

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE J	PAGE OF PAGES 1 19
2. AMENDMENT/MODIFICATION NO. 0004	3. EFFECTIVE DATE 07-Dec-2005	4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO.(If applicable)
6. ISSUED BY USACE, CONTRACTING DIVISION ATTN: CEMVN-CT, ROOM 172 7400 LEAKE AVE. NEW ORLEANS LA 70118-3651	CODE W912P8	7. ADMINISTERED BY (If other than item 6) See Item 6		
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)		X	9A. AMENDMENT OF SOLICITATION NO. W912P8-06-R-0064	
		X	9B. DATED (SEE ITEM 11) 03-Dec-2005	
			10A. MOD. OF CONTRACT/ORDER NO.	
			10B. DATED (SEE ITEM 13)	
CODE	FACILITY CODE			
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS				
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input checked="" type="checkbox"/> is extended, <input type="checkbox"/> is not extended.				
<p>Offer 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:</p> <p>(a) By completing Items 8 and 15, and returning <u>1</u> 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.</p>				
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 <input type="checkbox"/> is not, <input type="checkbox"/> 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.) The above numbered solicitation for New Orleans to Venice Hurricane Protection Levees, Plaquemines Parish and Buras Levee Districts, Emergency Levee Repairs, West Point A La Hache Siphon Repairs, Plaquemines Parish, LA, is amended as shown on the attached pages. PROPOSAL DUE DATE: A PROPOSAL DUE DATE OF 9 DECEMBER 2005, 2:00 PM LOCAL TIME, NEW ORLEANS, LA, IS HEREBY ESTABLISHED.				
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)		
		TEL: _____ EMAIL: _____		
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)		07-Dec-2005

EXCEPTION TO SF 30
APPROVED BY OIRM 11-84

30-105-04

STANDARD FORM 30 (Rev. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

SF 30 BLOCK 14 CONTINUATION PAGE

1. Section 00010, Bidding Schedule – Delete Page 00010-3 in its entirety and replace with the attached revised Page 00010-3.
2. Section 00700, FAR 52.211-10, “Commencement, Prosecution, and Completion of Work,” Paragraph (c) – Change “31 December 2005” to read “4 January 2006.”
3. Section 02332 – Delete Section 02332 in its entirety and replace with the attached revised Section 02332.
4. Section 03308 – Table 1.6.1-1 – Delete “(Per CY)” next to “Quantity.”
5. Section 03308 – Paragraph 1.6.1 – Add the following sentence directly after the table: “The Contractor shall add water to the above mix to achieve a desired workability. The maximum slump shall not exceed the requirements of paragraph 3.5.2.2.”
6. Section 16640 – Delete this section in its entirety.

Drawings:

1. Delete Drawing 3 in its entirety and replace with the attached revised Drawing 3.
2. Delete Drawing 4 in its entirety and replace with the attached revised Drawing 4.
3. Add attached Drawing 7, “Walker Road Borrow Pit.”

SECTION 00010 – BIDDING SCHEDULE

New Orleans To Venice Hurricane Protection Levees
 Plaquemines Parish and Buras Levee Districts
 Emergency Levee Repairs
 (West Point A La Hache Siphon Repairs)
 Plaquemines Parish, Louisiana

Item	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0001	Mobilization and Demobilization	1	LS		
0002	Selective Demolition	1	LS		
0003	Clearing	1	LS		
0004	Piling, Steel Sheet, Government Furnished	1800	SF		
0005	7-inch Concrete Paving	1	LS		
0006	Sand Grout Mixture	1295	CY		
0007	Miscellaneous Metalwork	1	LS		
0008	Semi-Compacted Fill	680	CY		

TOTAL \$ _____

Award will be made as a whole to one bidder.

NOTE 1: Bidders shall furnish unit prices for each items listed in the Schedule of bid items which require unit prices. If the bidder fails to insert a unit price in the appropriate blank for required item(s), but does furnish an extended total, or an estimated amount for such items), the Government shall deem the unit price to be the quotient obtained by dividing the extended amount for that line item by the quantity. IF A BIDDER OMITTS BOTH THE UNIT PRICE AND THE EXTENDED TOTAL OR ESTIMATED AMOUNT FOR ANY ITEM, ITS BID SHALL BE DECLARED NON-RESPONSIVE AND THEREFORE INELIGIBLE FOR AWARD.

