

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE _____ PAGE _____ OF _____ PAGES

2. AMENDMENT/MODIFICATION NO. _____ 3. EFFECTIVE DATE _____ 4. REQUISITION/PURCHASE REQ. NO. _____ 5. PROJECT NO. *(If applicable)* _____

6. ISSUED BY _____ CODE _____ 7. ADMINISTERED BY *(If other than Item 6)* _____ CODE _____

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)* _____ (X) 9A. AMENDMENT OF SOLICIATION NO. _____
 9B. DATED *(SEE ITEM 11)* _____
 10A. MODIFICATION OF CONTRACT/ORDER NO. _____
 10B. DATED *(SEE ITEM 11)* _____
 CODE _____ FACILITY CODE _____

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended, is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:
 (a) By completing items 8 and 15, and returning _____ 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: <i>(Specify authority)</i> 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 <i>(such as changes in paying office, appropriation date, etc.)</i> 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 <i>(Specify type of modification and authority)</i>

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

Item 14. Continued.

CHANGES TO THE BIDDING SCHEDULE

1. Bidding Schedule - Replace the Bidding Schedule with the attached new Bidding Schedule, bearing the notation "ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACW63-01-B-0002:"

CHANGES TO THE SPECIFICATIONS

2. Replacement Sections - Replace the following sections with the accompanying new sections of the same number and title, each bearing the notation "ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACW63-01-B-0002:"

SECTION 02370 STONE PROTECTION
SECTION 02930 SEEDING

CHANGES TO THE DRAWINGS

3. Replacement Drawings.- Replace the drawings listed below with the attached new drawings(s) of the same number, bearing the notation "AM #0001":

waco1am1.cal Seq 1 PROJECT LOCATION MAP & GENERAL PLAN VEIW
waco4am1.cal Seq 4 BANK PROTECTION SECTION AND DETAILS
waco6am1.cal Seq 6 BORING LOCATION AND LOGS STOCKPILE LOCATIONS

END OF AMENDMENT

ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACW63-01-B-0002

Brazos River, Streambank Protection (Title)
Sewage Treatment Plant, Waco, Texas (Location)

Solicitation No. DACW63-01-B-0002

BIDDING SCHEDULE
(To be attached to SF 1442)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0001	Clearing and Grubbing	2	Acre	\$_____	\$_____
0002	Demolition	Sum	Job	***	\$_____
[AM #0001]					
0003	Unclassified Excavation	26,540	CuYd	\$_____	\$_____
0004	Backfill	9,600	CuYd	\$_____	\$_____
0005	24-in riprap	16,650	Ton	\$_____	\$_____
0006	9-in Bedding	3,720	Ton	\$_____	\$_____
0007	Seeding	Sum	Job	***	\$_____
0008	Final Record Drawings	Sum	Job	***	<u>\$1,750.00</u>
TOTAL					\$_____

NOTES:

1. ARITHMETIC DISCREPANCIES (EFARS 14.407-2)

(a) For the purpose of initial evaluation of bids, the following will be utilized in resolving arithmetic discrepancies found on the face of the bidding schedule as submitted by bidders:

- (1) Obviously misplaced decimal points will be corrected;
- (2) In case of discrepancy between unit price and extended price, the unit price will govern;
- (3) Apparent errors in extension of unit prices will be corrected; and
- (4) Apparent errors in addition of lump-sum and extended prices will be corrected.

ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACW63-01-B-0002

Brazos River, Streambank Protection (Title)
Sewage Treatment Plant, Waco, Texas (Location)

Solicitation No. DACW63-01-B-0002

Brazos River, Streambank Protection (Title)
Sewage Treatment Plant, Waco, Texas (Location)

Solicitation No. DACW63-01-B-0002

BIDDING SCHEDULE (cont)

NOTES: (cont)

(b) For the purpose of bid evaluation, the Government will proceed on the assumption that the bidder intends his bid to be evaluated on the basis of the unit prices, the totals arrived at by resolution of arithmetic discrepancies as provided above and the bid will be so reflected on the abstract of bids.

(c) These correction procedures shall not be used to resolve any ambiguity concerning which bid is low.

