AMENDMENT #1

May 27, 2021

Invitation for Bids (IFB) Number PCCD-21-PCW10Rehab-02, 5/13/2021

Issued by
Plum Creek Conservation District
Lockhart, 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 specifications, and to provide meeting minutes (including Questions and Answers), attendance list for the 5/25/2021 Pre-bid Conference/Site Showing, and photographs of Site 10.
- 2. To remind bidders that <u>oral</u> 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:

- (1) Make appropriate notations on Exhibit A, Offer form (PART I, Subpart C, page GP-8).
- (2) 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 Daniel Meyer, Contracting Officer, clearly noting "Acknowledgment of Receipt of Amendment No. 1, IFB No. PCCD-21-PCW10Rehab-02" on the envelope. Fax, electronic, or telegraphic acknowledgments of receipt are not allowed.

ACKNOWLEDGMENT OF RECEIPT

Amendment No. 1 (5-27-2021)
IFB PCCD-21-PCW10Rehab-02 (Site 10 Rehabilitation)

Bidder's Signature:	
Bidder's Name:	
Bidder's Title:	
Date Signed:	
Company Name:	

PEN-AND-INK CHANGES

PART IV - CONSTRUCTION & MATERIAL SPECIFICATIONS

CSpec 5 – Pollution Control

Section 8.a.(2). ADD the following sentence:

"Geotextile used for the construction entrance shall be non-woven and conform to Material Specification 592."

CSpec 6 – Seeding, Sprigging and Mulching

Section 7.c.(1). DELETE the word "seeded" and INSERT the word "sprigged".

CSpec 7 – Construction Surveys

Section 9, ADD the following paragraph:

"In Section 3, Quality of Work, electronic models created for the purpose of aiding the Contractor in stakeout and/or quantity computations, as well as field layout and staking shall be prepared and/or performed by a Professional Engineer (PE) or Registered Public Land Surveyor (RPLS) licensed in the State of Texas."

Section 9.a.(5)(b). DELETE the word "Two" and INSERT the word "Four".

CSpec 23 - Earthfill

Section 10, 4th paragraph. DELETE words "The earthfill beneath the earthfill" and INSERT the words "The earthfill beneath the lime treated earthfill".

CSpec 28 – Lime Treated Earthfill

Section 12.b.(2). ADD the following sentence:

"Minimum nominal diameter pellet size shall be 0.25-inches."

MSpec 303 – Lime

Section 2.b.(1), 1st line. CHANGE "palletized" TO READ "pelletized".

PART V – DRAWING No. TX-EN-0740

Sheet 1

DELETE Construction Note 9. in its entirety.

Sheet 45

Stabilized Construction Entrance – Detail

ADD the following sentence to Note 2:

"Provide a layer of non-woven geotextile beneath the crushed rock"

ADD a new Note 5 as follows:

"5. Construction Entrances shall be approved and meet the requirements of Hays County, Texas."

DESIGNATIONS / ITEMS STAKED

ITEMS DESIGNATED VERBALLY/MARKED AT SITE SHOWING

Approved locations for burying materials are: [Ref: Page 1-3, 3rd paragraph]

• In the location of the waste area as designated on Sheet 2 of the drawings and as approved by the Engineer.

Actual limits of required clearing designated at site showing are: [Ref: Page 1-3, 8.a.(2).]

 All areas within the designated work limits defined on the drawings that are consequential to planned work as approved by the Engineer.

Structures or structure parts to be removed will be marked by pink paint or flagging per the Engineer. [Page 3-1, Section 2, Method 1]

Actual limits of fences required to be removed will be marked by pink paint or flagging per the engineer. [Page 3-3, 7.a.(2)]

The need for temporary fences determined at the site showing are: Any areas of work, as needed for the exclusion of livestock, that are within the designated work limits as shown on the drawings. [Page 8-4, 4.a.(3)]

QUESTIONS AND ANSWERS

Correction to 5/25/21 Statement: On 5/25/21 Daniel Meyer stated PCCD will attempt to open the slide gate prior to the Notice to Proceed if it is operational. However, PCCD has decided NOT to open the slide gate unless needed to fulfill its normal maintenance obligations to NRCS as the Primary Local Sponsor of the Plum Creek Small Watershed Project or to fulfill its obligations that might be imposed under orders of the Texas Commission on Environmental Quality with respect to Dam Safety under Texas Laws. The Contractor will be responsible for all operations necessary as specified in Construction Specification 11, Removal of Water. As a reminder, no work may be performed at the construction site until receipt of a Notice to Proceed from the Contracting Officer.

Q1: Is it possible to move the bid opening back a few days in order to provide more time for preparing the bid?

A1: No; the IFB was posted to the public on May 13th. Bids are due and set to be opened on June 3rd at 1:00pm CST.

Q2: What are the Hays County requirements for the construction entrances?

A2: The County recently advised PCCD that the driveway permit application was being reviewed and stated in an email that a culvert would not be required at the Pug Mill Entrance but an 18-inch culvert is required at the Primary Access Entrance. Contractor will be required to follow County requirements as stated in the final permit when it is issued.

Q3: Is "flowable fill" grout acceptable for the decommissioning of the existing principal spillway conduit?

A3: No; the existing conduit shall be decommissioned with a cellular concrete as specified in Construction Specification 99 – Conduit Abandonment.

Q4: Can Tifton 85 jiggs be used as an alternative for the Coastal Bermudagrass sprigs as specified?

A4: Acceptance of any sprigging alternative shall be reviewed and must be approved by PCCD prior to any revegetation activity.

Q5: Is there a germination or height requirement for the vegetation establishment prior to final acceptance?

A5: No vegetation establishment criteria are specified.

Q6: Can the NRCS provide the design CAD drawings/model?

A6: No; see Construction Specification 7 – Construction Surveys and the printed drawings for all survey and layout requirements.

Q7: Can a culvert be placed within the pug mill construction entrance if Hays County does not require one?

A7: Yes; if adding a culvert at that entrance does not violate Hays County criteria, the Contractor could install a culvert at his/her own expense. It would need to be removed at the end of construction and the area returned to its original or better condition.

Q8: Is there livestock within the project area?

A8: None currently; temporary fencing requirements are included in Construction Specification 8 – Mob/Demob for the exclusion of livestock if needed during the construction period.

Q9: Does Hays County need to be notified and/or provide approval for the required Traffic Control Plan (TCP)? If so, who is the contact person?

