

**AMENDMENT #1**  
**August 27, 2015**  
**Invitation for Bids (IFB)**  
**No. SC-15-O&GC7-01**  
**Dated 08-18-15**  
  
**Issued by**  
**Starr County**  
**Rio Grande City, Texas**

*The above numbered IFB hereby is amended as set forth below.  
The hour and date specified for receipt of offers is not changed.*

**PURPOSE OF AMENDMENT**

1. To transmit pen-and-ink changes to the IFB drawings and construction specifications, and to provide meeting minutes and attendance list for the August 25, 2015, Pre-bid Conference and Site Showing.
2. To remind bidders that oral explanations or instructions given before the award of the contract will not be binding. See PART I, Subpart B, Instructions to Bidders, Section 6.

Offerors ***must acknowledge receipt of this Amendment no later than*** the hour and date specified in the IFB for receipt of sealed bids by one of the following methods:

- (a) Make appropriate notations on Exhibit A, Offer form (PART I, Subpart C, page GP-9).
- (b) Complete and return form below. Form must be mailed or hand-carried to the address designated for receipt of bids, and be made to the attention of Starr County Judge Eloy Vera, clearly noting "Acknowledgment of Receipt of Amendment No. 1, IFB No. SC-15-O&GC7-01" on the envelope. Fax, electronic, or telegraphic acknowledgments of receipt are not allowed.

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**ACKNOWLEDGMENT OF RECEIPT**

**Amendment No. 1 (08-27-15)**  
**IFB No. SC-15-O&GC7-01 – Olmitos & Garcias Creeks Watershed**  
**FRS Site 7 Rehabilitation**

Bidder's Signature: \_\_\_\_\_

Bidder's Name: \_\_\_\_\_

Bidder's Title: \_\_\_\_\_

Date Signed: \_\_\_\_\_

Company Name: \_\_\_\_\_

## **PEN-AND-INK CHANGES**

### **PART IV – SPECIFICATIONS**

#### **Construction Specification 1- Clearing**

##### Section 8, first paragraph:

Line 1: INSERT the word “organic” after the word all. DELETE the word “burned” and INSERT the word “mulched” in its place.

Line 2. ADD the words “or Inspector” after the word “Engineer”.

ADD this sentence to the end of paragraph 1: “Non-organic rubbish that is not to be salvaged shall become property of the Contractor and removed offsite.”

DELETE entire 2<sup>nd</sup> paragraph: “Burning....conditions.”

ADD the following sentence to the end of paragraph 3. “The Inspector is to verify and concur that only organic materials are in the pile to be buried, before any earthfill cover is to be placed over the materials to be buried.”

#### **Construction Specification 3 – Structure Removal**

##### 7. Items of work and construction details:

INSERT an additional paragraph after 2<sup>nd</sup> paragraph to read: “No burning is allowed onsite. Any materials that the Contractor wishes to burn must be taken offsite and disposed of according to federal, state, and local regulations.”

DELETE Section 7.a.(1) and REPLACE with the following:

- (1) This item shall consist of the removal, salvage, and disposal of all designated fences in the construction area. The fences’ salvaged material shall be placed onsite at a location designated by the Inspector.

DELETE entire Section 7.a.(4) text and REPLACE it with the following: “In Section 4, Salvage the fence is to be salvaged and placed at a location as designated by the Inspector away from the construction site.”

In Section 7.b.(3) DELETE (cross out with pen-and-ink) portions as shown below:

- (3) In Section 5, Disposal, rubbish ~~from the removal shall be buried at locations identified by the Engineer within the designated work limits or~~ shall be salvaged, becoming the property of the Contractor, and removed from the site. ~~Minimum earth cover over the buried disposed materials shall be three feet.~~

ADD the following to Section 7.d.(1): “The concrete water trough shall become property of the Contractor and removed offsite. The corrals shall be salvaged and placed at the location designated by the Inspector.”

**Construction Specification 5—Pollution Control**

Appendix A, Storm Water Pollution Prevention Plan. Disregard references to burning on pages 3 and 4 in relation to burning on site. No burning is allowed onsite.

**Construction Specification 21 – Excavation**

ADD a new Section 10.k. as follows:

- k. Subsidiary Item, Excavation, Common, Downstream Soil-Bentonite Wall Working Pad
  - (1) This item shall consist of all excavation, outside of the limits of other designated excavations, required for the construction of the downstream soil-bentonite wall working pad.
  - (2) Separate payment will not be made for this item. Compensation for this item will be included in the payment for the bid item for Soil-Bentonite Wall, Downstream.

ADD a new Section 10.l. as follows:

- l. Subsidiary Item, Excavation, Common, Upstream Soil-Bentonite Wall
  - (1) This item shall consist of all excavation, outside of the limits of other designated excavation, required for the construction of the upstream soil-bentonite wall as shown on the drawings.
  - (2) Separate payment will not be made for this item. Compensation for this item will be included in the payment for the bid item for Soil Bentonite Wall, Upstream.

**Construction Specification 23 – Earthfill**

In Section 10.d., ADD the word “Wall” after the word Soil-Bentonite.

ADD a new Section 10.e. as follows:

- e. Subsidiary Item, Earthfill, Downstream Soil-Bentonite Wall Working Pad
  - (1) This item shall consist of all earthfill, outside of the limits of other designated earthfills, required for the construction of the downstream soil-bentonite wall working pad.
  - (2) The Contractor shall determine the required width of the working pad to perform the work. At the completion of the soil-bentonite wall installation the working pad in excess of the embankment final grade shall be removed.
  - (3) Separate payment will not be made for this item. Compensation for this item will be included in the payment for the bid item for Soil-Bentonite Wall, Downstream.

ADD a new Section 10.f. as follows:

f. Subsidiary Item, Earthfill, Upstream Soil-Bentonite Wall

- (1) This item shall consist of all earthfill, outside of the limits of other designated earthfills, required for the construction of the upstream soil-bentonite wall as shown on the drawings.
- (2) Separate payment will not be made for this item. Compensation for this item will be included in the payment for the bid item for Soil-Bentonite Wall, Upstream.

**Construction Specification 34 – Steel Reinforcement**

Table 34-2, page 34-4. All of the boxes in the first 2 columns of this table should be X's. Please PEN-AND-INK CHANGE each box to read as an "X".

**Construction Specification 36—Roller Compacted Concrete**

ADD the following paragraph to Section 22.a:

- (8) The basis for determining that the RCC meets specification will be the results of the 28-day test. Additional tests for longer periods than 28 days are solely for the information and use of the Contracting Local Organization and will not be used as the basis for acceptance of the RCC. The Contractor is responsible for providing a written receipt from the testing firm prior to close out of the contract. The receipt must show they have paid the testing firm to deliver certified results to the NRCS for all breaks not completed at the time of final inspection and acceptance.

**Construction Specification 416 – Earthfill Slurry Trench Cutoff Wall**

ADD the following to Section 12.a.(3):

- (c) Excavation, Common, Upstream Soil-Bentonite Wall as specified in Construction Specification 21.
- (d) Earthfill, Upstream Soil-Bentonite Wall as specified in Construction Specification 23.

ADD the following to Section 12.b.(3):

- (c) Excavation, Common, Downstream Soil-Bentonite Wall Working Pad as specified in Construction Specification 21.
- (d) Earthfill, Downstream Soil-Bentonite Wall Working Pad as specified in Construction Specification 23.

**PART V – DRAWING NO. TX-EN-0652**

Sheet 1.