2. If a modification to a bid based on unit prices is submitted, which provides for a lump sum adjustment to the total estimated cost, the application of the lump sum adjustment to each unit price in the bid schedule must be stated. If it is not stated, the bidder agrees that the lump sum adjustment shall be applied on a pro rata basis to every unit price in the bid schedule.

3. Bidders must bid on all items.

4. Costs attributable to Division 01 - General Requirements are assumed to be prorated among bid items listed.

5. ABBREVIATIONS

For the purpose of this solicitation, the units of measure are represented as follows:

- a. CuYd (cubic yard)
- b. Ton (ton(long))
- c. Acre

END OF BIDDING SCHEDULE

SECTION 02370

STONE PROTECTION
[AM #0001]

PART 1 GENERAL

1.1 SCOPE

This section covers riprap and bedding.

1.2 ACCEPTABLE SOURCES OF RIPRAP

Sources of riprap acceptable to the Government are Granite Mountain quarry, at Marble Falls, Texas and Dolese Brothers quarry at Richard Spur, Oklahoma.

1.3 REFERENCES

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

CORPS OF ENGINEERS (COE)

- | | |
|-----------|---|
| CRD-C 137 | (1977) Soundness of Aggregate by Use of Sodium Sulfate or Magnesium Sulfate |
| CRD-C 144 | (1973) Method of Testing Stone for Resistance to Freezing and Thawing |

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

- | | |
|------------|--|
| ASTM C 88 | (1976) Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate |
| ASTM C 127 | (1980) Specific Gravity and Absorption of Coarse Aggregate |
| ASTM C 535 | Resistance to Degradation of Large Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine |

1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; all other submittals are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-04 Samples

Stone Protection Materials; G.

Samples of stone protection materials of each type.

SD-06 Test Reports

Testing; G.

Within 24 hours of conclusion of physical tests, 2 copies of test results including durability, weight, absorption, soundness (magnesium sulfate test and freezing and thawing test), and resistance to degradation.

SD-07 Certificates

Testing; .

Qualifications of the commercial testing laboratory or Contractor's testing facilities.

1.5 MEASUREMENT AND PAYMENT

Measurement and payment shall be in accordance with SECTION 01270.

PART 2 PRODUCTS

2.1 STONE PROTECTION MATERIALS, GENERAL

Stone for the protection work shall be durable stone as approved by the Contracting Officer. Gypsum, anhydrite, chert, shale, and soft or weathered rock will not be approved. The Contractor shall make all arrangements for procuring, loading, hauling, handling, and placing all stone protection materials from **[AM #1] approved** sources.

2.2 RIPRAP

Stone for riprap shall be durable and of a suitable quality to insure permanence in the structure and in the climate in which it is to be used. It shall be free from cracks, seams, and other defects that would tend to increase unduly its deterioration from natural causes. The inclusion of objectionable quantities of dirt, sand, clay, and rock fines will not be permitted. Either boulders or quarried rock may be used. The stone shall be reasonably well graded from the minimum size stone permitted to the maximum size stone permitted. Neither the breadth nor the thickness of any piece of stone shall be less than one-third of its length. During production, the stone will be sampled as often as deemed necessary by the Contracting Officer to determine compliance with the provisions of the specifications. The Contractor shall provide all necessary equipment and labor for the taking, processing and weighing of representative samples.

Gradations shall be as follows:

RIPRAP GRADATIONS FOR STREAMBANK PROTECTION¹

Riprap Thickness (Inches)	Maximum Size (Pounds)	90 Percent Size ² (Pounds)	Average Size ³ (Pounds)	8-Percent Size ⁴ (Pounds)
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24 1120 650-875 200-350 35

- 1 Gradation is for stone having a specific gravity of 2.65.
- 2 Defined as that size such that 90 percent of the stone, by weight, is smaller and 10 percent larger.
- 3 Defined as that size such that 50 percent of the total riprap stone, byweight, is larger and 50 percent is smaller.
- 4 Not more than 8 percent of the riprap, by weight, shall consist of pieces weighing less than the weights shown for the applicable riprap thickness.