A9: Hays County must approve the TCP required in CSpec 9, Traffic Control. County contact is Mr. Timothy Vande Vorde, Operations Superintendent, Hays Co. Transportation Department. He prefers the TCP be submitted to him via email at tvandevorde@co.hays.tx.us. His mobile # is 512.738.0747; office # 512.393.7390.

Q10: Is Satterwhite Road paved?

A10: Yes.

Q11: [reserved] A11: [reserved]

Q12: Is there a minimum water level that is required for the reservoir?

A12: No; a minimum water elevation has not been specified.

Q13: Are there any requirements on fish protection or relocation?

A13: No.

Q14: Is there a water source available along Satterwhite Road?

A14: NRCS and PCCD are unaware of availability of a water supply source along Satterwhite Road.

Q15: Is a cofferdam required?

A15: A written dewatering plan is required and shall have an allowable probability of inflow of not less than 1-percent chance in any 1 year and shall be sealed by a Professional Engineer licensed in Texas. It would be that PE's responsibility to determine if a cofferdam was needed.

Q16: What are the payable excavation limits for Bid Item #11 – Excavation Common and does it include stripping of topsoil?

A16: The upper and lower limits for the excavations are detailed in Construction Specification 21 – Excavation with the upper limits being defined as the measured surface of the ground before construction and the lower limits being the true surface of completed excavation as

shown on the drawings, unless unsuitable materials still exist as determined by the Engineer. All topsoil is measured as the total surface area to be <u>covered</u> by topsoil computed to the nearest square yard and consists of the salvaging and placement of the topsoil. Payment for furnishing and placing topsoil is made at the contract unit price.

Q17: Will additional topsoil need to be imported?

A17: No; all topsoil shall be salvaged from designated earth surfaces that will be disturbed by construction activities.

Q18: Does the lime treatment processing area require the full 12-inches of topsoil?

A18: Yes; the depth of topsoil placement for all areas with lime treated earthfill; including the processing area, shall be 12-inches. All other exposed excavated slopes outside the limits of the lime treated earthfill shall have a depth of placement of 6-inches.

Q19: Will additional earthfill need to be imported?

A19: No; all fill material shall be obtained from required excavations and designated borrow areas.

Q20: Is a soil test of the placed topsoil required for the determination of the fertilizer application?

A20: No; all requirements for re-vegetation are detailed in Construction Specification 6 – Seeding, Sprigging, and Mulching.

Q21: There seems to be a difference in the area to be topsoiled and the area set to be revegetated. Would these not be the same?

A21: All areas that are topsoiled shall be sprigged in accordance to Construction Specification 6 – Seeding, Sprigging, and Mulching. All other disturbed areas; i.e. campsite, access, waste area, etc., shall also be prepped and sprigged in accordance to CS 6. The total area to be revegetated is shown on sheet 45 of the drawings.

Q22: Would the use of hydrated lime be acceptable? Hydrated lime is mentioned as an option in Section 2 of Construction Specification 28 – Lime Treated Earthfill.

A22: No; Section 12 – Items of Work and Construction Details, 2nd paragraph, explicitly states, that "In Section 2, Material, hydrated lime shall not apply. Quicklime shall be required and shall meet the requirements of Material Specification 303."

Q23: Can the water from the reservoir be used for construction activities?

A23: Yes; the Contractor is responsible for obtaining any and all special use permits; as applicable.

Q24: Can additives be used in the concrete mix to assist in placement of the conventional concrete?

A24: All admixtures shall meet the mix requirements that are specified in Construction Specification 31 – Concrete for Major Structures and Material Specification 533 – Chemical Admixtures for Concrete. All admixtures shall be approved by the Engineer prior to use.

Q25: Is the use of Fly Ash required for any of the concrete work?

A25: For conventional concrete, the use of a pozzolan / supplementary cementation material is specified in Construction Specification 31 – Concrete for Major Structures, Section 2 and Section 3; Method 1. For RCC, the use of a pozzolan / supplementary cementation material is

specified in Construction Specification 36 – Roller Compacted Concrete, Section 2 and 5. Use of Fly Ash is an option as a type of pozzolan for the proposed job mix, but not a requirement.

Q26: Can we place the RCC at night?

A26: After contract award, all requests for alternative work schedules will be reviewed and given consideration. There are many factors that will need to be determined and considered and there is no guarantee at this time such a request would be approved.

Q27: Will extra time or cost adjustments be given if availability of materials become an issue? A27: It is the responsibility of the Contractor to procure all required materials in a timely manner to complete the project within the performance time of the contract at the price specified in their bid.

Q28: Can the crest of the auxiliary spillway be lowered to aid in the dewatering of the site? A28: All proposed methods of dewatering shall be addressed in the written Dewatering Plan that is sealed by a Professional Engineer licensed in Texas and reviewed/approved by the Engineer and CO. See CSpec 11 – Removal of Water. Proposed lowering of the auxiliary spillway crest would have to be addressed in the submitted plan.

Q29: Are there any nearby rock quarries that have been previously approved for use? A29: There are several quarries located west of Austin, Texas near the Marble Falls, Texas area.

Q30: Can the rental office space located across Satterwhite Road be used as the Field Office for the NRCS inspector?

A30: No; the Field Office facility shall be located at the designated construction campsite area and meet the requirements as outlined in Construction Specification 8 – Mob/Demob.

Q31: Is the existing principal spillway conduit the only way to dewater the site?

A31: See answer to Q28.

Q32: Can material from the designated borrow areas be used to construct a cofferdam?

A32: Yes.

5/25/2021 SITE SHOWING / PRE-BID CONFERENCE MINUTES

<u>Note</u>: 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 Plum Creek Conservation District (PCCD), Lockhart, TX. The Contracting Officer (CO) for this project will be Daniel Meyer (PCCD Executive Manager) and the Alternate CO will be Alan Burklund (PCCD Staff Member). USDA-NRCS will provide a full time Inspector (Tony Barley) and a Project Engineer (Shane Ice). Jean Ann Maynard will serve as contracting consultant to the PCCD for the project. The project is receiving funds from the USDA-Natural Resources Conservation Service, TX State Soil and Water Conservation Board and PCCD. See Attachment A for a listing of all attendees.

The conference commenced at 9:30 a.m., and Daniel Meyer welcomed attendees, made introductions, and provided a brief history of the project. Questions and Answers from the conference and site visit are listed in this Amendment #1 as well as photographs of Site 10.