ADD the following Notes under Stabilized Construction Entrance Detail:

**Note 3.** Gate for the rock stabilized construction entrance will be recessed 30 feet from the road.

**Note 4.** The rock stabilized construction entrance shall remain in place at the end of construction.

AERIAL PHOTO (attached). The attached aerial photo shows the correct site access road, location of protected trees in campsite area, and location of ¾" water line to be protected as specified in Construction Specification 8, Section 4.a.(2)(i). STAPLE the attached photo to Sheet 1 of the drawings.

Sheet 2

Control Point TBM-1A has been removed and no longer exists at the site. DELETE TBM-1A from Coordinates table in upper left corner. REPLACE it with the following:

Point No.: TBM-3  
Northing: 16655703.000  
Easting: 902236.590  
Elevation: 227.540

ADD the following notes to Sheet 2:

- (1) At Station 4+84 to 4+96 a 14 foot wide overbuilt section to elevation 204.0 shall be constructed to allow road traffic without erosion.
- (2) At Station 19+79 to 19+91 a 14 foot wide overbuilt section to elevation 204.0 shall be constructed to allow road traffic without erosion.

CHANGE the NOTE on top of Sheet 2 to read: "The corral and water trough shall be removed as specified in Construction Specification 3."

Sheet 5

Add the following note

Zone 1: Acceptable materials: SM, SC, GC, GM, CH, CL, MH, ML  
Zone 2: Acceptable materials: SW-SM, SP-SM, SP-SC, SW-SC, GP-GC,  
GP-GM, GW-GC, GW-GM, SM, SC, GC, GM, CH, CL, MH, ML  
Zone 3: All soils except OL, OH, and PT are acceptable.

Sheet 7

Make the following pen-and-ink change to Section C-C: DELETE present NOTE and REPLACE with the following: "NOTE: Road crossing shall use rock with identical material specifications as the construction entrance on Sheet 1."

**8/25/15 SITE SHOWING / PRE-BID CONFERENCE MINUTES**

Note: Some items contained in the IFB were pointed out and are not included in these meeting minutes for purpose of brevity. However, this Amendment No. 1 contains information necessary for bidders to submit bids and all information where the lack thereof would be prejudicial to uninformed bidders.

## WELCOME / INTRODUCTIONS

The Contracting Local Organization for this project is Starr County, Rio Grande City, TX. The Contracting Officer (CO) for this project will be Rafael R. “Rudy” Montalvo (Director, Federal and State Programs) and the Alternate CO will be Maricela Ibarra (Senior Project Manager, Federal and State Programs). USDA-NRCS will provide a full time Inspector (Adam Rangel) and a Project Engineer (Ronald Gardner). Richard Standish and Jean Ann Maynard (R&J Contract Services) will serve as contract administration consultants to the County for the project. The project is receiving funds from USDA-NRCS, TX State Soil and Water Conservation Board, and Starr County. A listing of all meeting attendees is attached to this Amendment #1.

The conference commenced at 10:00 a.m., and Rudy Montalvo welcomed attendees, made introductions, and provided a brief history of Site 7. Mr. Montalvo mentioned the importance of maintaining a rapport with the ranchers. Also, the County Commissioners hope for as much utilization of the local workforce as possible. After Administrative and Technical presentations, participants visited the project site. Questions and Answers from the conference are listed in the last section of this Amendment #1.

## ADMINISTRATIVE PRESENTATION

This material was presented by Jean Ann Maynard, R&J Contract Services. Administrative matters not contained in the IFB along with items in the IFB that were emphasized are as follows:

### General Information

Sign-In Sheet. Be sure you listed complete information on how to contact you—need PHYSICAL address and MAILING address.

The IFB was published on 8/18/15. Printed copies of the bid documents are not being distributed. If you want a copy of the Invitation for Bids (IFB) package, any future amendments to it, and the Plan Holder Registration Form, you must download the files from the County website as stated in the Bid Notice. Also, there is a supply of blank registration forms here today if you would like register as a planholder.

Amendment No. 1 will be issued after this Site Showing. It will include today’s meeting minutes, all of the questions/answers, an attendance list, and any changes that might be made to the original bid package. All registered planholders will be advised by email when it is available online. In order to receive notification, you must submit a Plan Holder Registration Form. **Very important to register.** No hard copies of any Amendments will be mailed or emailed – you will need to download them from the County website.

Reminder: You must submit your acknowledgment of receipt of EACH Amendment (either on the Amendment cover sheet form or on bid form, Offer, Exhibit A). Failure to acknowledge receipt of an amendment may result in rejection of a sealed bid.

Performance Time. Original time is 331 calendar days. Additional days will be added for eligible weather delays and any change orders that warrant more time, as needed. PT begins day after receipt of Notice to Proceed. The 331 days was computed to include 20 calendar days move-in time and working the maximum allowed workweek of 6 days per week, 10 hours per day. It also includes Sundays and the holiday shutdown periods listed in PART II, Article 20(e).

Sealed Bids are DUE (and will be publicly opened).

- (a) 10:00 AM sharp, Wednesday, September 23.
- (b) Must hand carry or mail. No Fax or Telegraphic bids are allowed.
- (c) NOTE: Deliver or mail bid to **County Judge** in Annex **Suite 202**.

Engineer's Cost Estimate. This will NOT be disclosed until after bids have been opened. An Estimated Price Range is not being published.

IFB/Contract Terms & Conditions. As a local contract, various requirements from Texas codes and statutes govern the basic contract. However, due to Federal funding, there are also some Federal clauses and requirements that aren't normally found in a local contract.

### **Instructions to Bidders (PART I – General Provisions, Subpart B)**

Encouraged to *carefully read*.

Section 2 – Conditions Affecting the Work. To view site (other than today) you need to make an appointment with Mr. Montalvo or Maricela Ibarra and must be escorted to the site. Note that no digging or taking of core samples will be allowed.

Section 3 – Bid Must Contain (Original + 1 copy) ***SEE Part I, Subpart C, Bid Forms***

- (a) Exhibit A - Offer. Sign in ink (must have legal Authority to contractually bind the company).
- (b) Exhibit B – Bid Schedule. Offer must be valid for minimum of 30 days
- (c) Exhibit C. References.
- (e) Exhibit D – Bid Bond
  - (i) Bid Guarantee: 5% of TOTAL bid price.
  - (ii) Certified or cashier's check (responsible TX bank). --- OR ---
  - (iii) Bid bond. (1) Must use Exhibit D form (original + 1 copy). (2) Must meet all Bid Bond Requirements for surety as stated in Section 8. **READ THIS CAREFULLY.** NOTE surety must be U.S. Treasury listed.
- (f) Exhibit E – Bidder Certifications. (1) Four sections need to “circle” appropriate answer and write in surety information on one. (2) Some non-Texas resident bidders must provide a Certificate of Authority from TX Secretary of State to transact business in Texas.

### Section 4 – Preparation of Bid

IFB documents and Plan Holder Registration Form must be obtained using the County website as outlined in the Public Bid Notice. Printed copies of the IFB package are not available. The official printed hard copy shall take precedence over an electronic media copy. This official file hard copy may be viewed at the County Annex Suite 220 office.

Submit offer in DUPLICATE (original + 1 copy of all documents).

Bidders are entitled to EXCLUDE exempted taxes in bid price. Contractor will be performing a contract for an exempt organization. The County will issue an Affidavit to the Contractor. Contractor must issue a Tax Exempt Certificate to each supplier. Contractor is responsible to

know and follow all Texas Codes regarding this. [Details in Part II, General Conditions, Article 29]

**Bid Schedule (Exhibit B).** Must price each Bid item (Item 1-31). Note that the Bid Schedule is 2 pages long – failure to price each item is basis to reject bid.