2.3 BEDDING

Bedding material shall consist of sand, gravel, or crushed stone, well-graded between the prescribed limits. The material shall be composed of tough, durable particles, shall be reasonably free from thin, flat and elongated pieces, and shall contain no organic matter or soft, friable particles in quantities more than 5 percent of the total sample.

Sieve Designation U. S. Standard Square Mesh (Inch)	Percent by Weight Passing
6	100
3	65-100
1-1/2	40-60
3/4	25-45
No. 4	0-15
No. 40	0-5

PART 3 EXECUTION

3.1 FOUNDATION PREPARATION

Foundation preparation shall be in accordance with SECTION 02300 and the following:

Areas on which bedding is to be placed shall be trimmed and dressed to conform to cross sections shown on the drawings within an allowable tolerance of plus or minus 2 inches from the theoretical slope lines and grades. Where such areas are below the allowable minus tolerance limit they shall be brought to grade by filling with earth similar to the adjacent material and well-compacted or by filling with bedding material and no additional payment will be made for any material thus required. Immediately prior to placing the bedding, the prepared base will be inspected by the Contracting Officer and no material shall be placed thereon until that area has been approved.

3.2 BEDDING PLACEMENT

Bedding material shall be placed within the limits shown on the drawings or as staked in the field. Bedding material shall be spread uniformly on the prepared base, in a satisfactory manner, to the slope lines and grades indicated on the drawings or as directed. Placing of material by methods which will tend to segregate particle sizes within the bedding will not be permitted. Any damage to the surface of the bedding base during placing of the bedding shall be repaired before proceeding with the work. Unless otherwise specified, compaction of the bedding layers will not be required but they shall be finished to present a reasonably even surface free from mounds or windrows. A tolerance of plus or minus one inch from the thickness indicated on the drawings will be allowed in the finished surface of the bedding.

3.3 RIPRAP PLACEMENT

Riprap shall be placed within the limits shown on the drawings or otherwise required by the Contracting Officer. Stone for riprap shall be placed on the bedding in a manner to produce a reasonably well-graded mass of rock with a minimum of voids, and shall be constructed within the specified tolerance to the lines and grades shown on the drawings or staked in the field. Riprap shall be placed up the slope from the toe. A tolerance of plus 6 inches from the thickness shown on the drawings will be allowed in the finished surface of the riprap, i.e., isolated stones may extend as much as 6 inches above the grade line shown on the drawings. Where thickness of riprap exceeds the allowable tolerance, excess riprap shall be redistributed or removed from the work. Riprap removed from the work shall be reweighed for deduction from the quantity to be paid for. No minus tolerance will be permitted.

Beginning at the toe of the slope, riprap shall be placed to its full course thickness in one operation and in a manner to avoid displacing the bedding stone. The larger stones shall be well distributed and the entire mass of stones in their final position shall be roughly graded to conform to the gradation specified above. The finished riprap shall be free from objectionable pockets of small stones and clusters of larger stones. Placing riprap in layers will not be permitted.

Placing riprap by dumping into chutes or by similar methods likely to cause segregation of the various sizes will not be permitted. The desired distribution of the various sizes of stones throughout the mass shall be obtained by selective loading of the material at the quarry or other source; by controlled dumping of successive loads during final placing, or by other methods of placement which will produce the specified results. Rearranging of individual stones by mechanical equipment or by hand shall be performed as required to obtain a reasonably well-graded distribution of stone sizes as specified above.

Any unsuitable riprap placed in the work shall be removed from the work and reweighed for deduction from the quantity to be paid for. Finishing operations shall not lag initial placement operations more than 200 feet. Unless otherwise authorized by the Contracting Officer, riprap protection shall be placed in conjunction with the construction of the embankment and

with only sufficient lag in construction of the riprap as may be necessary to prevent mixture of embankment and stone protection materials. The Contractor shall maintain the riprap protection until accepted and any material displaced by any cause shall be replaced at his expense to the lines and grades shown on the drawings.

3.4 UNDERWATER PLACEMENT

For underwater placement, riprap stone shall be placed with a skip bucket or other approved equipment capable of discharging the material underwater with minimum freefall to reduce segregation. Stone shall be placed systematically beginning at the base of structure slopes. Low spots in stone shall be located by probing, and all low spots shall be thickened, as a minimum, to thickness and grade.