NOTE 2: THE NOTICE TO PROCEED (NTP): The successful bidder is advised that performance and payment bonds shall be submitted in accordance with the time frame in block 12B of SF 1442 after Notice of Award. The NTP will be issued immediately after verification of acceptable performance and payment bonds. Within three (3) days after issuance of the NTP, the Contractor shall initiate a meeting to discuss the submittal process with the Area or Resident Engineer or his authorized representative. Physical work cannot start until the Accident Prevention Program, Contractor Quality Control Plan, and other submittals which may be required, have been submitted and approved and all preliminary meetings called for under the contract, have been conducted.

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SECTION 02332 – EMBANKMENT

PART 1 GENERAL

1.1 SCOPE

The work covered by this Section consists of furnishing all plant, labor, equipment, and materials, except as otherwise specified in Section 02318, "EXCAVATION", and performing all operations in connection with hauling material from the stockpile area, foundation preparation and construction of embankments, including reconstructed levees and berms, and other incidental earthwork as may be necessary to complete the embankments, as shown on the drawings, and as hereinafter specified.

1.2 REFERENCES

The following publications of the issues listed below, but referred to before and thereafter by the basic designation only, form a part of this specification to the extent indicated by the references thereto:

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) STANDARD

D 698	(2000a) Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft ³)
D 2216	(1998) Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
D 2487	(2000) Classification of Soils for Engineering Purposes (Unified Soil Classification System)
D 3017	(1996) Water Content of Soil and Rock in-Place by Nuclear Methods
D 4318	(2000) Standard Test Methods for Liquid Limit, Plastic Limit and Plasticity Index of Soils
D 4643	(2000) Standard Test Method for Determination of Water (Moisture) Content of Soil by Microwave Method
E 329	(2005) Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction

U.S. ARMY CORPS OF ENGINEERS ENGINEER MANUAL.

EM 385-1-1 (2003) U.S. Army Corps of Engineers Safety and Health Manual

1.3 MEASUREMENT

1.3.1 Embankment

Semi-compacted fill will be measured for payment by the cubic yard, and quantities will be determined by the average end area method. The basis for the measurement will be cross sections of the areas to be filled taken after clearing, grubbing, foundation preparations, and vegetation removal operations and the theoretical design cross sections of the completed embankment constructed within the specified tolerance. Embankment not constructed to design grade and section will not be accepted.

1.4 PAYMENT

1.4.1 Embankment

Payment for all semi-compacted fill material placed as required in embankments will be made at the contract unit price per cubic yard for "Semi-compacted Fill". Price and payment shall constitute full compensation for furnishing all plant, labor, equipment and material, and performing all operations necessary for excavation, transportation from stockpile area, foundation preparation, and placing and compacting the material and moisture control.

1.5 QUALITY CONTROL

1.5.1 General

The Contractor shall establish and maintain quality control for embankment construction operations to assure compliance with contract requirements, and maintain records of his quality control for all construction operations including but not limited to the following:

- (1) Equipment. Type, size, and suitability for construction of the prescribed work.
- (2) Foundation Preparation. Breaking surface in advance of embankment and berm construction, and during fill placement when necessary, drainage of foundation and partially completed fill.
- (3) Materials. Suitability.

(4) Construction. Layout, maintaining existing drainage, moisture control, thickness of layers, spreading and compacting.

(5) Grade and Cross Section. Crown width, crown slope, side slopes, and grades.

(6) Roads and Ramps. Location of temporary roads to fields or buildings, location and placement of fills for ramps in accordance with specified dimensions and grades.

(7) Grade Tolerances. Check fills to determine if placement conforms to prescribed grade and cross section.

(8) Settlement of Foundation. Location of settlement gages established or measurements taken to determine settlement, location of sudden failures.

(9) Slides. Location and limits; methods and equipment used where remedial work has been directed.