ADMINISTRATIVE PRESENTATION

This material was presented by Jean Ann Maynard. 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 signed in.

The IFB was published on 5/13/21. Printed copies of the bid documents are <u>not</u> being distributed. If you want a copy of the Invitation for Bids (IFB) package, any future amendments to them, and the Plan Holder Registration Form, you must download the files from the PCCD website as stated in the Bid Notice.

Amendment No. 1 will be issued after this Site Showing. It will include today's meeting minutes, the questions/answers, an attendance list, and all pen-and-ink changes 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 District website.

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

<u>Performance Time (PT)</u>. Original time is 640 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 PT 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 shutdowns listed in Part II, Article 20.

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

- (a) Thursday, June 3: 1:00 PM
- (b) Must hand carry or mail. No Fax or Telegraphic bids are allowed.
- (c) NOTE: Deliver or mail bid to this PCCD office.

<u>Engineer's Cost Estimate</u>. This will NOT be disclosed until after bids have been opened. The Estimated Price Range is: between \$1,000,000 and \$5,000,000.

<u>IFB/Contract Terms & Conditions</u>. 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.

<u>Section 2 – Conditions Affecting the Work.</u> To view site (other than today) you need to make an appointment with Daniel Meyer and you must be escorted to the site with an authorized person. 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.
- (d) 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) <u>Must</u> use Exhibit D form (original + 1 copy). (2) Must meet <u>all</u> Bid Bond Requirements for surety as stated in Section 8. READ THIS CAREFULLY. NOTE surety <u>must be</u> U.S. Treasury listed.
- (e) Exhibit E Bidder Certifications. (1) Three sections you need to "circle" appropriate answer and write in surety information on one. (2) Certain non-Texas resident bidders must provide a Certificate of Authority from TX Secretary of State to transact business in Texas. (3) There are some new certifications due to State funding (Sections J, K, and L).

Section 4 – Preparation of Bid

- (a) IFB documents and Plan Holder Registration Form <u>must</u> be obtained using the District website as outlined in the Public Bid Notice. Printed copies of the IFB packages are not available. The official printed hard copy shall take precedence over an electronic media copy. This official file hard copy of each IFB may be viewed at the PCCD office.
- (b) Submit offer in DUPLICATE (original + 1 copy of all documents).
- (c) Bidders are entitled to EXCLUDE exempted taxes in bid price. Contractor will be performing a contract for an exempt organization. The District 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]
- (d) Bid Schedule (Exhibit B). One award will be made for the Total Bid Items (there are 33). Failure to price each item in the Bid Schedule is a basis to reject bid.

<u>Section 6 – Explanation to Bidders / Inquiries.</u> 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 Daniel Meyer (via Email or Fax is allowed). The <u>deadline</u> to submit written questions is noon on 5/27/21. 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 Daniel. If an Engineer's input is needed, he will do so [please don't contact Engineer Shane Ice directly].

<u>Section 8 – Bid Bond Requirements.</u> 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.

<u>Section 11 and 12 – Qualification/Disqualification of Bidders</u>. 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.

<u>Section 20 – Records</u>. This lists documents available at the PCCD office for viewing by interested parties. There is a large set of drawings along with a printed copy if the IFB package. There is also a copy of 2018 Soil Mechanics Report which includes as-built plans of the original dam construction. All of these documents also are available to view/download at the PCCD website.

Anticipated Schedule / Contracting Procedure

<u>Bid Opening</u> (June 3): Publicly open sealed bids. Declare apparent low bidder and meet with their representative.

<u>Issue Notice of Award</u>. PCCD Board will meet on June 8 to approve award. Notice will be issued on Wed., June 9, if possible. You will have 5 <u>work</u>days to submit your <u>1st post-award documents</u> [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 PCCD would move on to 2nd low bid).

<u>2nd Post-award Documents</u>. These will be requested at same time as Notice of Award and will be due about June 23 (such as construction schedule, safety plan, etc.).

The <u>Preconstruction Conference</u>, will be held about June 29 or 30. If everything is in order, the <u>Notice to Proceed</u> will be issued on Tuesday, July 6 (Monday is Federal holiday) and Day #1 of performance time would be Wednesday, July 7.

General Conditions (PART II)

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

Actual damages will <u>not</u> 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 District 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).

Per current conditions, a segment entitled "Delays Due to COVID-19" is included in this clause. PCCD shall follow guidelines of OSHA, CDC, and TX Department of State Health Services in determining if/when work would need to be suspended and resumed.

<u>Payments / Invoicing Requirements</u> [Article 7]. Progress payments will be made monthly. Per Texas Water Code, District shall retain 10 percent of progress payments on the first 50 percent of work completed (without paying interest). Please note that the payment due date for the District is within 45 days of receipt of "proper" invoice. The District will strive to pay sooner than 45 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.

<u>Superintendence</u> [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. NOTE that PCCD is in process of obtaining Hays Co. Temporary Entrance Permit for the primary and pug mill entrances. To date County said culvert isn't required at pug mill entrance but 18" culvert is required at main entrance. If PCCD does not secure the permit, Contractor is ultimately responsible to obtain it and comply with terms in it. Any other necessary permits are Contractor's responsibility.

Real Property Rights [Article 16].

- (a) The District has acquired all landrights to perform the work and the Construction Work Limits are shown on the drawings.
- (b) Contractor shall obtain owner's <u>advance written approval</u> 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. Any changes to items already designated in the contract (e.g., site entrance, campsite, etc.) must be approved by the Contracting Officer at his sole discretion.

<u>Water</u> [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].

- (a) Requires written schedule prior to commencement of work (CO must approve).
- (b) Maximum Work Week: Monday Saturday (10 hours per day).
- (c) Work may be performed during daylight hours only.
- (d) Holidays: Project will be shut down (and days are included in the performance time) for dates specified in this clause. The clause also lists dates for holidays/breaks where no work will be allowed if/when performance time extends beyond the original 640 calendar days.

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

<u>Surveys</u> [Article 22], <u>Shop Drawings</u> [Article 30], and <u>Layout of Work</u> [Article 35]. Some general information. Shane Ice will discuss contract requirements more thoroughly in his technical presentation.

<u>Suspension of Work</u> [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).

<u>Weather</u> [Article 26]. PT does <u>not</u> 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.]

<u>Accident Prevention and Safety</u> [Article 41]. Includes Supplement to OSHA regulations with many requirements. Shane Ice will cover later. VERY important – will monitor and enforce safety.