3.5 PRODUCTION QUALITY CONTROL

3.5.1 Government Sampling and Testing

During construction, stone protection materials will be sampled and tested as often as deemed necessary by the Contracting Officer. This testing will consist of in-place gradations and quality tests on the placed and finished stone. The Contractor shall furnish three laborers as required to assist in the sampling and testing, the necessary equipment and operators for performance of the sampling and testing, and shall be responsible for the satisfactory replacement of stone in the sampled area, all at no additional cost to the Government.

3.5.2 Riprap Gradation Test and Depth Checks

The in-place gradations and depth checks will be determined using the following procedure:

- (1) Selection of a full thickness sample at least 8 feet square from the placed and finished stone.
- (2) Determination of the weight of the entire sample and average depth of the area from which the sample was removed.
- (3) Determination of the weight of each individual piece of stone weighing over the specified 8 percent size.
- (4) Determination of the collective weight of all individual stones weighing less than the specified 8 percent weight.

Only those tests which meet all the specified requirements will be counted.

If any test indicates the materials or workmanship does not conform to the specifications, the material shall be removed and replaced with stone meeting these specifications; the frequency of testing will be increased until compliance has been obtained.

3.5.3 Bedding Gradation Tests and Depth Checks

The in-place gradations and depth checks will be determined prior to

placement of riprap. Gradation of bedding material shall be determined using the procedure in ASTM C 136. If any tests indicate the materials or workmanship does not conform to the specifications, the material shall be removed and replaced with stone meeting the specifications; the frequency of testing will be increased until compliance has been obtained.

3.5.4 Testing Frequency

3.5.4.1 Riprap and Bedding

One test for the first 10,000 square feet of stone placed. One test for the every additional 10,000 tons or portion thereof of stone placement.

-- End of Section --

SECTION 02930

SEEDING

1 GENERAL

1.1 SCOPE

This section covers the seeding of areas disturbed by the Contractor.

1.2 REFERENCES

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

COMMERCIAL ITEM DESCRIPTIONS (CID)

CID A-A-1909 (Basic) Fertilizer

U.S. DEPARTMENT OF AGRICULTURE (USDA)

USDA-01 (1939) Federal Seed Act of August 9, 1939 (53 Stat. 1275) Rules and Regulations

1.3 SUBMITTALS

Submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01300 SUBMITTAL PROCEDURES:

SD-07 Certificates

Certificates of Compliance; FIO.

Prior to the delivery of materials, certificates of compliance for the materials listed below shall be submitted certifying that materials meet the requirements specified.

- a. Fertilizer: Chemical analysis composition percent.

1.4 DELIVERY AND STORAGE

1.4.1 Delivery of Fertilizer

Delivery of fertilizer to the site shall be in original, unopened containers bearing manufacturer's chemical analysis. Instead of containers, fertilizer may be furnished in bulk.

1.4.2 Storage

Materials shall be stored in areas designated by the Contracting officer. Fertilizer shall be stored in cool, dry locations away from contaminants.

1.4.3 Handling

Materials shall not be dropped or dumped from vehicles.

1.5 MEASUREMENT AND PAYMENT

Measurement and payment shall be in accordance with SECTION 01270.

2 PRODUCTS

2.1 SEED

Seed labeled in accordance with USDA Rules and Regulations under the Federal Seed Act shall be furnished. Seed that is wet or moldy or that has been otherwise damaged in transit or storage will not be acceptable. The seed shall be free of field bindweed, hedgeweed, and nutgrass seed. Seed shall not contain other noxious weed seed in excess of the limits allowable under the Federal Seed Act and applicable State seed laws. Seed labeled as mixture or pasture mixture will not be acceptable. Each seed container shall bear the date of the last germination which date shall be within a period of 6 months prior to commencement of planting.

2.1.1 Seed Mixture

Seed with the following percentage by weight of pure live seed in each lot shall be furnished. Weed seed shall not exceed one percent.

