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|--|---------------------------------------|----------------------------------|---------------------------------------|
| 2. AMENDMENT/MODIFICATION NO. 0001 | 3. EFFECTIVE DATE 10 NOV 99 | 4. REQUISITION/PURCHASE REQ. NO. | 5. PROJECT NO. <i>(If applicable)</i> |
|--|---------------------------------------|----------------------------------|---------------------------------------|

| | |
|--|--|
| 6. ISSUED BY US ARMY ENGINEER DISTRICT, FORT WORTH ATTN: CESWF-CT (RM 2A19) PO BOX 17300 FORT WORTH, TX 76102-0300 | 7. ADMINISTERED BY <i>(If other than Item 6)</i> |
|--|--|

| | | |
|--|-----|--|
| 8. NAME AND ADDRESS OF CONTRACTOR <i>(No., street, county, State and ZIP Code)</i> | (✓) | 9A. AMENDMENT OF SOLICITATION NO. DACW63-99-B-0078 |
| | X | 9B. DATED <i>(SEE ITEM 11)</i> 22 OCTOBER 1999 |
| | | 10A. MODIFICATION OF CONTRACTS/ORDER NO. |
| | | 10B. DATED <i>(SEE ITEM 13)</i> |

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 tended. is extended, is not ex-

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:
 (a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

- | | |
|-----|--|
| (✓) | A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: <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.)*
The Solicitation for REPAIR SAN ANTONIO RIVER CHANNEL, SAN ANTONIO, TEXAS, is amended as follows:

See Continuation Sheet.

NOTE: Bid Opening date and time remains "23 November 1999, 2 p.m., local time as previously announced.

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 _____ <i>(Signature of person authorized to sign)</i> | 15C. DATE SIGNED |
| | 16B. UNITED STATES OF AMERICA BY _____ <i>(Signature of Contracting Officer)</i> |
| | 16C. DATE SIGNED |

Item 14. Continued.

BIDDING SCHEDULE:

1. Bidding Schedule.- Replace the Bidding Schedule with the accompanying new Bidding Schedule, bearing the notation "ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACW63-99-B-0078."

WAGE RATES AND AFFIRMATIVE ACTION PLAN:

2. Sections 00710 and 00720.- Delete the notes concerning the Wage Rates and Affirmative Action Plan and substitute therefore the attached Wage Rates and Affirmative Action Plan, each bearing the notation "ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACW63-99-B-0078."

SPECIFICATIONS:

3. Section 01000.- Replace this Section with the accompanying new Section 01000, bearing the notation "ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACW63-99-B-0078."

4. Section 02933.- Replace this Section with the accompanying new Section 02933, bearing the notation "ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACW63-99-B-0078."

DRAWINGS:

5. Sequence Nos. 2, 3, and 9:

NOTE No. 3 is to be deleted and replaced with "3. ALL UNPAVED GRADED AND DISTURBED AREAS THAT ARE A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL RECEIVE TURFING TREATMENT. TURFING WILL CONSIST OF FERTILIZING, TILLING, SEEDING, WITH BUFFALOGRASS, ROLLING, WATERING, AND MOWING. SEE SPECS. SECTION 02933."

6. Sequence Nos. 4, 5, 6, 7, and 10:

NOTE No. 1 is to be deleted and replaced with "1. TOP 6 INCHES OF COMPACTED BACKFILL SHOWN ON CROSS SECTIONS SHALL BE TOPSOIL. TOPSOIL SHALL BE TURFED IN ACCORDANCE WITH SPECS. SECTION 02933."

7. Sequence No. 13:

A. NOTE No. 1 is to be deleted and replaced with “1. ALL AREAS WHERE NEW TOPSOIL IS PLACED SHALL RECEIVE TURFING IN ACCORDANCE WITH SPECS. SECTION 02933.

B. Add NOTE No. 3 to read “3. ALL UNPAVED GRADED AND DISTURBED AREAS THAT ARE A RESULT OF THE CONTRACTOR’S OPERATIONS SHALL RECEIVE TURFING TREATMENT. TURFING WILL CONSIST OF FERTILIZING, TILLING, SEEDING, WITH BUFFALOGRASS, ROLLING, WATERING, AND MOWING. SEE SPECS. SECTION 02933.