Supplemental Conditions (PART III)

<u>Insurance Requirements</u> [Articles 1-3]. Read carefully. Due 5 <u>work</u>days 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 most policies require District to be listed as additional named insured and all policies must include a waiver of subrogation.

<u>Post-Award Information</u> [Article 4]. Lists items you must submit within 5 <u>work</u>days after receipt of Notice of Award. Be prepared to do this!

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

<u>Commencement, Prosecution, and Completion of Work</u> [Article 6]. You must commence work within 20 calendar days of date you receive written Notice to Proceed (mobilization does not qualify).

<u>Wage Rates</u> [Article 8]. Because construction, must pay prevailing wage rates for laborers and mechanics. Rates in PART VI. Weekly certified payrolls are not required.

<u>Ethics / Conflicts of Interest</u> [Article 9]. Per State requirements, Contractor will be required to complete online Form 1295, Certificate of Interested Parties.

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

Special Federal Requirements [Articles 14-19]. Also, Article 17A is a State certification.

<u>Subcontractor Certification (TPDES)</u> [Article 20]. Subcontractors who perform work that may impact pollution control measures must sign a certification form (see Appendix A, Construction Specification 5).

TECHNICAL PRESENTATION

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

PART II - GENERAL CONDITIONS

Article 8 - Material and Workmanship

Certificates and test data shall be submitted to show compliance of materials and construction equipment 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 Government Representative with copies to the Contractor and Contracting Officer.

Article 18 - Materials to be Furnished by the Contractor

Materials which require material certifications are: Silt Fence materials; Pelletized Lime; Aggregates for Drainfill, fine and coarse; Aggregates for Concrete, fine and coarse; Aggregates for Roller Compacted Concrete, fine and coarse; Rock for Riprap; Portland Cement; Supplementary Cementitious Material; Concrete Admixtures; Concrete Curing Compound; Expansion Joint Filler; Sealing Compound for Joints; Steel Reinforcement for Concrete; Reinforced Concrete Pressure Pipe; Ductile-Iron Pipe; Plastic Pipe; Slide Gate; Metal (Principal Spillway Metal Work, Rodent Guard, Cleanout Cover, Mounting Brackets, Stile); Galvanization of Metal; Geotextile; Vegetative establishment materials; and Fencing materials (Field Fence and Chain Link).

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

The Contractor shall comply with all applicable OSHA safety standards. All or part of the work may be suspended for noncompliance. The GR and Inspector will have delegated authority to suspend work for any noncompliance posing a serious or imminent danger to the health or safety of the Contractor's employees or others such as employees of the CLO or NRCS and the public.

The Supplement to OSHA 1910 and 1926 emphasizes 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 must be worn on the job site at all times.

Equipment must be outfitted with working backup alarms, seat belts, and approved roll-over protective structures (ROPS). All equipment will be inspected at the job site by the Construction Inspector prior to use on the project.

PART IV - SPECIFICATIONS AND SWPPP

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.

The following construction specifications are summarized, in part, to aid in preparing a competitive bid. However, all language of the specifications apply to the contract.

1 - CLEARING

Subsidiary Item - Clearing, Class C

This item consists of all clearing within the work limits required for construction of the works. Actual limits of clearing shall be designated or staked at the time of site showing. Class C clearing requires that trees and other woody vegetation be removed as near to the ground surface as conventional tools or field conditions will permit.

Most, if not all, of the cleared material can be burned and buried. Burning shall be local to the area being cleared in locations as approved by the engineer. Locations for burying material shall be approved by the engineer and designated at the time of the site showing. Buried material shall have an earthfill cover of not less than 3-feet.

Compensation for this item is to be included in **Bid Item 11 – Excavation, Common**.

3 - STRUCTURE REMOVAL

In Section 2, Marking, Method 1 shall apply. Structures to be removed will be marked by the Engineer or Inspector with stakes, paint, or flags.

In Section 6, Measurement and Payment, Method 2 shall apply and be made at the contract lump sum price.

Bid Item 1 - Structure Removal, Fences

This item shall consist of the removal and disposal of all designated fences in the construction area. The approximate limits of the existing fences to be removed are shown on the drawings. The actual limits will be designated by the engineer.

In Section 3, Removal, Method 2 shall apply. The fences shall be removed to the bottom of the footing and/or post.

In Section 5, Disposal, rubbish or non-woody material shall be disposed of by the Contractor at sites of his own choosing away from the construction site as approved by the Engineer. The woody materials shall be disposed by burning and burying at locations as approved by the Engineer within the designated work limits or hauled to an offsite location of the Contractor's choosing as approved by the Engineer. Minimum earth cover over the buried disposed materials shall be three feet.

Bid Item 2 - Structure Removal, Principal Spillway Inlet

This item shall consist of removal and disposal of the existing principal spillway inlet; designated conduit sections, concrete cradle; pipe cantilever and pipe support as shown on the drawings.

The existing principal spillway conduit shall be used for dewatering and shall remain open until the new principal spillway system and outlet channel installation are complete.

In Section 3, Removal, Method 1 shall apply and removed to the limits as shown on the drawings.

In Section 5, Disposal, rubbish from the removal shall be buried at locations as approved by the Engineer or hauled to an offsite location of the Contractor's choosing as approved by the Engineer. Minimum earth cover over the buried disposed materials shall be three feet.

5 – POLLUTION CONTROL

This construction site is greater than 5 acres and is subject to the Texas pollutant Discharge Elimination System (TPDES) requirements administered by the Texas Commission on Environmental Quality (TCEQ). Rules for the TPDES process relative to construction sites are contained in TPDES General Permit No. TXR150000. A copy of the general permit may be found at the TCEQ website. In conformance with the general permit, a Storm Water Pollution Prevention Plan (SWPPP) is required. A SWPPP has been prepared by the NRCS and shall be amended by Contractor to include a detailed work sequence outline which defines and delineates the proposed construction operation. A copy of the approved SWPPP, as amended, shall be maintained at the construction site by the Contractor. A copy of the general permit shall be attached to the SWPPP. All applicable TCEQ rules and regulations concerning the TPDES and the SWPPP must be followed.

TPDES also requires a Notice of Intent (NOI) and Notice of Termination (NOT) to be filed with TCEQ. The Contractor will be responsible for submitting the Contractor's copy of the NOI to the Engineer at least five business days before work begins.