**Section 6 – Explanation to Bidders / Inquiries.** NO verbal explanations or instructions given before award of the contract will be binding. ALL questions regarding the meaning or interpretation of any bid document must be submitted IN WRITING to Rudy Montalvo (Fax and Email inquiries are allowed). The deadline to submit written questions is noon, Wednesday, September 16. If the answer requires interpretation of a bid document, it will be given in writing to all planholders via an Amendment to the IFB. Please send all inquiries through Mr. Montalvo. If an Engineer’s input is needed, he will do so [please don’t contact Ronald Gardner directly].

**Section 8 – Bid Bond Requirements.** All bids require a bid guarantee in the amount of not less than 5% of Total Bid Price. Bonds must be on the form provided in the bid package.

**Section 11 and 12 – Qualification/Disqualification of Bidders.** Carefully note these requirements. In order to be awarded the contract, the low bid must meet two requirements. First, bid documents are reviewed to determine if the bid is “responsive”—meets essential elements of the IFB requirements. Then, the “responsibility” of the bidder is determined. Technical and financial references are carefully checked to ensure bidder is qualified, etc. These clauses list what will be considered in determining the “responsibility” of the bidder.

**Section 20 – Records.** This lists documents available at the County Annex Suite 220 office for viewing by interested parties. There is a large set of drawings, official printed copy of the IFB package, and many engineering records dating from 1962 to 2014. The Engineering Records are available to you at no charge on a CD – contact Maricela Ibarra if you would like a copy of the CD. Also, we have some available TODAY if you want a copy.

### **Anticipated Schedule / Contracting Procedure**

**Bid Opening** (Wednesday, September 23): Publicly open sealed bids. Declare apparent low bidder and meet with their representative.

**Issue Notice of Award** (about Monday, September 28, if possible). You will have 5 workdays to submit your 1<sup>st</sup> post-award documents [See Part III – Supplemental Conditions, Article 4 for a LIST]. You are encouraged to review these now and be prepared to submit on time (or your bid security could be forfeited and the County would move on to 2<sup>nd</sup> low bid).

**2<sup>nd</sup> Post-award Documents.** These will be requested about October 7 (or maybe earlier with Notice of Award). They will be due in about 2-3 weeks (such as construction schedule, quality control plan, safety plan, etc.).

The **Preconstruction Conference**, will be held sometime during last two weeks of October followed by the **Notice to Proceed** generally a few days after the conference.

Day #1 of PT is the day after you receive Notice to Proceed and you have 20 days to commence work (mobilization does not count).

## **General Conditions (PART II)**

Exceeding Time in Contract [Article 5]. If you do not complete work within performance time and it is deemed in best interest of Starr County to allow Contractor to complete the work (vs. terminate for default), will assess actual damages. NO liquidated damages clause.

Actual damages will not be assessed for lost revenue and/or taxes. Actual damages will be based upon the additional costs incurred by the Contracting Local Organization (CLO) and the Grantor Agencies (USDA-Natural Resources Conservation Service and Texas State Soil and Water Conservation Board) resulting from the Contractor not completing the work within the allowable performance period. These costs include but are not limited to personnel costs (Inspector, Engineer, Contracting Officer and related personnel), travel costs (lodging, per diem, mileage, etc.), additional supplies, etc. Your bonding company can contact the County if it has additional questions about this clause.

The clause also allows for an extension of performance time (without terminating the Contractor's right to proceed or charging Contractor with actual damages) if a delay in completion of the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Note that TIME only is allowed (no costs are allowed).

Payments / Invoicing Requirements [Article 7]. Progress payments will be made monthly. Per Texas Local Government Code, the County shall retain 5 percent of progress payments (without paying interest) until final completion and acceptance of the work. Please note that the payment due date for the County is within 30 days of receipt of "proper" invoice. The County will strive to pay sooner than 30 days if possible.

Per paragraph (h), Contractor and Subcontractors must follow TX Government Code 2251 rules for paying others for goods, services, etc. related to performing the work.

Superintendence [Article 10]. Must have full-time superintendent acceptable to CO. You will be asked to propose an Alternate superintendent for approval so that you have a backup in place to serve in the absence of the regular superintendent.

Permits and Responsibilities [Article 11] and Other Contracts [Article 13]. The Contractor is responsible to determine all Federal, State, and municipal laws, codes and regulations that apply to this project and comply with them. Also, Contractor is required to obtain all necessary licenses and permits at own expense. The Contractor is responsible for all materials delivered and work performed until completion and acceptance of the entire construction work.

Real Property Rights [Article 16]. The County has acquired all landrights to perform the work and the Construction Work Limits are shown on the drawings. Contractor shall obtain owner's advance written approval if he/she plans to enter, remove, or otherwise make use of adjacent property, roads, utility lines, fences, and other improvements not included within the real property rights provided by the Contracting Local Organization. A copy of the written approval must be submitted to the Contracting Officer. Any associated costs are Contractor's responsibility.

Water [Article 19]. Contractor is responsible to provide and maintain at own expense an adequate supply of water needed to perform the work. Contractor must locate and arrange for adequate water source(s) and obtain any required permits to take/use water and a copy of those permits will need to be submitted to the Contracting Local Organization.

Workweek - Construction Schedule [Article 20].

Requires written schedule prior to commencement of work (CO must approve).

Maximum Work Week: Monday – Saturday (10 hours per day).

Work may be performed during daylight hours only. If during concrete placement work is needed during non-daylight hours, this clause can be amended to allow such work under certain conditions (such as giving ample advance notice and securing approval from the Engineer and Contracting Officer)."

Holidays: Project will be shut down (and days are included in the performance time):  
Independence Day, Labor Day, and breaks at Thanksgiving and Winter.

Subcontractors [Article 21]. All require CO written approval (prior to signing a subcontract).

Surveys [Article 22], Shop Drawings [Article 30], and Layout of Work [Article 35]. Some general information. Ronald Gardner will discuss contract requirements more thoroughly in his technical presentation.

Suspension of Work [Article 23]. Contractor is eligible to recover damages for any unreasonable delays as specified in this clause. Includes additional performance time and damage costs (excluding profit).

Weather [Article 26]. PT of 331 calendar days does not include any adverse weather delays. PT will be extended if warranted by weather or its effects. Allows TIME only (not costs or damages).

Quantity Variations [Article 28]. 25% clause for estimated quantities in bid schedule. Variations within 25% are paid at the bid price and there is no adjustment in performance time. If variation exceeds 25% (over or under), the contract price/time is equitably adjusted for the quantity that exceeds 25% (over or under). [This differs from Article 3 regarding "Changes". If any new work is added to the contract (or any work is deleted), this is not a Quantity Variation and Contractor is entitled to an equitable adjustment in the contract price and performance time.]

Accident Prevention and Safety [Article 41]. Includes Supplement to OSHA regulations with many requirements. Ronald Gardner will cover later. VERY important – will monitor and enforce safety.

**Supplemental Conditions (PART III)**

Insurance Requirements [Articles 1-3]. Read carefully. Due 5 workdays after receipt of Notice of Award. If approved subcontractors are not covered on prime Contractor's insurance policies, proof that subcontractor carries the same types/levels of coverage is required. NOTE that some policies require County to be listed as additional named insured and all policies must include a waiver of subrogation.

Post-Award Information [Article 4]. Lists items you must submit within 5 workdays after receipt of Notice of Award. Be prepared to do this!

Performance of Work [Article 5]. The prime contractor must perform at least 20% of work with own forces.