(10) Moisture Control. Soil classification and moisture content determination to conform to limits as specified in paragraph 1.7.3. For each sample submitted to a laboratory for testing, a duplicate sample suitably sealed in an airtight container, shall be submitted to the Contracting Officer's representative.

Contractor Testing. The Contractor shall perform all control testing such as soil classification and moisture content. The Contractor shall perform as a minimum, the specified number of each of the tests to demonstrate to the satisfaction of the Contracting Officer that the specifications are in compliance.

1. Soil Classification Tests. Determination of soil classification shall be in accordance with the Unified Soil Classification System.

2. Moisture Content Tests. Moisture content tests shall be taken to assure compliance with requirements for fill placement within the design sections as specified in paragraph 1.7.3. Determination of moisture content shall be performed in accordance with ASTM D 2216, ASTM 3017 or ASTM D 4643.

1.5.2 Reporting

The original and two (2) copies of these records of inspections and tests, as well as the records of corrective action taken, shall be furnished the Government daily. Format of

the report shall be as prescribed in Section 01451, "CONTRACTOR QUALITY CONTROL".

1.6 EQUIPMENT

1.6.1 Hand Tampers

Hand tamping shall be used in the compaction of embankment replaced as a result of required excavation to drive government furnished sheetpile. These hand tampers should be power driven, hand operated type.

1.6.2 Other Compaction Equipment

1.6.2.1 Tractor-Drawn

Tractor-drawn tamping rollers shall consist of one or more units. Each unit shall consist of a cylindrical drum not less than forty-eight (48) inches in length and not less than forty (40) inches in diameter. Each drum shall have staggered feet uniformly spaced over the cylindrical surfaces to provide approximately three (3) tamping feet for each two (2) square feet of drum surface. The tamping feet shall be seven (7) to eleven (11) inches in clear projection from the cylindrical surface of the roller, and shall have a face area of not less than five (5) nor more than ten (10) square inches. The drums shall be water or sand and water ballasted. The weight of the roller when fully loaded shall be not less than one thousand one hundred fifty (1150) pounds per linear foot of drum length and when empty shall be not more than eight hundred fifty (850) pounds per foot of drum length. The Contractor shall vary the amount of ballast in the drums to obtain optimum compactive effort for the material being compacted. The roller shall be equipped with cleaning devices, so designed and attached as to prevent the accumulation of material between the tamping feet. These cleaning devices shall be maintained at their full and correct alignment throughout the periods of use of the roller. The rolling units of multiple-type tamping rollers shall be pivoted on the main frame in a manner that will permit the units to adapt themselves to uneven ground surfaces and to rotate independently. The roller shall be pulled by a tractor at a speed not to exceed three and one-half (3.5) miles per hour

1.6.2.2 Self-Propelled

At the option of the Contractor, self-propelled tamping rollers may be used in lieu of tractor-drawn tamping rollers, provided these rollers conform to the towed roller requirements for the length and spacing of tamping feet, the empty weight per foot of drum, and cleaning devices. However, self-propelled rollers exceeding the empty weight requirement may be used, provided that by substitution of tamping feet having a face area not exceeding fourteen (14) square inches, the nominal foot pressure on the tamping feet of the self-propelled roller can be adjusted to approximate the foot pressure

of the towed roller for the particular working conditions. Self-propelled rollers conforming to the above requirements but with tamping feet exceeding the fourteen (14) square inch maximum face area may be approved for use provided the Contractor demonstrates to the satisfaction of the Contracting Officer, by field tests performed in accordance with the provisions of paragraph 1.6.1.5, that the roller can properly compact and fill without creating planes of weakness or laminations. For the self-propelled rollers in which steering is accomplished with rubber-tired wheels, the tire pressures shall not exceed forty (40) pounds per square inch. The roller shall be operated at a speed of not more than three and one-half (3.5) per miles hour.