Bid Item 3 – Pollution Control

This item includes work required to maintain sediment filters; installation and maintenance of the stabilized construction entrance and rock sediment filter; implementing the SWPPP.

All pollution control measures shall be removed at the completion of all construction activities.

In Section 7, Measurement and Payment, Method 3 shall apply and establishes lump sum payment for this work which is prorated in equal monthly payments.

Bid Item 4 - Sediment Filters

This item consists of furnishing and installing silt fence to the lengths and locations designated on the Drawings and otherwise needed to control sediment from leaving the construction site.

In Section 3, Erosion and Sediment Control Measures and Works, Sediment Filters shall be limited to geotextile silt fence.

Silt fence material shall meet the requirements of MS 592 and installed according to ASTM D6462.

In Section 7, Measurement and Payment, Method 1 shall apply and will be made to the nearest linear foot installed as specified.

Special Note: Payment includes providing and installing the sediment filters and not maintaining them. Maintenance falls under Bid Item 3 – Pollution Control.

6 – SEEDING, SPRIGGING, AND MULCHING Bid Item 5 – Vegetation, Sprigging

This consists of all aspects required for establishing vegetation including but not limited to: preparing seedbed, furnishing and applying sprigs, fertilizing, hay mulching, and crimping or tackifier.

Permanent vegetation is not required below the elevation of the lowest un-gated outlet.

Sprigs shall be Coastal Bermudagrass applied at 48 bushel or 60 CF per acre and be obtained from a source within a radius of 100 miles. Not more than 30 hours shall elapse between the initial harvest and planting of the sprigs. Jan 15 – May 15 sprigging window.

Straw mulch shall consist of coastal Bermudagrass or a native bluestem mix and applied at a rate of 2 % tons per acre.

Fertilizer shall be of the pelleted form and applied at a pure nutrient rate of 30lb (N) 40lb (P) 0lb (K).

In Section 6, Measurement and Payment, Method 1 shall apply and will be made to nearest 0.1 acre at the bid unit price.

Bid Item 6 – Irrigation System

This consists of furnishing and installing a temporary solid set sprinkler irrigation system to irrigate the sprigged areas.

A written proposed plan for the system shall be furnished 30 days prior to installing the system.

All equipment, operators, maintenance, operating supplies, and materials needed to install the system shall be furnished. In addition, an in-line, propeller type water meter with volumetric calibration shall be furnished so that all water applied for the irrigation of grasses under the contract will be metered.

The system shall be removed upon completion of all irrigation applications.

In Section 6, Measurement and Payment, Method 2 shall apply and will be made at the contract lump sum price.

Bid Item 7 - Irrigation Water

This consists of applying irrigation water to the areas sprigged. It includes the cost of water and labor.

The Contractor shall obtain a source of water for irrigation and obtain any necessary use permits if required.

The watering efficiency shall not be less than 85% (uniform distribution).

In Section 6, Measurement and Payment, Method 1 shall apply and will be made at 1000-gallon units and measured to the nearest 1000 gallons based on the applied volume determined from the readings of an in-line water meter(s).

7 - CONSTRUCTION SURVEYS

Bid Item 8 - Construction Surveys

In Section 3, Quality of Work, electronic models created for the purpose of aiding the Contractor in stakeout and/or quantity computations, as well as field layout and staking shall be prepared and/or performed by a Professional Engineer (PE) or Registered Public Land Surveyor (RPLS) licensed in the state of Texas

In Section 5, Construction Surveys, Method 2 shall apply along with those listed below.

- Those required to check all excavations and earthfill slopes as work progresses.
- Earthfill slopes shall be checked at least each 5-ft vertical and corrected to planned slope.
- Those necessary to set "bluetops" for subgrades and finished grades of all excavations, earthfills, and appurtenances to the works.

The Contractor must submit to the CO in writing the names, qualifications and experience of the surveyor personnel for approval prior to commencement of work. The Contractor is responsible for the layout of all the work and for checking all work.

In Section 7, Records, the original field notebooks and other records shall be provided to and become the property of the owner before final payment.

In Section 8, Payment, Method 2 shall apply with payment made as the work proceeds with progress payment amounts determined as a percentage of the total work planned as projected from the Contractor's approved construction schedule.

Initial and final surveys for determinations of final quantities will be performed by the Government. All surveys shall proceed from points established by the Government. The benchmarks are shown on the drawings.

Subsidiary Item – Establishment of Permanent Reference Markers

Consists of all work and materials (except the benchmark cap) required for the establishment of four (4) permanent reference markers (PRM). The cap for the PRM will be furnished by the NRCS prior to casting/pouring the concrete.

Markers shall be cast in place or precast non-reinforced concrete cylinders installed flush with the ground line

Compensation for this item is to be included in the payment for Bid Item 8 - Construction Surveys.

8 – MOBILIZATION AND DEMOBILIZATION

Bid Item 9 – Mobilization and Demobilization

Access to the work area shall be from Satterwhite Road (CR 107). Two access entrances shall be installed, one for the primary access and for the pug mill access. Each access road shall be constructed as shown on the drawings and maintained by the Contractor. The access roads shall be a minimum of 14 feet wide and be graded and smoothed to provide a surface which can be easily traversed by automobiles. Culverts shall be installed at crossings of low areas where significant concentrations of runoff water accumulate and cause ponding of water. The roads shall be maintained in a smooth rut-free condition throughout the contract period. Culverts installed as a part of this item of work shall have the strength to support the anticipated loads imposed by construction traffic and shall be left in place in good condition at the end of the contract period. If damage occurs to the culverts due to construction activities, those culverts shall be replaced. Corrugated metal culverts shall be galvanized. Minimum culvert requirements shall be 18-inch i.d., 24 feet long, 2-2/3" x 1/2" corrugations and 16-gauge thickness. A minimum of 18 inches of compacted fill shall be placed over top of the pipe before construction equipment can pass over the pipe.

The Contractor shall furnish a facility at the construction campsite suitable for use as a Field Office for the Contracting Local Organization and Government. The facility shall contain not less than 240 square feet (8-ft-wide by 30-ft-long) having a minimum 7-ft-high ceiling. The facility shall meet all additional requirements contained within this specification.

The facility shall be enclosed by a six (6) foot high chain link fence placed to provide a minimum of six (6) feet clearance between the fence and the outside walls of the facility. One (1) gate four (4) feet in width shall be installed in the fence.