8. Sequence No. 17:

A note is to be added as such: “NOTE: 1. ALL UNPAVED GRADED AND DISTURBED AREAS THAT ARE A RESULT OF THE CONTRACTOR’S OPERATIONS SHALL RECEIVE TURFING TREATMENT. TURFING WILL CONSIST OF FERTILIZING, TILLING, SEEDING, WITH BUFFALOGRASS, ROLLING, WATERING, AND MOWING. SEE SPECS. SECTION 02933.”

9. Sequence No. 19:

A. NOTE No. 3 is to be deleted and replaced with “3. ALL UNPAVED GRADED AND DISTURBED AREAS THAT ARE A RESULT OF THE CONTRACTOR’S OPERATIONS SHALL RECEIVE TURFING TREATMENT. TURFING WILL CONSIST OF FERTILIZING, TILLING, SEEDING, WITH BUFFALOGRASS, ROLLING, WATERING, AND MOWING. SEE SPECS. SECTION 02933.”

B. Note No. 4 is to be added as such: “4. THE VEHICULAR CLEARANCE AT THE ASPHALT ROAD BELOW MILITARY DR. BRIDGE IS APPROXIMATELY 10 FT – 3 IN.”

10. Sequence No. 20:

NOTE No. 4 is to be deleted and replaced with “4. TOPSOIL THROUGHOUT REPAIR LIMITS SHALL RECEIVE TURF IN ACCORDANCE WITH SPECS. SECTION 02933.”

ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACW63-99-B-0078

Repair San Antonio River Channel, PL 84-99
San Antonio, Texas

Solicitation No. DACW63-99-B-0078

BIDDING SCHEDULE
(To be attached to SF 1442)

| Item No. | Description | Estimated Quantity | Unit | Unit Price | Estimated Amount |
|-------------|--------------------------|-----------------------|-------------|---------------|---------------------|
| 0001 | Riprap | <u>5,610</u> | ton | \$ _____ | \$ _____ |
| 0002 | Choker Stone | <u>720</u> | ton | \$ _____ | \$ _____ |
| 0003 | Excavation, Unclassified | <u>730</u> | Cubic Yards | \$ _____ | \$ _____ |
| 0004 | Backfill | <u>2,307</u> | Cubic Yards | \$ _____ | \$ _____ |
| 0005 | Turfing | Job | Sum | *** | \$ _____ |
| 0006 | Care of Water | Job | Sum | *** | \$ _____ |
| 0007 | Record Drawings | Job | Sum | *** | \$ 5,250 |
| 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

BIDDING SCHEDULE (cont)

NOTES: (cont)

(4) Apparent errors in addition of lump-sum and extended prices will be corrected.

(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, 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. For the purpose of this solicitation, the word "item" shall be considered to mean "schedule" as used in Provision 52.214-0019, CONTRACT AWARD--SEALED BIDDING--CONSTRUCTION, in Section 00100 INSTRUCTIONS, CONDITIONS, AND NOTICES TO BIDDERS.

END OF BIDDING SCHEDULE

ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACWQ63-99-B-0078
GENERAL DECISION TX990043 03/12/99 TX43
 General Decision Number TX990043

Superseded General Decision No. TX980043

State: **TEXAS**

Construction Type:
HEAVY
HIGHWAY

County(ies):

| | | |
|--------------|-----------|------------|
| BELL | CORYELL | TRAVIS |
| BEXAR | GUADALUPE | WILLIAMSON |
| BRAZOS | HAYS | |
| COMAL | MCLENNAN | |

Heavy (excluding tunnels and dams) **and Highway Construction Projects** (does not include building structures in rest area projects). *NOT TO BE USED FOR WORK ON SEWAGE OR WATER TREATMENT PLANTS OR LIFT/PUMP STATIONS IN BELL, CORYELL, McLENNAN AND WILLIAMSON COUNTIES.

| | |
|----------------------------|-------------------------|
| Modification Number | Publication Date |
| 0 | 03/12/1999 |

COUNTY(ies):

| | | |
|--------------|-----------|------------|
| BELL | CORYELL | TRAVIS |
| BEXAR | GUADALUPE | WILLIAMSON |
| BRAZOS | HAYS | |
| COMAL | MCLENNAN | |