Commencement, Prosecution, and Completion of Work [Article 6]. Note that you must commence work within 20 calendar days of date you receive written Notice to Proceed (mobilization does not qualify). Performance time is 331 calendar days.

Wage Rates [Article 8]. Because construction, must pay prevailing wage rates for laborers and mechanics. Rates in PART VI.

Performance/Payment Bonds [Article 13]. Gives specific requirements. (a) Due 5 workdays from date receive Notice of Award. (b) Penal sum: 100% of contract award price.

Special Federal Requirements [Articles 14 - 19]. EEO, affirmative action, debarment & suspension, lobbying, clean air and water.

Subcontractor Certification (TPDES) [Article 20]. Note that subcontractors who perform work that may impact pollution control measures must sign a certification form (see Appendix A of Construction Specification 5).

Subcontracts. Several of the clauses in Supplemental Conditions must be included in subcontracts (depending on dollar amount of subcontract).

## **TECHNICAL PRESENTATION**

This material was presented by Ronald Gardner (Project Engineer). Technical matters not contained in the IFB and additional items emphasized are as follows:

Pen-and-ink changes that will be made to the Construction Specifications (Part IV) and Drawings (Part V) were discussed.

## **PART II – GENERAL CONDITIONS**

### **Article 41 Accident Prevention & Supplement to OSHA Part 1926 and 1910 Construction Industry Standards and Interpretations**

The Contractor shall comply with applicable OSHA safety regulations 1926. The Contracting Officer will notify the Contractor of any noncompliance with these requirements. If the Contractor refuses to comply with these requirements, all or part of the work may be suspended until corrective action is taken.

The Inspector and Project Engineer will have delegated authority to suspend work for any noncompliance with safety requirements that poses a serious or imminent danger to the health or safety of the public and/or personnel of the Contractor, Contracting Local Organization, or State Grantor Agency, or the NRCS Personnel.

The Supplement to OSHA 1926 and 1910 emphasizes several specific safety items which must be understood by the Contractor prior to bidding this job. Among these items are the requirements for:

1. Written plan for accident prevention and safety (CO must approve prior to beginning work).
2. First Aid Training certificates
3. First aid facilities – on site
4. Safety Meetings, weekly “tool box” and monthly

5. Dust control
6. Rollover protective structures
7. Backup alarms
8. Restroom Facilities
9. Scaffolding and Fall Protection

Hard hats shall be worn on the job site at all times including in vehicles and equipment. Equipment shall be outfitted with working backup alarms, seat belts, and approved roll-over protective structures. If the Contractor requires safety vests or eye protection for the site they shall be provided to the NRCS personnel during working hours.

All equipment shall be inspected by the NRCS Construction Inspector prior to use on the project. Equipment will be inspected at the job site and shall not move outside of the camp site until approved. Equipment such as cranes must have their detailed inspection and the operators must have the appropriate certification submitted and approved before operation.

#### **Article 8 –Material and Workmanship**

Certificates and test data shall be submitted to show compliance of materials and construction specified in the contract requirements. Materials or equipment for which samples, certifications or test data are required shall not be used in the work until approved in writing by the Contracting Officer Representative. Payment will not be issued for unapproved materials delivered onsite. Source/supplier, gradation, material type, etc should be included in material submittals.

Some of these materials include (but are not all inclusive to submit for approval):

1. Aggregates, riprap, and drainfills.
2. Portland Cement
3. Fly ash, burn-furnace slag and silica fume.
4. Admixtures.
5. Concrete Curing compounds.
6. Joint filler.
7. Sealing compounds for joints for concrete and concrete pipe.
8. Steel reinforcement.
9. Reinforce concrete pressure pipe.
10. Plastic pipe.
11. Slide gates.
12. Steel and aluminum alloys.
13. Galvanizing
14. Field fencing material
15. Geotextile
16. Bentonite

#### **Article 30 - Shop Drawings**

Required shop drawings include; Reinforced Concrete Pressure Pipe, Steel Reinforcement fabrication details.

## **SECTION IV – SPECIFICATIONS**

There are two types of specifications in this contract: (1) Construction Specifications and (2) Material Specifications. The construction specifications are composed of two parts. The first part is called the closed specification and is the standard NRCS construction specification that begins with the SCOPE and ends with MEASUREMENT AND PAYMENT or PAYMENT. The second part is called the open specification and consists of the ITEMS OF WORK AND CONSTRUCTION DETAILS that are written specifically for this job.

Special emphasis items are covered below.

### **2- CLEARING AND GRUBBING     Subsidiary Bid Item 9 and 10**

Consists of all clearing and grubbing required to construct the embankment, auxiliary spillway, and outlet channel. All cleared and grubbed materials shall be chipped or removed offsite or used onsite for mulch. Burning is not allowed. Trees larger than 12 inches in diameter are to be protected at the site. Work shall be accomplished in a manner to protect trees greater than 12 inches in diameter. Any tree in excess of 12 inches the Contractor identifies to be removed to perform the work will need concurrence by the CLO, Engineer or Inspector in writing before it can be removed. Compensation is to be included in Bid Items 9 and 10.

### **3 - STRUCTURAL REMOVAL     Bid Item 1 and 2; Subsidiary item 7.c and 7.d**

**Bid Item 1:** Work includes Fence removal as designated and as shown on the Drawing TX-EN-0652 Sheet C-2. The fences' salvaged material shall be placed onsite at a location designated by the Inspector.

**Bid Item 2:** Removing the existing principal spillway outlet, designated conduit sections, concrete cradle, pipe cantilever and support as shown in the drawings, and the subsidiary item Structure Removal Culvert shall become property of the Contractor and removed offsite at the Contractor's expense. There are no locations on the property to dispose of refuse material.

Subsidiary Items to each of the bid items under structure removal are the excavation and earthfill required to remove the structures designated (7.c and 7.d). Earthfill is to be disposed of at the waste sites if deemed excess or unsuitable material.

### **5 - POLLUTION CONTROL     Bid Item 3 and 4:**

**General.** A SWPPP is required for this site (copy included in the solicitation). The prepared SWPPP shall be amended by Contractor to include a detailed work sequence outline which defines and delineates the Contractor's construction operation [as shown on Construction Schedule, required]. All applicable TCEQ rules and regulations concerning the TPDES and the SWPPP shall be followed, including stabilizing entrance to prevent mud tracking onto roads.

Bid Item 3, includes work required to accomplish the requirements of Section 1, maintain sediment filters, and to implement the SWP3. Method 3 in Section 7 establishes lump sum payment for this Bid Item 3 work which is prorated in equal monthly payments. (Method 3 in Section 7. The rock entrance gate should be recessed 30 feet, but the overall length of the entrance shall remain 75 feet.

Bid Item 4 - sediment filters (silt fences), shall be installed as per SWPPP requirements and the Drawings (TX-EN-0652 Sheet 42). Payment shall be per linear foot installed.

**6 - SEEDING, SPRIGGING, AND MULCHING**      **Bid Item 5**

Bid Item 5. - Consist of preparing seedbed, fertilizing, sprigging and hay mulching, and tackifying. A good quality coastal Bermuda grass or bluestem mix straw mulch is required on all areas sprigged. Measurement and payment is per Section 6, Method 1 (nearest 10<sup>th</sup> acre). Hay mulch application rate is 2.5 tons per acre.

**7 - CONSTRUCTION SURVEYS**      **Bid Item 6**

The Contractor is responsible for the layout of all the work. Also the Contractor is responsible for checking (blue topping) all work. The Contractor shall also submit to the Contracting Officer in writing the name, qualifications and experience of the surveyor personnel for approval prior to commencement of work. The Contractor is responsible for providing survey information to the CLO as stated in Section 7, Records. Per 9.a.4 Initial cross sections have been previously surveyed for the calculation of quantities. - provided no other changes are made from the planned lower limits of excavation. Section 8 Method 2 will be used for payment.