1.6.2.3 Rubber-Tired Rollers

Rubber-tired rollers shall have a minimum of four wheels per axle equipped with pneumatic tires. The tires shall be of such size and ply as to be capable of being operated at tire pressures between eighty (80) and one hundred (100) pounds per square inch at a twenty-five thousand (25,000) pound wheel load. The roller wheels shall be located abreast and so designed that each wheel will carry approximately equal load in traversing uneven ground. The spacing of the wheels shall be such that the distance between the nearest edges of adjacent tires is not greater than fifty percent (50%) of the rated tire width of a single tire. The roller shall have a rigid steel frame provided with a body suitable for ballast loading so that the load per wheel may be varied, as directed by the Contracting Officer, from eighteen thousand (18,000) to twenty-five thousand (25,000) pounds. The roller shall be towed at speeds not to exceed five (5) miles per hour.

1.6.2.4 Crawler-Type Tractors

Crawler-type tractors used for spreading or compaction shall weigh not less than twenty thousand (20,000) pounds, shall exert a unit tread pressure of not less than six (6) pounds per square inch, and shall be operated at speeds not to exceed three and one-half (3.5) miles per hour.

1.6.2.5 Alternative Compaction Equipment

The Contractor may propose to use alternative types of compaction equipment not included in these specifications. The suitability of the alternative equipment shall be demonstrated to the Contracting Officer by a field test conducted by and at the expense of the Contractor. The alternative compaction equipment shall be capable of properly compacting the soil so that no planes of weakness or laminations are formed in the fill. The field test shall consist of compacting a minimum of three layers of an area of embankment with the alternative type equipment. Testing and inspection of the area shall then be performed by the Contractor at no additional cost to the Government. Procedures for constructing and testing the area will be provided by the Contracting

Officer. Each proposed alternative type of equipment shall be capable of compacting a layer of soil not less than twelve (12) inches thick. A minimum of four complete passes over each layer of the test fill will be required for each type of alternative equipment that is allowed for use, unless in the course of constructing the test fill the Contractor is able to demonstrate that proper compaction can be obtained with fewer passes. Alternative type equipment shall be operated at speeds not to exceed and one-half (3.5) miles per hour. If sufficient previous testing has been performed on the alternative compaction equipment proposed by the Contractor to verify the suitability of the equipment to the Contracting Officer's satisfaction, the Contracting Officer may determine that the above-specified field test is not required.

1.6.2.6 Miscellaneous Equipment

Scarifiers, disks, spring-tooth or spike-tooth harrows, spreaders, powered hand tampers, and other equipment shall be types suitable for construction of embankment and berms.

1.6.2.7 Sprinkling Equipment

Sprinkling equipment shall be designed to apply water uniformly and in controlled quantities to variable widths of surface.

1.7 EMBANKMENT MATERIALS

1.7.1 General

The embankment shall be constructed of earth materials naturally occurring or contractor blended. Materials that are classified in accordance with ASTM D2487 and the Unified Soil Classification System as CL or CH materials that are free from masses of organic matter, sticks, branches, roots, and other debris including hazardous and regulated solid wastes. As earth from the designated excavation areas may contain excessive amounts of wood, isolated pieces of wood will not be considered objectionable in the embankment provided their length does not exceed one (1) foot, their cross-sectional area is less than four (4) square inches, and they are distributed throughout the fill. Not more than one percent (1%) (by volume) of objectionable material shall be contained in the earth material placed in each cubic yard of the levee section. Pockets and/or zones of wood shall not be placed in the embankment. The Contractor shall notify the Contracting Officer whenever the Plasticity Index, PI, of the material is less than 7. Material with a Plasticity Index, PI, of less than 5 shall not be used in the embankment.

1.7.2 Frozen Materials

Under no circumstances shall frozen earth, snow, or ice be placed in an embankment or berm. The Contracting Officer may require the wasting of frozen material in order that construction may proceed, and such material wasted, if directed by written order of the Contracting Officer, will be measured as specified with paragraph 1.3.4 and paid as specified in paragraph 1.4.5 above.