SUTX2042A 03/26/1998

| | Rates | Fringes |
|------------------------------|-------|---------|
| AIR TOOL OPERATOR | 8.08 | |
| ASPHALT HEATER OPERATOR | 11.00 | |
| ASPHALT RAKER | 8.00 | |
| ASPHALT SHOVELER | 7.97 | |
| BATCHING PLANT WEIGHER | 11.00 | |
| CARPENTER | 10.80 | |
| CONCRETE FINISHER-PAVING | 9.57 | |
| CONCRETE FINISHER-STRUCTURES | 8.83 | |
| CONCRETE RUBBER | 8.52 | |
| ELECTRICIAN | 16.25 | |
| FLAGGER | 6.86 | |
| FORM BUILDER-STRUCTURES | 8.77 | |
| FORM LINER-PAVING & CURB | 8.00 | |
| FORM SETTER-PAVING & CURB | 8.68 | |
| FORM SETTER-STRUCTURES | 8.73 | |
| LABORER-COMMON | 7.12 | |
| LABORER-UTILITY | 7.99 | |
| MECHANIC | 12.15 | |
| OILER | 11.40 | |
| SERVICER | 8.44 | |

ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACWQ63-99-B-0078

| | |
|---|-------|
| PAINTER-STRUCTURES | 10.00 |
| PIPE LAYER | 8.27 |
| ASPHALT DISTRIBUTOR OPERATOR | 9.70 |
| ASPHALT PAVING MACHINE | 9.26 |
| BROOM OR SWEEPER OPERATOR | 7.12 |
| BULLDOZER | 9.28 |
| CONCRETE CURING MACHINE | 7.79 |
| CONCRETE FINISHING MACHINE | 11.00 |
| CONCRETE PAVING SAW | 9.79 |
| SLIPFORM MACHINE OPERATOR | 11.15 |
| CRANE, CLAMSHELL, BACKHOE, DERRICK, DRAGLINE, SHOVEL | 10.12 |
| FOUNDATION DRILL OPERATOR TRUCK MOUNTED | 15.00 |
| FRONT END LOADER | 8.86 |
| HOIST - DOUBLE DRUM & LESS | 10.81 |
| MIXER | 7.12 |
| MIXER - CONCRETE PAVING | 11.00 |
| MOTOR GRADER FINE GRADE | 12.37 |
| MOTOR GRADER | 11.14 |
| PAVEMENT MARKING MACHINE | 8.31 |
| PLANER OPERATOR | 15.75 |
| ROLLER, STEEL WHEEL PLANT-MIX PAVEMENTS | 7.73 |
| ROLLER, STEEL WHEEL OTHER FLATWHEEL OR TAMPING | 7.33 |
| ROLLER, PNEUMATIC, SELF PROPELLED | 7.17 |
| SCRAPERS | 8.38 |
| TRACTOR-CRAWLER TYPE | 9.40 |
| TRAVELING MIXER | 7.92 |
| TRENCHING MACHINE, HEAVY | 9.92 |
| WAGON-DRILL/BORING MACHINE | 8.00 |
| REINFORCING STEEL SETTER PAVING | 14.50 |
| REINFORCING STEEL SETTER STRUCTURES | 10.61 |
| STEEL WORKER-STRUCTURAL | 11.73 |
| SPREADER BOX OPERATOR | 8.55 |
| WORK ZONE BARRICADE | 8.29 |
| SIGN INSTALLER | 7.97 |
| TRUCK DRIVER-SINGLE AXLE LIGHT | 8.32 |
| TRUCK DRIVER-SINGLE AXLE HEAVY | 7.954 |
| TRUCK DRIVER-TANDEM AXLE SEMI- TRAILER | 8.02 |
| TRUCK DRIVER-LOWBOY/FLOAT | 10.12 |
| WELDER | 11.02 |

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(v)).

WAGE DETERMINATION APPEALS PROCESS

ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACWQ63-99-B-0078

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.

ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACWQ63-99-B-0078
END OF GENERAL DECISION

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (APR 1984) (FAR 52.222-23D) (DEVIATION)

(a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.

(b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

| Goals for minority participation <u>for each trade</u> | Goals for female participation <u>for each trade</u> |
|---|---|
| 47.8% | 6.9% |

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed.

Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs Office.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on (1) its implementation of the Equal Opportunity clause, (2) specific affirmative action obligations required by the clause entitled "Affirmative Action Compliance Requirements for Construction," and (3) its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

(d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance Programs, within 10 working days following award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the--

- (1) Name, address, and telephone number of the subcontractor;
- (2) Employer's identification number of the subcontractor;
- (3) Estimated dollar amount of the subcontract;
- (4) Estimated starting and completion dates of the subcontract; and
- (5) Geographic area in which the subcontract is to be performed.

(e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is: the City of San Antonio, TX, and the Counties of Bexar, Comal, and Guadalupe.