Kilograms/Hectare	Kind of Seed	of Pure Hulled or
Common Name	Scientific Name	Live Seed Unhulled

Reclamation of Borrow Pits, R.O.W., Other Areas	Buffalo Grass 'Topgun'	
Buchloe dactyloides	17 kg Unhulled, 'Topgun' Treated	
Sideoats Grama	Bouteloua curtipendula	17 kg Unhulled
Little Bluestem	Schizachyrium scoparium	18 kg Unhulled
Green Sprangletop	Leptochloa dubia	12 kg Unhulled

2.2 FERTILIZER

2.2.1 Fertilizer for Fertilizing

Fertilizer shall be commercial grade, free flowing, uniform in composition and conforming to CID A-A-1909 FERTILIZER. Granular Fertilizer: Consists of nitrogen-phosphorus-potassium ratio: 15 percent nitrogen, 5 percent phosphorus, and 10 percent potassium. Fertilizer shall be applied at a rate of 350 pounds per acre.

2.2.2 Fertilizer for Refertilizing

Fertilizer for refertilizing shall be as specified in paragraph Fertilizer for Fertilizing.

2.3 WATER

Water shall be of a quality suitable for irrigation.

3 EXECUTION

3.1 PLANTING TIMES

Seed shall be planted from March 15 through June 1.

3.2 SITE PREPARATION

3.2.1 Grading

Site preparation work shall be performed only during periods when beneficial results can be obtained. When drought, excessive moisture, or other unsatisfactory condition prevails, the work shall be stopped when directed. Seeded areas shall be filled as needed or have surplus soil removed to attain the finished grade. Graded surfaces shall be blended to existing areas. Finished graded areas shall be protected from damage by vehicular or pedestrian traffic and erosion.

3.2.2 Fertilizer Application

Fertilizer shall be incorporated into the soil to a minimum depth of 4 inches or may be incorporated as part of the tillage operation.

3.2.3 Tillage

Soil shall be tilled to a minimum depth of 4 inches by plowing, disking, harrowing, rototilling, or other method.

3.3 SEEDING

3.3.1 General

If unplanted skips and areas are noted after germination and growth of the grass, the Contractor shall be required to seed the unplanted areas at no additional cost to the Government. Seed boxes shall be kept at least half full during seeding operations to insure even distribution of seed over all the areas seeded.

Areas shall be seeded at a rate of 40 pounds of pure live seed per acre.

3.3.2 Drill Seeding

The seed shall be planted using a Brillion seeder or approved equal. Seed shall be uniformly drilled to an average depth of 1/2 inch. The seed shall be planted prior to the initial watering.

3.3.3 Rolling

Immediately after seeding, the entire area shall be firmed with a roller not exceeding 90 pounds for each foot of roller width. Areas which have been seeded with seed drills equipped with rollers shall not be rolled.

3.4 PROTECTION OF SEEDED AREAS

Immediately after seeding, the area shall be protected against traffic or other use by erecting barricades and providing signage as required or as directed by the Contracting officer.

3.5 ESTABLISHMENT

3.5.1 Duration

The establishment period shall commence upon completion of the last day of the seeding operation and shall continue for a period of 3 months or until all work on the entire project has been completed and accepted, whichever is later.

3.5.2 Stand of Turf for Seeding

Seeding shall provide a minimum of 20 grass plants per square foot with bare spots not larger than 6 inches square. The total bare spots shall not exceed 2 percent of the total turfed area.

3.5.3 Maintenance

Turf shall be reestablished as specified herein for eroded, damaged, or barren areas. Mulch shall be repaired or replaced as required.

Turfed areas shall be mowed as directed by the Contracting officer.

Watering shall be started within 7 days after seeding. Watering shall be at intervals to maintain a moist soil condition to a minimum depth of 1 inch. Frequency of watering and quantity of water shall be adjusted in accordance with the growth of the turf.

Fertilizer shall be applied at a rate to provide 0.5 pounds of available nitrogen per 1000 square feet 30 days after planting is performed but not after the beginning of winter dormancy.

When a pest, disease, or weedy growth becomes apparent during the turf establishment period, a state certified applicator shall apply required chemicals in accordance with EPA label restrictions and recommendations.

3.6 FINAL ACCEPTANCE

At the end of the turf establishment period, a final inspection will be made. Final acceptance of the turf will be based upon a stand of turf as defined above. Rejected areas shall be replanted or repaired as directed

-- End of Section --