**8 - MOBILIZATION AND DEMOBILIZATION**      **Bid Item 7 and subsidiary item C-3.7.d**

The Contractor shall provide all utilities including 24 hr. electrical Service to a Contractor furnished field office trailer. They must be in place prior to work requiring continuous inspection and no later than 15 days after receipt of the Notice to Proceed.

Section 4.a.(2)(h). Contractor is responsible for repairing damages to and maintaining County road as affected by the construction operations. This pertains to the segment of the County road from U.S. Highway 83 at Guevara to the construction access entrance.

Theft is common to the area and the Contractor is responsible for securing their equipment.

Other Spec Requirements. Access road to the camp site and work area shall be constructed and maintained including a culvert crossing as needed. Install additional culverts as needed in low areas. Note requirements on TX-EN-0652 Sheet 1 for Contractor's responsibilities for installing a rock stabilized entrance. Work includes Demobilization, and some of these items are described.

Section 3 PAYMENT states, "Payment will be made as the work proceeds, after presentation of paid invoices . . . by the Contractor showing specific mobilization and demobilization costs and supporting evidence of the charges of suppliers, subcontractors, and others." You may be asked to provide proof of the total direct cost. You will have to submit paid invoices for the purchase of bonds and mobilization supplies in order to be reimbursed for these items prior to the final payment.

Subsidiary Item, Water Trough and Corral. The concrete water trough shall become property of the Contractor and removed offsite. The corrals shall be salvaged and placed at the location designated by the Inspector.

**9 - TRAFFIC CONTROL      Subsidiary Item of Bid Item 7**

Requires the Contractor to submit a written plan for the control of traffic, and placement of signs, all meeting the TXDOT Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges (2014) and must be approved by TxDOT and the Engineer.

**11 - REMOVAL OF WATER      Bid Item 8**

This item of work requires the Contractor to submit written plans for diverting the surface water and dewatering the construction site for approval before beginning construction. Protection to the new principal spillway conduit installation area is required. The protection plan is required to be designed and stamped by a Registered PE in Texas.

**21 - EXCAVATION      Bid Item 9 and 10, Subsidiary Items**

There is no guarantee that materials obtained from the specified excavations may be used directly in the specified fills. Stockpiling of excavated materials to be used in the specific zones of the fill shall be required (to insure their availability). Disposal of unsuitable excavated materials shall use method 1 in Section 5.

Bid Item 9. Excavation, Common, Embankment. This item consists of installation of the 42-inch principal spillway. The measurement and payment method in Section 9 is Method 3.

Subsidiary Items consist of:

Clearing as it relates to this item

Excavation Common, Foundation Stripping (10.d). Strip from 3 to 12 inches as required to remove weeds, grass, roots, and soils containing significant vegetative or organic material prior to placing earthfill.

Excavation, Common, Outlet Channel (10.g)

Bid item 10, Excavation, Common, Auxiliary Spillway. Clearing as it relates to this item is subsidiary.

**23 - EARTHFILL      Bid Item 11 and 12**

Under Bid Item 11, Zone 1 and 2 - earthfill require Class A compaction. See Materials Placement Data on Drawing TX-EN-0652, Sheet 5. In-place dry density of materials being placed shall not be less than 95 percent of the minimum dry density obtained during tests performed in accordance with procedures contained in ASTM Designation D-698, using Method A. In Section 4 Placement, fill shall not be placed until the required excavation and foundation preparation have been completed and the foundation has been inspected, surveyed and approved by the Engineer. Fill shall be placed in horizontal layers. Note the requirements for processing the fill material.

Bid Item 11, Zone 1 and 2 –Earthfill, Class A compaction (95% ASTM D698 Standard proctor). See Materials Placement on Drawing, TX-EN-0652, Sheet 5.

Bid Item 12, Zone 3 – Earthfill Class C compaction. Auxiliary Spillway Dikes and downstream berm.

**24 - DRAINFILL**                    **Bid Item 13 and subsidiary item**

The drainfill shall meet the requirements of Material Specification 521. The percentage of drainfill materials finer than the No. 200 U.S. Standard Sieve Size shall not be more than 3 percent. A soundness test on the fine and coarse aggregate is required. Note: sieve analysis is required on delivered materials [see Construction Specification 94, Section 10.a.(8)(e)].

The fine aggregate shall not be limestone or crushed limestone except in combination with other materials such that not more than 5% of the portion finer than the No. 4 sieve shall be limestone. Class A compaction of the fine graded drainfill is required as specified in Section 9. Coarse graded drainfill shall use Class III compaction. Trench depths are limited to 5 feet. Trench Safety OSHA guidelines shall be followed.

Excavation, Common Drainfill is subsidiary to this bid item.

**26 - TOPSOILING**                    **Bid Item 14:**

This item consists of salvaging approved topsoil from required excavations, foundation stripping, and placing on all designated earthfills and exposed excavated slopes. Method 1 for furnishing, spreading and measurement will be used.

**27-DIVERSIONS AND WATERWAYS**    **Bid Item 15**

All work required to construct stub diversions. The locations on the drawings are approximate. Final locations shall be designated by the Engineer.

**31 - CONCRETE FOR MAJOR STRUCTURES**    **Bid Item 16, 17 and Subsidiary Item**

Measurement and payment for concrete shall be per Section 24, Method 1 (nearest .1 cu. yd.). All Concrete items shall be constructed using Type II or Type V, low alkali cement. The Contractor is responsible for submitting the concrete mix design for approval by the Engineer.

All finished surfaces exposed to air or water shall be finished by (1) a complete Carborundum stone rubbing, or (2) by treatment with cement based heavy duty coating such as "MasterSeal 581" manufactured by Master Builders Solutions or equivalent. Coating must be approved by the Engineer. All concrete must equal or exceed Class 4000. The slump specified shall be 4" +/- 1" unless otherwise approved.

Bid Item 16: Concrete, Structural with subsidiary item Excavation, Common, Concrete Structures

Bid Item 17: Concrete, Pipe Cradle. This item requires the Contractor to furnish and install the pipe cradle for the principal spillway conduit. Subsidiary item Excavation, Common, Concrete Structures

**(Paid under other bid items)** Subsidiary Items – Permanent Reference markers paid under Bid Item 6

**34 - STEEL REINFORCEMENT Bid Item 18**

All work required to furnish and place all steel reinforcement required for the construction of the concrete works for this site, including welded wire reinforcement, except for the box culverts steel. Section 5 -Splicing will use method 1. Section 9-Measurement and Payment will use method 1. Table 34-2. The boxes in first two columns should be X's (to be included as a pen-and-ink change in IFB Amendment #1).

**36-ROLLER COMPACTED CONCRETE Bid Item 19 and 20**

RCC shall be placed in layers 2 feet thick consisting of (2) 12 inch compacted lifts. Damaged or defective RCC will be removed as determined by the Engineer. The Engineer retains the right to reject repairs that are not of the required quality or appearance. Earthfill adjacent to the sidewalls shall be placed concurrently with each lift.

Roller Compacted Concrete. This item consists of furnishing and placing all roller compacted concrete required for the construction of the auxiliary spillway as shown on the drawings.

Material Sampling and Testing: The Contractor shall provide for the testing and sampling as required to meet the Contractor Quality Control requirements and the Government Quality Assurance testing.