SECTION 01000

CONSTRUCTION SCHEDULE

05/1998

AMENDMENT NO. 0001

PART 1 GENERAL

1.1 SCHEDULE

Commence, prosecute, and complete the work under this contract in accordance with the following schedule and Section 00800 SPECIAL CONTRACT REQUIREMENT clauses COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK and LIQUIDATED DAMAGES:

| <u>Item of Work</u> | <u>Commencement of Work (calendar days)</u> | <u>Completion of Work (calendar days)</u> | <u>Liquidated Damages per calendar day</u> = |
|------------------------------|---|---|--|
| (1) All Work | Within 10 days after receipt of Notice to Proceed | <u>210 (am#1)</u> | \$ 150.00 |
| (2) Establishment of Turf | * | * | \$ 53.00 |

[ALTERNATE A]

*Establishment of Turf

Planting and maintenance for turfing shall be in accordance with 02933 ESTABLISHMENT OF TURF . No payment will be made for establishment of turf until all requirements of the section are adequately performed and accepted, as determined by the Contracting Officer.

1.2 STREET CLOSINGS

The Contractor shall coordinate all requests for street closings with the Contracting Officer in writing 14 days prior to date of requested outage:

- a. One lane traffic shall be maintained at all times.

b. The final street repair shall be completed within 14 days after the start of any street crossing. Any part of the street returned to service prior to final repair shall be maintained smooth with hot-mix cold-lay surface course.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

-- End of Section --

SECTION 02933

ESTABLISHMENT OF TURF
12/1995
AMENDMENT NO. 0001

PART 1 GENERAL

1.1 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.

ASSOCIATION OF OFFICIAL ANALYTICAL CHEMISTS (AOAC)

AOAC-01 Official Methods of Analysis

COMMERCIAL ITEM DESCRIPTIONS (CID)

CID A-A-1909 (Basic; Notice 1) Fertilizer

UNITED STATES DEPARTMENT OF AGRICULTURE (USDA)

USDA Part 201 Federal Seed Act Regulations

1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. Six copies each of the following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES and prior to commencement of planting operations:

SD-07 Schedules

Turfing Equipment List; FIO.

Prior to planting operations, the Contractor shall furnish for approval, notification of the types of equipment, including descriptive data, he/she proposes to use in turfing operations such as preparation of ground surface, smoothing, fertilizing, seeding, mulching, compacting, mowing, and watering.

SD-09 Reports

Fertilizer; FIO.

Seed ; FIO.

Test reports of samples of fertilizer and seed shall be signed and certified by the testing laboratory. Testing laboratories used by the Contractor shall be approved by the Contracting Officer.

SD-13 Certificates

Fertilizer; FIO.

Bulk deliveries of fertilizer shall be accompanied by a certificate indicating net pounds furnished, chemical analysis, name, trade name, and warranty of the supplier of the fertilizer.

Seed; FIO.

The Contracting Officer shall be furnished signed copies of certificates from the seed vendor, certifying that each container of seed delivered is labeled in accordance with Federal Seed Act and is at least equal to requirements specified. This certification shall be obtained from the vendor and shall be furnished on or with all copies of seed invoices.

SD-18 Records

Signed, certified copies of the following reports shall be submitted.

Fertilizer Invoices; FIO.

Invoices obtained from the vendor shall indicate quantities and grade of each fertilizer furnished.

Seed Invoices; FIO.

Invoices shall be obtained from the vendor.

Official Seed Analysis or Official Seed Tags; FIO.

Obtained from the vendor. The official seed analysis or the official seed tags shall be furnished with all copies of the seed invoices.

Notification of Sources; GA.

The Contractor shall notify the Contracting Officer for approval, in writing, the sources from which the following materials will be furnished:

Soil for repairs
Topsoil
Water

1.3 INSPECTION AND TESTS

1.3.1 Fertilizer

Samples of each lot of fertilizer shall be tested by the Contractor upon request of the Contracting Officer. Sampling and testing shall be in accordance with the AOAC Official Methods of Analysis, at the discretion of the Contracting Officer. The empty fertilizer bags shall be retained, and upon completion of the project, a final check of total quantities of fertilizer used will be made against the total area treated. If minimum rates of application have not been met, additional quantities of these materials to make up minimum application specified shall be distributed as directed.