1.7.3 Moisture Control

The Contractor shall control the moisture content of the embankment material. Material placed in the fill shall have a moisture content ranging between the following limits:

<u>Type of Material</u>	<u>Moisture Content</u> (In percent dry weight)	
	<u>Maximum</u>	<u>Minimum</u>
CL	28	18
CH	37	20

The Contractor shall perform a minimum of one moisture content test for every lift. The Contractor shall perform the necessary work in moisture control to bring the material within the moisture content ranges specified above. The material shall be processed to within 10 percentage points of the specified maximum moisture content, before it may be placed within the semi-compacted embankment for final processing. Any necessary processing shall be performed on the existing levee. Once the material moisture content is within this range, the material can be placed within the semi-compacted embankment for further moisture control processing. Compaction shall not begin until moisture content tests are performed and the moisture content is within the above ranges. Material processing thickness shall be limited to no more than 12 inches. Wet material shall be processed by stockpiling, disking and harrowing at the work area, if necessary, until the moisture content is reduced sufficiently. If the borrow material is too dry, it shall either be prewet in the work area, or sufficient moisture shall be uniformly distributed in each layer before compacting. When it is discovered that wet fill has been placed over existing levee or newly constructed fill, the incident layer and previous layer will be tested in a minimum of one test per lift for compliance. If the top or contact surfaces of a partial fill section becomes too wet to permit suitable bond between these surfaces and the additional backfill to be placed thereon, the wet material shall be scarified and permitted to dry, assisted by disking or harrowing. The material shall be recompacted in accordance with the applicable requirements of paragraph 1.7.5. No additional payment will be made for any moisture control or moisture control testing required in this subparagraph.

1.7.4 Compaction

When the moisture content and conditions of the spread layers are satisfactory, each layer shall be compacted by any of the following methods, at the option of the Contractor:

(1) Tamper-Type Roller. Four (4) complete passes over each layer will be required. If tamping rollers are used in tandem, not more than two (2) rows will be permitted, and in such case, one (1) trip of tandem rollers over any surface will be considered as two passes. When tamping rollers are used in tandem, the tamper foot spacing shall be offset so that the circumferential rows on the rear drums are in line with the midpoint of the circumferential rows of the forward drums. Each pass of the tamping roller shall overlap the preceding or adjacent pass by not less than one (1.0) foot.

(2) Rubber-Tired Roller. Two (2) complete passes over each layer will be required.

(3) Crawler-Type Tractor. Three (3) complete passes over each layer will be required. The tractor will not be considered to be compacting while spreading materials.

(4) Powered Hand Tampers. Powered hand tampers shall be used to compact the material within 5 feet of the steel sheetpile. The first and each successive layer of compacted fill material shall be compacted to at least 95 percent of maximum dry density as determined by ASTM D 698 (Standard Proctor Density) at a moisture content within the limits of plus 5 to minus 3 percent of optimum moisture content determined from the Standard Proctor density Test ASTM D 698.

1.7.5 Definition of Pass

A pass shall consist of one (1) complete coverage of the surface of a layer by the treads of the roller, tractor, or other compacting equipment. Portions of the embankment that the compacting equipment cannot reach for any reason shall be compacted by an approved method to the density equal to that of the surrounding embankment.

1.7.6 Dressing

The entire embankment and berm, including topsoil where specified, shall be brought to not less than the prescribed design cross section, within allowable tolerance, at all points. Unreasonable roughness of the surface shall be dressed out to permit fertilizing and seeding operations.

1.7.7 Additional Compaction

If, in the opinion of the Contracting Officer, the desired compaction of any portion of the embankment cannot be secured by the minimum number of passes specified, additional complete passes shall be made over the surface area of such designated portion until the desired compaction has been obtained, and an equitable adjustment in the contract price and time will be made.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 HAULING

All material to be hauled to the site from the stockpile area shall be loaded from stockpiles as directed by the Contracting Officer. The Contractor shall be responsible for the equipment necessary for loading the stockpile material in the trucks. The route for trucks carrying material to and from the job site, and to and from the borrow area shall avoid residential streets, and shall be approved by the Contracting Officer. Trucks shall not spill or track mud on public roads. The Contractor shall take immediate action to clean up any material spilled on the roads without notification from the Contracting Officer. Failure by the Contractor to satisfactorily clean public roads used for the hauling operation shall result in the suspension of hauling operations until such roads are cleaned to the satisfaction of the Contracting Officer