Material Handling and Processing: Temperature of cement and Fly Ash when delivered to the job site shall not exceed 160 degrees F. Pipe delivering material to storage bins shall not exceed 180 degrees F. Sufficient cement and fly ash for 24 hours of placement shall be stored on site, as estimated for average production rate.

Aggregates shall be transported to the site in a minimum of two components. Storage on-site shall be by separate stockpiles, to prevent mixing and contamination. A two week supply of aggregates shall be stored on site.

Submittals: Manufacturer's certifications and test reports shall be produced and dated within the 6 months preceding the delivery of the submittal. The test method used shall be noted on all test reports.

*Trial mix production submittals* - The submittals listed below shall be provided, no later than 30 days before trial mix production. Trial mix production shall not proceed before approval of these submittals.

- a. The name and qualifications of the laboratory that will perform the mix design.
- b. The source(s) from which the Cementitious materials will be obtained along with a certified mill test report for each type of cement, pozzolan, and/or blended cement that will be used to produce RCC. The certified mill test report shall verify that the cement, pozzolan, or blended cement conforms to the applicable material specification.
- c. The source from which the aggregate will be obtained and certified test results showing that all aggregates conform to the specification.
- d. The source from which the water will be obtained and the certified test results showing that water to be used in the mix conforms to ASTM C 94.

- e. The source of the admixture along with certified test results showing that the admixture conforms to the specification.

*RCC pre-production submittals* - The submittals listed below shall be provided, in writing for approval, to the Engineer. The submittal for the job mix and bonding mortar shall be furnished 30 days before delivery of any RCC or bonding mortar component materials to the site. The submittal for the plant and equipment, personnel, and test section plan shall be provided no later than 30 days before delivery of the plant or equipment to the site. RCC materials or equipment shall not be delivered to the site before approval of these submittals.

### **Job mix**

- a. A certified statement of materials, mix proportions (reported for saturated surface dry aggregate), theoretical air-free density (TAFD), moisture/density curves (wet density only), Vebe time, air content, unit weight of mix in air pot just prior to testing air content, and all compressive strength test results for each of the three mixes required in the development of the RCC job mix.
- b. Gradation of each of the aggregate component and combined aggregates used in each mix developed in the mix design program.
- c. The compacted bulk density and voids in each of the aggregate components and combined aggregates used in each mix developed in the mix design program.
- d. A statement of materials and mix proportions used in each mix developed in the mix design program.
- e. A statement of materials and mix proportions proposed to be used in manufacturing the RCC job mix.

### **Plant and equipment**

- a. The planned RCC component material production, transportation, and storage and temperature control procedures. Anticipated peak production capacity, normal production capacity, and onsite storage volumes shall be included in the plan.
- b. Mixing plant manufacturer's data and operating instructions and the plant layout to include a schematic drawing of the plant and materials storage with a narrative description providing its peak capacity, normal anticipated production rate, and results of the most recent uniformity tests conducted within the previous 12 months. The proposed location of the mixing plant relative to the placement site(s) shall be provided.
- c. A narrative description and a layout of the equipment and methods to be used for delivering and depositing RCC at the placement site(s).
- d. The type and expected number of pieces of equipment required for all placing, spreading, and compaction of the RCC.
- e. The plan for obtaining the specified vertical surfaces.
- f. The method and procedure for curing of the in-place RCC, including the type of curing compound if used.
- g. The method and procedure that will be implemented to provide protection of RCC from temperature extremes, including the type of external heating equipment and insulating materials to be used.

### **Personnel**

- a. The names and qualifications of the supervisor and plant operator who will direct the batching, mixing, and placing of RCC.

### **Test section plan**

- a. The Contractor's proposed location for the test section and equipment, materials, personnel, and methods to construct the test section as specified. The submittal shall include plans for the pre- and post-test section briefings.

***Test section submittals*** - Within 24-hours of completing the tests or test section, the following information shall be transmitted to the Engineer in writing.

- a. Results of moisture and density tests used to compute the apparent maximum density (AMD). Include the results of all density tests made of RCC in the test section.
- b. Lift maps of the test section.
- c. Results of compressive strength tests.
- d. Air content and unit weight of RCC.
- e. Production plan that includes RCC production methods, materials, plant, equipment, and personnel as modified based on the results from the performance of the test section that have been documented to produce RCC that meets the requirements of the specification.

Unless otherwise specified, 7 days prior to beginning RCC production, submit a final written plan for RCC production methods, materials, plant, equipment, and personnel that will produce RCC that meets the requirements of this specification.

***RCC production submittals*** - The following submittals shall be provided in writing within 24 hours after delivery tickets, records, or test results are produced, unless otherwise specified.

- a. Delivery tickets for cement and pozzolan shall include the source, date manufactured or produced, type or class, Contractor's name, project name, and a certification that the material meets the specification requirements.
- b. Delivery tickets for aggregates shall include the source, material description, date, and certification that the material meets the specification requirements.
- c. Delivery tickets for bonding mortar shall include name and location of batch plant, ticket number, load and truck number, date, destination, class of Cementitious materials, mix proportions, quantity of bonding mortar, time mixer drum charged with cement, and recording of revolution counter (transit-mixed concrete). If bonding mortar is produced on site, the above required information shall be provided as applicable.
- d. Records of climatic conditions shall be collected on a daily basis and reported on a weekly basis.
- e. Mix plant production records and summary of daily material use and RCC produced shall be submitted before the start of the next production shift. Production records shall include a comparison of actual materials used to the approved job mix.
- f. Results of RCC moisture and wet density tests.
- g. Results of uniformity tests.

- h. Results of compressive strength tests.
- i. Results of RCC temperature tests.
- j. Lift maps shall be submitted before the start of the next production shift.

4. Personnel – One person shall be named and approved for the **supervision of all aspects** of the RCC placement. One person shall be responsible for **plant operations and batching**. One person shall be responsible for **RCC curing**. The plant operator and supervisor shall have experience on at least one other RCC job with the same responsibilities as being considered for.

5. RCC mix design – The Contractor shall conduct the mix design program at a materials testing laboratory staffed by American Concrete Institute (ACI) Certified Grade II Concrete Laboratory Testing Technicians.

*Trial mix design parameters -*

The minimum compressive strength for the RCC job mix shall be 2500 PSI at 28 days.

- A minimum of three separate mixes shall be developed in the laboratory.
- Pozzolan(s) shall comprise at least 20 percent (by volume), but shall not exceed 50 percent (by volume) of the Cementitious materials.
- The remainder of the Cementitious materials shall be comprised of Portland cement.
- A compaction curve (wet density only) shall be developed for each mix to determine the water content that corresponds to the maximum wet density of each mix. Compaction tests shall be performed in accordance with ASTM D 1557, adapted as follows:
  - The mold specified for Method C shall be used.
  - All mix components shall be included.
  - When the maximum size aggregate in the mix is larger than 3/4 inch, place the material in three layers into the mold and compact each layer with 94 blows of the hammer.
- A Vebe test shall be performed on each trial mix design to determine the Vebe consistency time in seconds and the wet density in pounds per cubic foot. The Vebe test shall be performed according to ASTM C 1170. The Vebe consistency time shall range from a minimum of 15 seconds to a maximum of 30 seconds.

***Theoretical air free density*** - The theoretical air free density (TAFD) shall be computed for each of the three laboratory mixes in the mix design program. The TAFD is the maximum wet density that can be attained for a specific mix assuming there is no air (entrapped or entrained) in the mix. The TAFD shall be computed by dividing the sum of the individual weights of the mix components by the sum of the individual absolute volumes of the mix components. The absolute volume is the volume of the solid matter in the particles, exclusive of the volume of voids between the particles. The absolute volume of each mix component is determined as per ACI 211. The saturated surface dry weight and density of the aggregate shall be used when computing the TAFD.