1.3.2 Not Used.

1.3.3 Seed

Each lot of seed may be sampled and tested, in accordance with the latest USDA Rules and Regulations under the Federal Seed Act, at the discretion of the Contracting Officer. Such sampling and testing shall be made by or under the supervision of the Government. If these tests reveal the seed to be below the specified pure live seed content, the Contractor shall be required to plant additional seed to compensate for the deficiency at no additional cost to the Government. The seed test will be conducted by the State Seed Laboratory. Allowance will be made for the actual pure live seed content of Buffalograss in determining the actual planting rate.

1.3.4 [AM#1] DELETED

1.3.5 Not Used.

1.3.6 Mulch

Not less than five days prior to commencement of mulching operations the Contracting Officer shall be notified of sources from which mulch materials are available and the quantities thereof. Representative samples of the material proposed for use shall be submitted for approval. A weight certificate signed by a public weigher shall be furnished for each load of mulch used on the site. The weight certificates shall be furnished prior to applying the mulch. The mulch material shall be unloaded and stacked in an orderly manner.

1.3.7 Soil for Repairs

Not less than five days prior to the commencement of repair work, the Contracting Officer shall be notified of the source from which soil for repairs is to be furnished. The material will be inspected to determine whether the selected soil meets the requirements. The soil shall be subject to approval prior to use.

1.3.8 Not Used.

1.3.9 Not Used.

1.4 PAYMENT

No payment or partial payment will be made for work covered by this section of the specifications until all portions of this section, including maintenance of turfing work, are adequately performed and accepted, as determined by the Contracting Officer. Upon completion of work, all work performed under this section shall be paid for at the contract job sum price for bid item "Turfing". The payment shall constitute full compensation for furnishing plant, labor, and materials to accomplish all excavation and grading as necessary to establish turf on all designated areas and disturbed areas by the Contractor. Topsoil used in designated turfing areas shall not be measured. Payment for topsoil shall be made subsidiary to that bid item of "Turfing". This payment shall constitute full compensation to the contractor for providing all plant, labor, material, and equipment and performing all operations necessary for the complete and satisfactory placement of topsoil.

1.5 DELIVERY AND STORAGE

1.5.1 Delivery

1.5.1.1 Fertilizer

Fertilizer shall be delivered to the site in original, unopened bags or other convenient containers, each fully labeled, conforming to the applicable State fertilizer laws, and bearing the name, trade name or trademark, and warranty of the producer. In lieu of bags or containers, fertilizer may be furnished in bulk. Bulk deliveries shall be accompanied by a certificate conforming to ART 1 paragraph SUBMITTALS, SD-13 Certificates.

1.5.1.2 Seed

Seed shall be furnished in sealed, standard containers unless written exception is granted.

1.5.2 Storage

1.5.2.1 Storage Area

Materials shall be stored in areas designated by the Contracting Officer.

1.5.2.2 Seed and Fertilizer

Seed, and fertilizer shall be stored in dry locations away from contaminants.

1.5.2.3 [AM#1] DELETED

PART 2 PRODUCTS

2.1 MATERIALS

2.1.1 Fertilizer for Fertilizing

Fertilizer shall be commercial grade, free flowing, uniform in composition and conforming to CID A-A-1909. Granular Fertilizer: Consists of nitrogen-phosphorus-potassium ratio: 12 percent nitrogen, 12 percent phosphorus, and 12 percent potassium or approved equal. Forms of nitrogen shall be either urea, ammonium sulfate, or ammonium nitrate.

2.1.2 Fertilizer for Refertilizing

Fertilizer for refertilizing shall be commercial grade, uniform in composition, free flowing, and conforming to CID A-A-1909. Granular Fertilizer consists of nitrogen-phosphorus-potassium ratio: 15 percent nitrogen, 5 percent phosphorus, and 10 percent potassium, or approved equal. Forms of nitrogen shall be either ureaformaldehyde, sulfur-coated urea, or isobutylidene diurea.

2.1.3 Not Used.

2.1.4 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. Common Bermudagrass seed shall not contain in excess of three percent of giant strains of Bermudagrass. 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 operations.

2.1.4.1 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.

| <u>Kind of Seed</u> | | <u>Percent</u> | <u>Hulled or</u> |
|---------------------|----------------------------------|------------------|--------------------|
| <u>Common Name</u> | <u>Scientific Name</u> | <u>of Pure</u> | <u>Unhulled</u> |
| | | <u>Live Seed</u> | |
| Buffalo Grass | Buchloe Dactyloides "Top Gun" | 67% | Unhulled & Treated |
| Common Bermudagrass | Cynodon dactylon | 82% | Hulled |

NOTE: $\% \text{ Purity times } (\% \text{ Germination plus } \% \text{ hard or dormant seed}) = \% \text{ pure live seed}$

100

2.1.5 [AM#1] DELETED

2.1.6 Water

Water shall be free from oil, acid, alkali, salt, and other substances harmful to growth of grass, and shall be from a source approved prior to use.