The Contractor shall furnish and install electrical service to the Government field trailer and be responsible for supply of power throughout the contract period as specified in this specification. The electrical service shall be 110–120-volt, 60 amp, alternating current. If a generator is used to supply power, the Contractor is responsible for the complete operation and maintenance of the generator.

All utilities shall be in place at the worksite prior to the start of work and no later than 15 days after receipt of the Notice to Proceed.

Temporary fence shall be installed as determined at the time of site showing, as needed, and maintained throughout the contract period. Temporary fencing shall meet all additional requirements contained within this specification.

As part of demobilization, the access road shall be bladed to be smooth and shall be left in a rut-free condition. All debris, trash, tires, equipment, equipment parts, chains, cables, and other such items resulting from the construction operation shall be removed from the worksite and disposed of in an approved location of the Contractor's own choosing. All disturbed areas shall be bladed or smoothed to blend the area with the surrounding land surface. The bladed or smoothed surface shall be free of abrupt mounds, windrows, depressions or other irregularities that would prevent the safe operation of ordinary farm equipment thereon. The finished surface shall prevent diversion of surface runoff and shall prevent standing or ponding water. All buildings, trailers, chain link fence, storage sheds, sanitary facilities, cattleguard and other such items shall be removed from the worksite when construction work is completed. All utilities shall be removed from the site as required by the owner of the utility after construction work is completed. All traffic control devices, warning signs, barricades and any other material used for traffic control shall be removed.

9 - TRAFFIC CONTROL

Subsidiary Item - Traffic Control

The Contractor is required to submit a written plan for the control of traffic. This plan must be approved by Hays County this contract's engineer and may include signage, barricades, use of flaggers, etc.

Compensation for this item is to be included in **Bid Item 9 – Mobilization and Demobilization**.

11 - REMOVAL OF WATER

Bid Item 10 - Removal of Water

This item of work requires the Contractor to submit a written plan for diverting surface water and dewatering the construction site. The written plan, complete with plans and specification, shall be sealed by a Professional Engineer licensed in Texas. The plans shall be submitted to the Engineer prior to start of construction operations.

There is no guarantee that the slide gate on the principal spillway tower will function to dewater the site. Therefore, pumping and siphoning of the site may be required.

The new principal spillway conduit installation area shall be protected from the entry of water from the reservoir until the dam is reconstructed to the full design cross-section over the conduit. Water will not be permitted to enter the new principal spillway conduit until the impact basin and outlet channel are constructed and fully operational.

In Section 7, Measurement and payment, Method 1 shall apply. Payment will be made as the work proceeds with progress payment amounts determined as a percentage of the total work planned as projected from the contractor's approved construction schedule.

21 - EXCAVATION

Bid Item 11 - Excavation, Common

This item shall consist of all excavation required for reconstruction of the embankment including the embankment toe within the pond, installation of the new 30-inch principal spillway system, RCC chute spillway, rock lined outlet, outlet channel and the embankment slopes and crest as shown on the drawings.

Prior to performing the designated excavations, the embankment shall be stripped of vegetal, organic and any other unsuitable materials. The depth of this stripping shall be sufficient to remove soil containing significant vegetative or organic matter. The depth of stripping is estimated to be 6 inches, on average.

In Section 4 – Use of Excavated Materials, Method 1 shall apply. There is no guarantee that materials obtained from the specified excavations may be used directly in specified fill areas. Separate stockpiling of selected materials to ensure their availability for use in specific zones of the fill may be required. Stockpiling shall be at areas shown on the drawings or as approved by the engineer.

In Section 5 – Disposal of Waste Materials, Method 1 shall apply. The disposal of the excavated materials shall include transporting, depositing, and spreading the materials to and on the designated waste area. The waste area shall be at the location designated on the drawings.

In Section 9 – Measurement and Payment, Method 3 shall apply where the upper limit is the original ground surface and the lower limits are the true surface of the completed excavations.

Subsidiary Item - Excavation, Structure Removal

This item includes all excavations, outside the limits of other designated excavation, required for the structure removal of the existing principal spillway system as shown on the drawings.

Subsidiary Item - Excavation, Common, Foundation Stripping

This item shall apply to the areas receiving earthfill that do not require other excavations before earthfill placement. The depth of stripping shall be sufficient to remove the vegetative material and soil containing significant organic matter and is estimated to be 3 to 12 inches. The total required volume of stripping shall not exceed that obtained by assuming a depth of 6 inches.

Compensation for this item is to be included in Bid Item 11 - Excavation, Common.

Subsidiary Item – Excavation, Common, Downstream Pond Notch

This item shall consist of all excavations, outside the limits of other designated excavation, required for the partial removal of the downstream pond embankment as shown on the drawings.

Compensation for this item is to be included in **Bid Item 11 – Excavation, Common**.

Subsidiary Item – Excavation, Common, Borrow

This item shall consist of excavation from within the borrow areas as designated on the drawings and required for completion of earthfills and lime treated earthfill.

Compensation for this item is to be included in Bid Item 12 - Earthfill; Item 17 - Lime-Treated Earthfill.

Subsidiary Item - Excavation, Common, Drainfill

This item includes all excavations, outside the limits of other designated excavation, required for the installation of the drainage systems as shown on the drawings.

Compensation for this item is to be included in Bid Item 13 - Drainfill.

Subsidiary Item - Excavation, Common, Concrete Structures

This item includes all excavations, outside the limits of other designated excavation, required for the installation of the new principal spillway system and appurtenances including the impact basin.

Compensation for this item is to be included in **Bid Item 19 – Concrete**, **Structural**; **Bid Item 20 – Concrete**, **Pipe Cradle**.

Subsidiary Item - Excavation, Common, RCC Side Walls

This item shall consist of all excavations, outside the limits of other designated excavation, required for the subgrade foundation beneath the left and right sidewalls as shown on the drawings.

Compensation for this item is to be included in **Bid Item 22 – Roller Compacted Concrete.**

Subsidiary Item – Excavation, Common, Rock Riprap

This item shall consist of all excavations, outside the limits of other designated excavation, required for the construction of the rock riprap as shown on the drawings.

Compensation for this item is to be included in Bid Item 26 - Rock Riprap.

23 - EARTHFILL

Bid Item 12 - Earthfill

This item shall consist of all earthfill required for fill and backfill outside the limits of the lime treated earthfill for completion of the embankment, RCC chute spillway and construction of the new principal spillway as shown on the drawings.