3.2 EMBANKMENT FOUNDATION PREPARATION

3.2.1 Foundation Preparation

3.2.1.1 Above Ground Preparation

After clearing and grubbing and any required excavation of the levee embankment, any depressions shall be broken down, where so directed, to flatten out the slopes. Scour holes and steep vertical erosion faces shall be flattened, benched and backfilled as shown on the drawings. The entire earth surface on or against which fill is to be placed, except areas covered with water and not drained as specified in paragraphs 3.1.2, shall be thoroughly broken to a depth of six (6) inches. If for any cause, this broken surface becomes compacted in such a manner that, in the opinion of the Contracting Officer, a plane of seepage or weakness might be induced, it shall again be adequately scarified before depositing material thereon. For levee enlargement work, both the natural surface of the ground and the surface of the existing levee to be occupied by the new work shall be prepared as specified above. All scarifying and breaking of ground surface shall be done parallel to the centerline of the levee. All of the foregoing work shall be completed at least two hundred (200) feet but not greater than five hundred (500) feet in advance of the embankment construction.

3.2.2 Drainage

The foundation receiving fill and all partially completed fill shall be kept thoroughly drained.

3.2.3 Frozen Ground

No fill shall be placed upon frozen ground.

3.3 EMBANKMENT CONSTRUCTION

3.3.1 Semi-compacted Fill

The location and extent of the semi-compacted fill is shown on the drawings. Semi-compacted fill shall not be placed in water. The materials for semi-compacted fill shall be placed or spread in layers, the first layer not more than six (6) inches in thickness and the succeeding layers not more than twelve (12) inches in thickness prior to compaction.

Layers shall be started full out to the slope stakes and shall be carried substantially horizontal and parallel to the levee centerline with sufficient crown or slope to provide satisfactory drainage during construction. Benching into the slope of the existing embankment is required in order to place and compact the material in horizontal layers when the depth of fill between the theoretical side slope and the existing levee side slope equals or exceeds three (3) feet in the vertical dimension. Benching shall consist of excavating the existing levee embankment as shown on the drawings and described herein. The vertical face of the existing embankment resulting from the benching operation shall be a minimum of one (1) foot in height but shall not exceed two (2) feet in height as shown on the drawings. Material excavated from the benching operations shall be used as fill. When the surface of any compacted layer is too smooth to bond properly with the succeeding layer, it shall be adequately scarified before the next layer is placed thereon except as specified in paragraph 3.1.1. The elevation of the levee embankment shall not exceed the elevation of the berm embankment(s) by more than three (3) feet.

3.4 CROSS SECTIONS AND ZONING OF MATERIALS

3.4.1 Embankment Sections

Unless otherwise specified, the dimensions and slopes shall conform to the applicable cross sections including the allowable tolerance, shown on the drawings.

3.5 GRADE TOLERANCES

All embankments shall be constructed to the design grade and cross section shown on the drawings. For semi-compacted fill, at all points, a tolerance of 3/10 of 1 foot, at all points, a tolerance of 5/10 of 1 foot above or below the prescribed design grade and cross section shown will be permitted in the final dressing provided that the crown of the levee drains, there are no abrupt humps or depressions in surfaces or bulges in the width of the crown, and the side slopes are uniform. Any partial fill or temporarily stockpiled material placed within the design-section shall not exceed the design grade or design slopes of the embankment by more than one (1) foot and shall have side slopes not steeper than 1V on 3H.

3.6 SLIDES

Should a slide occur in any part of the embankment during its construction, or after its completion, but prior to its acceptance, the Contractor shall, upon written order of the Contracting Officer, either cut out and remove the slide from the embankment and then rebuild that portion of the embankment, or construct a stability berm of such dimension, and placed in such manner, as the Contracting Officer shall prescribe. In case the slide is caused through fault of the Contractor, the foregoing operations shall be performed at no additional cost to the Government. In case the slide is not the fault of the Contractor, the repair shall be made by an equitable adjustment under the Section 00700 Clause entitled, *Changes (FAR 52.243-4)*. The method of slide correction will be determined by the Contracting Officer.