2.1.7 Not Used.

2.1.8 Mulch

Acceptable mulch shall be baled, bright, native prairie hay, such as broomsedge bluestem, little bluestem, big bluestem, switchgrass, and indiagrass, or hay of other grasses and sedges having the equivalent in leafiness, structure and fibre strength. Bermudagrass hay, cereal grain straw (such as oat and wheat), and forage sorghums, including johnsongrass, will not be acceptable. Hay material which has passed through a seed harvesting combine or a thresher will not be acceptable. A minimum of 50 percent of weight of the herbage making up the material shall be 10 inches in length or longer. Mulch material which contains an excessive quantity of mature seed of noxious weeds or other species, including crops which would be detrimental to the grasses planted on the mulched areas or provide a menace to surrounding farm lands, will not be acceptable. Discolored, weathered, brittle hay or any hay harvested during the dormant season will not be acceptable.

2.1.9 Not Used.

2.1.10 Topsoil

Natural, friable topsoil, characteristic of representative soils in the vicinity that produce heavy growths of crops, grass, or other vegetation shall be furnished. Topsoil shall be free from tree roots, stones, and other materials that hinder grading, planting, and maintenance operations, and free from noxious and other objectionable weed seeds and toxic substances. All topsoil shall be obtained from approved sources.

2.1.11 Not Used.

2.1.12 Not Used.

PART 3 EXECUTION

3.1 GENERAL

The turfing work shall be accomplished only when satisfactory results can be expected during periods of 1 April to 1 June or 1 September to 1 October. When conditions such as drought, excessive moisture, high winds, or other factors prevail to such an extent that satisfactory results are not likely to be obtained, the Contracting Officer may, at his own discretion, stop any phase of the work. The work shall be resumed only when, in the opinion of the Contracting Officer, the desired results are likely to be obtained. All turfing operations shall be conducted across the slope. Establishment of turf shall be accomplished on all unpaved, graded, and disturbed areas that are the result of the Contractor's operations and as specified herein.

3.2 Not Used.

3.3 REPAIR WORK

Repair work shall be done on the slopes of areas where gullies have occurred, as required by the Contracting Officer. The entire fill in gullies shall be compacted by the tractor wheels as the soil is placed and spread. Repairs shall be accomplished on slopes damaged prior to or during accomplishment of turfing work. The damaged slopes shall be repaired to re-establish the condition and grade of the soil prior to the damage as directed by the Contracting Officer. Repair work shall be done to the extent and at the locations directed by the Contracting Officer. Repair work shall be done before fertilizing operations are begun. Reseeding shall be accomplished on previously seeded areas after repairs are completed.

3.4 SMOOTHING

Smoothing shall be done on areas to receive turfing as directed by the Contracting Officer. Smoothing shall be done on gullied areas, where grades cannot be restored and gullies filled by the specified tillage operations. Smoothing shall be done, where required, to facilitate seeding operations. Smoothing shall be done with a bulldozer, maintainer or other approved blade equipment.

3.5 APPLICATION OF FERTILIZER

Fertilizer shall not be applied more than 24 hours in advance of tilling operations. The fertilizer distributor box shall be equipped with baffle plates to prevent downward movement of fertilizer when operating on the slope. Fertilizer shall be distributed with a fertilizer distributor (Ezee Flow) or approved equal at the rate of 400 pounds of 12-12-12, or approved equal, per acre prior to tilling.

3.5.1 Refertilizing

The planted areas shall be refertilized 5 weeks after commencement of maintenance operations, with refertilizing completed not later than 3 days after commencement. Fertilizer shall be applied at the rate of 300 pounds of 15-5-10, or approved equal, per acre using a fertilizer distributor (Ezee Flow or approved equal). Fertilizer shall be applied when the vegetation is dry. The refertilized areas shall be watered as specified for MAINTENANCE OF TURFING WORK within 24 hours following refertilizing operations.

3.6 Not Used.

3.7 PREPARATION OF GROUND SURFACE

Equipment, in good condition, shall be provided for the proper preparation of the ground. Equipment shall be subject to approval before work is started.