In Section 2, Materials, the maximum particle size for all earthfill shall be 6 inches.

In Section 3, Foundation preparation for the required loosened depth shall be 4 inches. The foundation on which earthfill is to be placed that has not had previous excavation performed shall be properly prepared as outlined in Section 3 of this specification.

The earthfill beneath the lime treated earthfill shall be completed to the line and grades shown on the drawings before placement of the lime treated earthfill.

Additional compensation will not be made for removing or reworking the foundation or fill materials to meet the requirements herein specified.

Each lift of fill material shall then be disked, bladed, and plowed to an acceptable degree and depth to thoroughly loosen, blend, and bond the material with the preceding lift before compaction is started. The minimum disk blade size shall be 34" in diameter.

In Section 6, Compaction, Class A compaction shall apply. In-place dry density of materials being placed shall not be less than 95 percent of the maximum dry density. Placement moisture shall be from optimum to optimum plus 4 percent.

Maximum layer thickness shall be 9-inches before compaction.

In Section 9, Measurement and payment, Methods 2 and 6 shall apply. In Method 2, the measured finished surface shall be the surface before the placement of topsoil. In Method 6, payment is made at the contract unit price for that type and compaction class of earthfill.

24 - DRAINFILL

Bid Item 13 - Drainfill

This item shall consist of furnishing and installing the graded fine and coarse drainfill required for the impact basin, filter diaphragm, strip drain, foundation trench drain, RCC spillway drainage system including RCC diaphragm and the pea gravel for the weep holes and impact basin as shown on the drawings.

Specified gradation of the drainfill shall be ASTM C33 for the fine aggregate and ASTM C33 No. 89 for the coarse aggregate. Two alternatives are also shown within the specification.

Use of forms having projections that cause disturbance of adjacent drainfill materials or of in-place embankment materials when being withdrawn will not be permitted.

In Section 2, Material, Method 1 shall apply. A minimum of 30 days before delivery of materials to the site, the Contractor shall inform the engineer in writing of the source(s) from which drainfill material will be obtained.

In Section 5, Control of moisture, fine drainfill shall be in wet or near saturated condition when placed. Each layer of fine drainfill shall be saturated immediately prior to compaction. No control of moisture is required for coarse drainfill.

In Section 6, Compaction, for fine graded drainfill, Class A compaction with the following exceptions shall apply:

The compacted dry density shall be a minimum of 95 percent of the maximum dry density.

The ASTM D698 test procedure shall be modified to consist of a 1-point test performed on a representative sample of oven-dried drainfill.

In Section 6, Compaction, for coarse graded drainfill, Class III compaction shall apply and be that resulting from the placing and spreading operations.

In Section 8, Measurement and payment, Method 1 shall apply and with the volume measured within the neat lines shown on the drawings. A deduction in volume will not be made for embedded conduits.

Subsidiary Item - Crushed Stone, Principal Spillway

This item shall consist of furnishing and installing the crushed stone required for the principal spillway inlet foundation as shown on the drawings.

The principal spillway foundation shall be a crushed stone pad 4-foot thick with lateral dimensions of 15 feet by 15 feet.

The crushed stone shall meet the gradation of ASTM C33 No. 57.

Compensation for this item is to be included in **Bid Item 19 – Concrete, Structural.**

Subsidiary Item - Crushed Stone, RCC Sidewalls

This item shall consist of furnishing and installing the crushed stone required for the RCC sidewalls as shown on the drawings.

The crushed stone shall meet the gradation of ASTM C33 No. 57.

Compensation for this item is to be included in Bid Item 22 - Roller Compacted Concrete.

26 - TOPSOILING

Bid Item 14 - Topsoil, Lime Treated Earthfill

This item shall consist of salvaging of approved topsoil from required excavations and from the foundation stripping operations and placing and spreading it on all lime treated earthfill as shown on the drawings. The thickness of topsoil placed normal to the slope in the lime treated embankment and over the lime processing area shall be 12-inches.

Bid Item 15 - Topsoil, 6" Placement

This item shall consist of salvaging of approved topsoil from required excavations and from the foundation stripping operations and placing and spreading it on the designated earthfill areas of the embankment, the outlet channel, other exposed excavated slopes outside the limits of the lime treated earthfill as shown on the drawings.

In Section 3, Furnishing, Method 1 shall apply. Topsoil shall be salvaged from designated surfaces that will be disturbed by construction activities.

In Section 5, Spreading, Method 1 shall apply. After spreading the topsoil on the required surfaces, a minimum amount of compacted effort shall be applied by passing over the entire surface with at least one pass of a dozer track.

In Section 6 – Measurement and Payment, Method 1 shall apply and computed to the nearest square yard.

27 - DIVERSIONS AND WATERWAYS

Bid Item 16 - Diversions

This item shall consist of all work required to construct the stub diversions as shown on the drawings.

In Section 6, Measurement and payment, Method 1 shall apply and is determined to the nearest linear foot by measurement along the centerline of the diversion.

28 - LIME-TREATED EARTHFILL

Bid Item 17 - Lime-Treated Earthfill

This item consists of processing and placing lime-treated earthfill as shown on the drawings.

Bid Item 18 - Furnishing and Handling Lime

Quicklime shall be pebble or pelletized only. The amount of quicklime required for treatment shall be 4% relative to the dry weight of the soil being treated. Adjustments in the amount of quicklime being used may be required as the work progresses to obtain a PI equal to or less than 20 and a pH of 12.4.

In Section 2 – Material, soil material and rock particles larger than 6-inches shall be removed prior to treatment. Hydrated lime shall not apply. Quicklime shall be required and meet the requirements of Material Specification 303 – Lime for quicklime and a minimum nominal diameter pellet size of 0.25-inches and no larger than 0.75-inches.

In Section 3 – Equipment, the minimum disk size shall be 34-in in diameter.

In Section 6 – Lime Application, none of the methods apply. Quicklime shall be uniformly applied in dry form on the soil surface at a rate that will attain the specified proportioning and watered until thoroughly wet to induce slaking. Placement of the lime-treated earthfill shall be within 8 hours from the start of the mixing process. Immediately before placement of the lime-soil mixture, the subgrade shall be scarified and watered to create a water content that shall allow suitable bonding of the lime-soil mixture. During initial mixing with dry lime, a minimum of two cycles of water application followed by mixing with disks and high-speed rotary mixers are required.

In Section 8 – Placing, the foundation shall be loosened 4-inches prior to placement of fill.