**Laboratory compressive strength** - Fifteen compressive strength cylinders from each RCC mixture shall be prepared in accordance with ASTM C 1176 or C 1435 and weighed to determine the density of the RCC within each cylinder. Any cylinder that weighs less than 98 percent of the weight of the heaviest cylinder shall be discarded and another cylinder prepared and weighed until all 15 cylinders have a weight that is at least 98 percent of that of the heaviest cylinder. The water content of each mixture, from which cylinders are made, shall be within 0.5 percent of the water content that corresponds to the maximum wet density determined in accordance with ASTM D 1557. Three cylinders from each RCC mixture shall be tested at 7, 14, 28, 90, and 180 days for compressive strength in accordance with ASTM C 39.

After the job mix has been approved the source, character, or grading of the aggregates; the source mill, type, brand, or quantity of the cement; the source, type, or quantity of the pozzolan; the type, brand, or quantity of the chemical admixture(s) used shall be changed without approval. Changes to the approved job mix will require submittal and approval of a new job mix that complies with the requirements of this specification.

A **test Section** shall be placed in the downstream cutoff wall. The AMD, Air Content and Density, Compressive Strength Test (fifteen compressive test cylinders) shall be calculated during the placement of the test section. 13 days after RCC placement in test section 10 intact vertical cores 1' x 6" Dia, strength test shall be made for two cores at 14, 28, 56, 90, 180 days.

Section 2- Type II or V type cement.

Section 5 – RCC mix design minimum compressive strength shall be 2500 psi at 28 days.

Section 6 – The test section location will be at the downstream cutoff wall.

Section 11- RCC foundation shall be reworked and compacted to 100% standard proctor with moisture at optimum to optimum +4. All earthen surfaces must be damp and a surface temperature above 35 degrees F before placement.

Section 12 – RCC will have a maximum temperature of 85 degrees F at time of placement.

Section 15 – Lift Joints, Treatment Method I will be used.

Bid Item 20- Cementitious Material furnishing and handling the cement and pozzolan for the RCC to be used on the auxiliary spillway.

**41 - REINFORCED CONCRETE PRESSURE PIPE CONDUITS Bid Item 21**

Includes furnishing and installing the 42" Inside diameter Pre-stressed, concrete lined, steel cylinder pipe. AWWA C-301 pipe is required. Pressure testing is not required.

**45 - PLASTIC PIPE Bid Item 22**

Perforated and non-perforated PVC plastic pipe shall be AWWA C900, pressure class 100; ASTM D1785, schedule 80; or ASTM D2241, SDR 21. Six-inch ID pipe is required. Payment for this item also includes payment for Subsidiary Items, Rodent Guards and Metal Cleanout Cover in Constr. Specification 81

**61- ROCK RIPRAP      Bid Item 23**

Rock Type 1 is required. Test load requirements are in 8.a.(3). Note the testing requirements in Material Specification 523 and the methods required for the soundness test. A test sample of at least 5 tons with certified test results shall be delivered to the site. Equipment shall not be allowed on the rock during or after placement. Statement-of-delivery ticket showing weight to the nearest 0.1 ton is required and shall be furnished to the Inspector. Delivery of rock is allowed only during regularly scheduled work hours. Subsidiary item is Excavation, Rock Riprap.

**81 - METAL FABRICATION & INSTALLATION      Bid Item 24 and Subsidiary Items**

This specification includes requirements for furnishing and installing the specified metal work for the inlet and outlet structures.

Bid Item 24: includes Trash Rack and Manhole Cover and frame. Furnish and install.

Subsidiary Item, Stiles. Note that this item shall be paid in bid item 26 (Fence Barbed Wire).

Subsidiary Items Metal Cleanout Cover and Rodent Guards shall be paid in bid item 22 (Plastic Pipe)

**91 – CHAIN LINK FENCE      Bid Item 25 and subsidiary items**

Bid item 25 includes requirements for furnishing and installing chain link fence shall be polymer- color black.

Subsidiary Item, Barbed Wire for Safety Fence, Impact Basin.

**92 - FIELD FENCE      Bid Item 26**

Contractor shall install fences per specification and at approximate locations shown on drawings. Final locations shall be staked by the Engineer.

Subsidiary Item, Stiles.

**94 - CONTRACTOR QUALITY CONTROL      Bid Item 27**

Contractor shall have a full time quality control inspector onsite. Each continuous activity will require a dedicated inspector while being performed. Additional inspectors will be required if other work is being performed concurrently that requires continuous or full time inspection.

In Sections 3 and 4, Method 2 shall be used. This requires the quality control activities to be performed by competent personnel who are separate and apart from the line supervision and who report directly to management. Names of quality control personnel and their duties, qualifications, certifications, and authorities are required and shall be submitted to the Engineer for approval. A written plan (quality control system) must be submitted to the Engineer for approval. Daily QC reports are required to be submitted to the Inspector. Any testing done by the CLO is for the sole benefit of the CLO. It is the Contractor's responsibility to perform tests to prove and ensure that all work performed meets the contract requirements. All tests shall be

conducted in accordance with the appropriate ASTM method and with equipment that meets the requirements of the specified ASTM test method. Contractor's scheduling of construction activities may require more than one on-site quality control inspector (note the degree of quality control specified). Digital photos documenting the work are required with automatic imprinting of time and date as specified.

**95 - GEOTEXTILE Bid Item 28**

A non-woven Class I as defined in Material Specification 592, Table 592-2 is required. Per Section 5, Method 2, the non-woven geotextile shall be secured in place with pins and overlap shall be 18 inches.

**99 – CONDUIT ABANDONMENT Bid Item 29**

Fill existing conduit once the new spillway is completed. Hot weather grouting may require admixture to meet temperature requirements and setting time.

**416 – EARTHFILL SLURRY TRENCH CUTOFF WALL Bid Item 30 and 31**

Slurry wall must be at least 2.5 feet wide. It must be at least 2 feet into the siltstone layer. A written plan must be submitted before the installation of the slurry walls how to verify the slurry wall is 2 feet into the siltstone for both the upstream and downstream soil-bentonite walls.

Bid Item 30: Soil-Bentonite Wall, Upstream

Must be completed before the conduit is installed.

Subsidiary items:

Excavation, Common, Upstream Soil-Bentonite Wall Working Pad

Earthfill, Upstream Soil-Bentonite Wall Working Pad

Excavation, Common, Upstream Soil-Bentonite Wall

Earthfill, Upstream Soil-Bentonite Wall

Bid Item 31: Soil-Bentonite Wall, Downstream

Subsidiary items:

Excavation, Common, Downstream Soil-Bentonite Wall Working Pad

Earthfill, Downstream Soil-Bentonite Wall Working Pad

Excavation, Common, Downstream Soil-Bentonite Wall

Earthfill, Downstream Soil-Bentonite Wall

**Material Specifications:**

Questions covered

**PART V - DRAWINGS**

Drawing TX-EN-0652

**VISIT TO PROJECT SITE**

**Items Marked or Staked:** Fences to be removed, Camp area, stockpile area, centerline of new Principal Spillway alignment, and construction site entrance.

Flagging (all locations are approximate and to be used to give an idea of location; Contractor is responsible for verifying exact alignments and locations):

- White and Pink - the centerline of the finished dam
- White – Fence to be removed
- White and Orange – Corral to be removed
- Pink along toe fence line – Finished toe
- Spillway - Red and white
- Orange – access road
- Pink – Campsite
- Red – Waste Area

**STOPS AT SITE VISIT:**

Construction Site Entrance.