3.7.1 Clearing

Prior to grading and tilling, vegetation that may interfere with operations shall be mowed, grubbed, and raked. The collected material shall be removed from the site. The surface shall be cleared of stumps, and stones larger than one inch in diameter, and roots, cable, wire, and other materials that might hinder the work or subsequent maintenance shall also be removed.

3.7.2 Grading

Previously established grades shall be maintained on the areas to be treated in a true and even condition, and necessary repairs shall be made to previously graded areas. All surfaces shall be left in a smooth condition to prevent formation of depressions. Areas having inadequate drainage as indicated by the ponding of water shall be filled or graded to drain as directed by the Contracting Officer. Ruts, deep tracks, dead furrows, and ridges shall be eliminated and the necessary replanting accomplished prior to acceptance of the completed work. Replanting shall be at the same rate and same manner as specified for the original planting.

3.7.3 Tillage

After the areas have been brought to the grades shown, tillage shall be accomplished in such manner as to destroy existing vegetation and to prepare an acceptable seed bed. The Contractor shall utilize tractors with adequate horsepower and heavy duty tillage equipment in accomplishing the specified tillage operations. All areas shall be tilled with a heavy duty disk type breaking plow or chisel type breaking plow, followed by disking with a disk harrow, and smoothing with a weighted spike tooth harrow, railroad irons, or bridge timber float drag. When a chisel plow is used the chisels shall be set not to exceed 10 inches apart, and the areas shall be cross or double tilled. Lawn areas shall be left smooth for lawn purposes and other areas shall be left smooth for ease of mowing. Depth of tillage shall be 4 inches

3.8 [AM#1] DELETED

3.9 Not Used.

3.10 PLANTING SEED

The Contractor shall conduct seeding equipment calibration tests in the presence of the Contracting Officer as a means of determining the equipment setting to plant the seed at the specified rates. If unplanted skips and areas are noted after germination and growth of the grass, the Contractor shall be required to seed the unplanted areas with the grass or grasses that were to have been planted 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. Seeding equipment operating on slopes shall be anchored, as required, to prevent downward movement of the equipment and formation of ridges and ruts.

3.10.1 Seeding

The equipment to be used and the methods of planting shall be subject to the inspection and approval of the Contracting Officer prior to commencement of planting operations. The seed shall be planted at the rates and with the equipment specified as follows:

Seed shall be planted at the rate of 40 pounds of Common Bermudagrass, , and 60 pounds of Pure Live Seed (PLS) Buffalograss per acre. The seed shall be planted using a native grass seed drill. The Common Bermudagrass and Buffalograss shall be uniformly mixed in the presence of the Contracting Officer and planted through the small seed box. Depth of planting the seed shall be 1/2 inch . The seed shall be planted after fertilizing and tilling and prior to mulching and anchoring mulch. Disks and seed spouts on the native grass seed drill shall not be spaced more than 10 inches apart. The disks shall be equipped with depth control bands.

3.11 PROTECTION

The seeded areas shall be protected against traffic or other use by erecting barricades immediately after seeding is completed and by placing warning signs of a type approved by the Contracting Officer on the various areas. Such protective devices shall be maintained until completion of all work under this contract.

3.12 MULCHING AREAS

3.12.1 Applying Mulch

Mulch shall be spread uniformly in a continuous blanket, using 3 tons per acre. Mulch shall be spread by hand or by an approved blower-type mulch spreader. Blower-type mulch spreaders shall be adjusted and operated in such manner to prevent excessive breakage of the mulch material. If this cannot be accomplished, the mulch shall be spread by hand. Care shall be exercised to insure that all wire from baled hay is collected as it is removed from the bale and then removed from the site. Mulching shall be started at the windward side of relatively flat areas, or at the upper part of a steep slope, and continued uniformly until the area is covered. The mulch shall not be bunched.

3.12.1.1 Mulching Prior to Planting

During periods when turfing is not approved , hay mulch shall be applied at the rate of 3 tons per acre following tilling. Hay mulch will then be anchored.

3.12.1.2 Mulching After Planting

Hay mulch shall be applied after fertilizing, tilling, and seeding during period when seeding is approved.

