUIREMENTS CLAUSES entitled FINAL EXAMINATION AND ACCEPTANCE or SHOALING.

3.5.4 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	
<u>MAIN CHANNEL ACROSS ARANSAS BAY</u>							
830+000	---	---	---	---	1	5	16
830+000	833+700	2	1	5	---	---	16
833+700	834+000	2	1	3-3L,5R	---	---	16

834+000	836+200	2	1	3L,5R	---	---	16
836+200	836+500	2	1	3-5L,5R	---	---	16
836+500	900+000	2	1	5	---	---	16
900+000	---	---	---	---	1	5	16
<u>TRIBUTARY CHANNEL TO ARANSAS PASS</u>							
185+00	---	---	---	---	1	2	16
1185+00	321+19	2	1	2	---	---	16
321+19	324+42	2	1	---	3L,2-OR	---	16
324+42	---	---	---	---	1	2	16

3.6 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. Monthly reports will be generated by the District Office using the reporting features of the database. If technical problems arise, the point-of-contact for this matter will be Tim Baumer at (409) 766-3874.

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