Access

Note the road will require regular dust control

Contractor is responsible for maintaining the gate is closed except ingress and egress to site.

Campsite.

Large trees in area.

All trees in excess of 12 inches are to be maintained.

Fence to be removed along toe.

Waterline at left abutment of crest.

Centerline of pipe conduit (Sta. 850+00)

Waste Area heel of spillway.

Fence to be removed

Spillway

Centerline and tangents as staked based upon the drawings.

Fence to be removed

**QUESTIONS & ANSWERS (Q&As)**

**Q:** Are subcontractors required to meet the minority and women goals as specified in PART III, Supplemental Conditions Article 16.

**A:** Yes, subcontractors are subject to the same minority goals as the prime contractor as specified Supplemental Conditions Article 16.2 for all subcontracts at all tiers if the subcontract amount exceeds \$10,000.

**Q:** Will the CADD files be given to the Contractor after award?

**A:** No, NRCS policy in Texas is that the CADD design files are not given to the Contractor.

**Q:** Is power close to the site?

**A:** There are power lines close to the campsite as shown in the drawing TX-EN-6052 Sheet 2. AEP Texas Customer Operations Center phone is 1-877-373-4858. The website is [www.aeptexas.com](http://www.aeptexas.com) and there is a Builders and Contractors tab with information about temporary service to construction sites.

**Q:** Who is responsible for care of water? Can the water be diverted from the site?

**A:** The Contractor is fully responsible for care of water at their expense and risk. All water coming into the site is natural runoff (no facilities discharge water in this watershed). There is no way to divert or move runoff water away from the site. The time of concentration is estimated at 10.3 hours.

**Q:** Can manufactured sand be used?

**A:** Yes, as long as it meets Material Specification 521.

**Q:** Can concrete cement type III be used?

**A:** No.

**Q:** Can work be performed outside of the designated working hours to meet concrete temperature as per Construction Specifications 31 and 36? Can work be continuous (24 hours per day) for concrete work?

**A:** Concrete work outside of the hours designated by PART II, General Conditions Article 20 will be allowed under very limited circumstances where concrete temperature quality control is exceedingly difficult to meet during the day. Requests to work outside of the designated hours will be evaluated and must be pre-approved by the Engineer and Contracting Officer. Bid assuming the work is limited to 10 hours a day, 6 days a week.

**Q:** Where can Contractors get water for the site?

**A:** Information is available from Union Water Supply Cooperation at 5992 FM 1430, Rio Grande City, TX 78582; phone 956-487-3744; contact person Jorge Bazan.

**Q:** How will payment be determined for the 56, 90 and 180 days tests if the site work is complete before the final breaks of the concrete test specimens?

**A:** See Amd. #1 pen-and-ink change to Construction Specification 36, Roller Compacted Concrete. RCC is paid at the unit price on monthly progress payments based on the quantity installed that period as approved by the Engineer.

**Q:** Have you run trial mixes on the local aggregate for concrete?

**A:** No, the NRCS does not have information on the suitability of the local aggregates. The Contractor is responsible for finding and using aggregate that meets Material Specification 522 and/or Material Specification 524 (as appropriate). The Contractor is responsible for ensuring that the aggregate does not have alkali-silica reactivity (ASR) as specified by Material Specification 522.4.

**Q:** Is there a sulfate maximum for ASR?

**A:** Material Specification 524.4 specifies the maximum for reactivity.

**Q:** Is the aggregate required to have fractured face percentages?

**A:** No. Material Specification 524.3 defines the particle shape. Fractured faces are not required in the specification.

**Q:** Should cementitious material (such fly ash or silica fume) other than Portland cement have its own bid item?

**A:** No.

**Q:** What is the definition of vertical surface for RCC concrete?

**A:** Refer to Construction Spec 36, Section 17 that requires 80% coverage. Form work will be required for exposed vertical surfaces, but not on areas that will not be exposed after work is complete.

**Q:** Can United States Army Corps of Engineers' lab certification be used in lieu of an ACI grade 2 technician?

**A:** No. United States Army Corps of Engineers' lab certification is to the entire laboratory where as the ACI grade 2 technician is specific to an individual.

**Q:** Is there a percentage of percent bentonite that should be used for the slurry wall mix?

**A:** No minimum mix or percentage of bentonite is required. It must meet the slurry viscosity requirements in Construction Specification 416, Section.5.

**Q:** What are the reasons that the gate is to be closed at all times except for ingress and egress of traffic?

**A:** It is to prevent dumping of trash on the property, to prevent animals from leaving or entering the property such as goats and cattle, and for security.

**Q:** Can organic material such as trees and brush be chipped?

**A:** Yes, Construction Specification 1 allows for organic material to be mulched or buried. The Inspector must approve any piles to be buried as containing only organic matter. Note this is included in the Amd. #1 Pen and Ink change for Construction Specification 1.

**Q:** Can we use the water from the waterline?

**A:** The Contractor would need to have a written agreement from the land owner as per General Conditions Article 16.

**Q:** How close are the residences from the campsite?

**A:** Aerial Photos from google earth show approximately 0.4 miles north of the residence at Guevara road and approximately 0.2 miles east of the nearest residences at Lito Garza St.

**Q:** Where is the borrow site?

**A:** It is expected that the spillway excavation will provide all suitable borrow material.

**Q:** Is the top of dam surfaced or is the river gravel part of the fill?

**A:** Gravel has been added to the top of the dam.

**Q:** What is suitable material?

**A:** See Amd. #1 Pen and Ink Change to TX-EN-0652 Sheet 5 for acceptable materials for Zones 1, 2, and 3.

**Q:** Is irrigation required for establishment of the grass seed?

**A:** No, grass seed is to be spread as per Construction Specification 6. Contractor is not responsible for irrigation or establishment of grass.

**Q:** Can the Contractor allow for a person to stay onsite after hours to watch over the equipment?

**A:** Yes, the Contractor may have no more than two (2) personnel to stay onsite after hours to watch over the site. The Contractor will be responsible for providing appropriate facilities for the personnel that will be onsite.

**Q:** Can the Contractor have alternate access to the site such as Lito Garza St.?

**A:** The Contractor is responsible for having written agreements with the land owners and providing them to the Contracting Officer as per PART II, General Conditions Article 16. Final approval for alternate access lies with the Contracting Officer.

**Q:** What are the qualifications for winning the award of the contract?

**A:** The contract will be awarded to the lowest priced bidder whose bid is responsive and whose firm is qualified (responsible). Refer to PART I, General Provisions Subpart B. Sections 11 and 12 regarding qualification and disqualification.

#### ATTACHMENTS:

AERIAL PHOTO (to staple to Drawing Sheet 1 of 42)

8-25-15 Site Showing Attendance listing (page 27 of 27)

#### DISTRIBUTION:

To be posted on Starr County website. All registered plan holders and 8/25/15 site showing attendees will be advised via email (or otherwise) when Amendment #1 is available for downloading from

**[www.co.starr.tx.us](http://www.co.starr.tx.us)** (click on link to IFB SC-15-O&GC7-15)

**SITE SHOWING ATTENDANCE**  
**August 25, 2015**

**Starr County Personnel**

Rafael R. (Rudy) Montalvo, CO and Director of Federal and State Programs  
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**Items of Note for site showing**

Location of Waterline and access road not identified on TX-EN-0652 Drawing 1

**Legend**

- Access Road
- Exposed Waterline