3.12.2 Anchoring Mulch

Within 4 hours following spreading, the mulch shall be anchored in the soil to a depth of 2 inches to 3 inches. An approved machine equal to a disk harrow with cupped disks removed and replaced with straight rolling coulters spaced not more than eight inches apart and having edges approximately 1/8 inch wide shall be used to anchor the mulch. The machine shall be weighted and operated in such manner to secure the hay firmly in the ground to form a soil-binding mulch and prevent loss or bunching of the hay by wind. The mulch anchoring machine shall be as manufactured by the Finn Equipment Co. of Cincinnati, Ohio, or approved equal. The mulch machine shall be anchored as required to prevent downward movement of the equipment and the formation of ridges and ruts. Suitable anchoring equipment shall be on hand and ready for use prior to applying the mulch. The coulters shall be at least 10 inches in diameter. The number of passes needed, not to exceed 3, will be determined by the Contracting Officer.

3.12.3 Maintenance of Mulched Areas

Mulch shall be maintained until all work or designated portions thereof have been completed and accepted. Maintenance shall consist of providing protection against traffic by erecting barricades and placing warning signs as specified in PART 3 paragraph PROTECTION. Any damage shall be repaired, and mulch material that has been removed by wind or other causes shall be replaced and secured.

3.13 WATERING

3.13.1 Initial Watering

Water shall be applied to the seeded areas. Such watering shall be within 12 hours after commencement of tillage operations on each portion of an area to be planted. If the soil is extremely dry prior to planting, watering of the areas 48 to 72 hours in advance of planting may be required if deemed necessary by the Contracting Officer. Water shall be applied using portable aluminum pipelines with rotating sprinklers. The sprinklers shall not be spaced in excess of 40 feet apart. Small areas which are inaccessible with portable aluminum pipelines will be watered with hoses and rotating sprinklers. Water shall be applied to the planted areas at a rate sufficient to insure thorough wetting of the soil to a depth of 4 inches over the entire planted area which will usually require a minimum of 27,000 gallons per acre. The actual rate will be determined by the Contracting Officer at the time of watering. Watering operations shall be discontinued during and following effective rains and resumed as directed by the Contracting Officer. Watering operations shall be properly supervised to prevent run-off of water. The Contractor shall supply all pumps, hoses, pipelines and sprinkling equipment. The Contractor shall have adequate equipment available for watering operations prior to commencement of planting operations. The Contractor shall repair areas damaged by watering operations at no cost to the Government. All water shall be kept free from oil, acids, alkali, salts, and other substances harmful to the growth of grass.

3.13.2 Rewatering

On each area specified to be watered, rewaterings shall be required after the initial watering, when such rewatering is deemed necessary by the Contracting Officer. Rewatering shall be at the same rate and applied in the same manner as specified for the initial watering. Rewaterings shall be completed prior to the end of the maintenance period.

3.14 MAINTENANCE OF TURFING WORK

3.14.1 General

The Contractor shall maintain all planted areas during the planting period and for an additional period of not less than 90 calendar days following completion of planting operations or replanting operations, if required. Maintenance shall consist of watering, replanting, mowing, maintaining existing grades, and repair of erosion damage.

3.14.2 Stand

A stand shall be defined as the planted area achieving a uniform live grass coverage having a density where the total bare spots do not exceed 2 percent of the total turfed area, bare spots are not larger than 6 inches square, and the grass is of a height sufficient to be capable of being mowed as specified in the mowing requirements contained in this contract.

3.14.3 Replanting

Bermudagrass seed should germinate within at least 14 days from planting. If, after that 14-day period a successful germination of a potential stand of grass is not present, the area shall be reseeded within the next 7 days after the 14-day period as specified in this contract.

3.14.4 Maintenance of Grades and Repair of Erosion Damage

It shall be the responsibility of the Contractor to maintain the original grades of the planted turf areas after commencement of planting operations and during the specified maintenance period. Any damage to the finished surface from Contractor's operations shall be promptly repaired. In the event erosion occurs from either watering operations or from rainfall, such damage shall be repaired within 10 days from the date of the noted damage. Ruts, ridges, tracks, and other surface irregularities shall be corrected and replanted where required prior to acceptance.

3.14.5 Mowing

One mowing of all planted areas shall be accomplished on all planted areas when the soil is dry and when deemed necessary by the Contracting Officer. The exact time of the mowing will be determined by the Contracting Officer. Mowing of the vegetation shall be to a height of 4 inches and shall be accomplished with a rotary type mower. The clippings shall be left evenly distributed over all the mowed areas. Mowing shall be conducted in such a manner as not to cause damage to slopes. Mowing shall be completed prior to the end of the maintenance period.

-- End of Section --