In Section 9 – Compaction, Class A compaction in Section 6 of CS 23 – Earthfill shall apply and have a minimum in-place dry density of 95% of the maximum dry density. Placement moisture shall be from optimum up to 4% wet of optimum. Maximum layer thickness shall be 9-inches before compaction and the max particle size shall be 6-inches.

In Section 10 – Curing, the 72-hour curing period shall not apply. The final mixing of the lime mixture shall have a minimum passing through a #4 sieve of 60% prior to placement.

In Section 11 – Measurement and Payment, Method 2 and Method 6 shall apply with measurements being between the surface of the foundation when approved for placement and the specified neat lines of the earthfill surface. Payment shall be at the contract unit price for that type of earthfill. No separate payment will be made for water applied to the foundation and used for preparing the lime-treated earthfill.

31 – Concrete for Major Structures Bid Item 19 – Concrete. Structural

This item shall consist of furnishing and placing all concrete required for construction of the concrete principal spillway inlet, scour apron and impact basin as shown on the drawings.

Bid Item 20 - Concrete, Pipe Cradle

This item shall consist of furnishing and placing all concrete required for the construction of the new principal spillway conduit cradle and the extension of the existing principal spillway conduit as shown in the construction drawings.

Concrete items installed in conformance with this specification shall be of concrete made with Type II or V cement. Class 2 coarse aggregate shall be Size No. 7, 57, 67, or 467. The slump range for all concrete specified within this specification shall be 4 inches plus or minus 1 inch.

In Section 3, Concrete mix design, Method 1 shall apply. All concrete shall equal or exceed Class 4000. The Contractor must provide the engineer with full documentation to support each job mix and any admixtures to be used in the work at least 15 days prior to placement.

In Section 24, Measurement and payment, Method 1 shall apply and will be made at the contract unit price.

Subsidiary Item – Concrete, Metal Cleanout Covers

This item shall consist of the concrete required for the trench drain metal cleanout covers as shown in the construction drawings.

Compensation for this item is to be included in Bid Item 25 - Plastic Pipe, PVC 6" I.D.

34 - STEEL REINFORCEMENT

Bid Item 21 - Reinforcing Steel

This item shall consist of furnishing and placing all steel reinforcement required for the construction of all reinforced concrete works under this contract.

In Section 7, Placing, if during the placement of the concrete any reinforcement is displaced more than one-half inch from its designated position, that reinforcement shall be entirely removed and placed in proper position.

In Section 9, Measurement and payment, Method 1 shall apply.

36 - Roller Compacted Concrete

Bid Item 22 - Roller Compacted Concrete

This item shall consist of furnishing and placing all roller compacted concrete (RCC) required for the construction of the auxiliary chute spillway as shown on the drawings.

Bid Item 23 - Cementitious Material

This item shall consist of furnishing and handling the cement and pozzolan required to produce RCC required for the auxiliary chute spillway.

The Contractor shall provide a drawing showing the layout of the mixing plant for the RCC. The layout shall be located on-site within the work limits designated on the drawings. Before the completion of the construction, the materials from these temporary areas shall be removed and disposed of at an approved off-site location.

All RCC trial mix and preproduction submittals required by this specification shall be provided, in writing, for approval no later than 30 days before commencement of that phase.

There must be a supervisor who is responsible for all aspects of the RCC operation and a plant operator who is solely responsible for batching and mixing. There must be an onsite quality control inspector dedicated to RCC quality control. The supervisor, plant operator, and quality control inspector must have responsible experience on at least one previous RCC job in the same position for which they are being considered for the current job. There must be at least one person whose sole responsibility is the oversight of the RCC curing activities.

In Section 2, Material, Portland cement shall be Type II or V. If fly ash is used as a pozzolan, it shall be Class F.

Section 5, RCC mix design, the minimum compressive strength shall be 3,000 psi. The contractor must conduct the mix design program at a material testing laboratory staffed by American Concrete Institute (ACI) Certified Grade II Concrete Laboratory Testing Technicians.

In Section 6, Test section, Prior to RCC production, the Contractor shall construct a test section as part of the RCC placement operations. The location of the test section shall be the downstream cutoff wall as shown in the drawings.

The mix plant shall either be a batch-type pugmill or a continuous-flow pugmill. The pugmill shall be a twin shaft paddle-type mixer and must have adequate capacity to produce a uniform RCC mix. The plant must have a minimum capacity of 100 tons/hour. Additional requirements of the pugmill are listed in detail within Section 7 of this specification.

In Section 11, Foundation preparation, the foundation shall be excavated or filled to the specified lines and grades as shown on the drawings and shall be reworked and compacted to 100% Standard Proctor Maximum Density. Placement moisture shall be from optimum upward.

In Section 14, Record Testing, 1 set of RCC cylinders for compressive strength tests shall be obtained for each 1,000 CY of RCC placed. Each set shall consist of 15 cylinders. Two sets of vertical core RCC samples shall be extracted in accordance with ASTM C42. Each set shall contain 8 intact cores.

In Section 17, Vertical surfaces, the Contractor shall provide a written plan for constructing the specified vertical surfaces to the Contracting Officer for approval.

The Contractor shall remove and replace damaged or defective RCC. The Engineer will determine the required extent of removal, replacement or repair and advise the Contractor, in writing, of this determination.

The earthfill placement adjacent to the RCC sidewalls shall be placed concurrently with each lift of the RCC.

Weep holes shall be installed in the stilling basin as shown on the drawings.

The volume of RCC is measured and computed to the nearest cubic yard by the method of average cross-sectional end areas and is determined by measuring from the surface of the approved foundation to the specified neatlines of the completed RCC structure. Payment will be computed to the nearest cubic yard and paid at the specific unit price. The quantity of cementitious material is computed based on statement of delivery tickets rounded to the nearest 0.1 ton. Payment will not be made for any cementitious materials not incorporated into the structure or test section.

41 – REINFORCED CONCRETE PRESSURE PIPE

Bid Item 24 - Concrete Pipe, Pressure 30" I.D.

This item shall consist of furnishing and installing the 30" I.D. conduit for the new principal spillway as shown on the drawings.

As indicated on the drawings, the pipe conduit shall meet the specified requirements of AWWA C-301 and MS 541.

In Section 3, Laying the pipe, Method 1 shall apply. The pipe shall be set to the specified line and grade and temporarily supported on precast concrete blocks or wedges. The joint shall be connected by sliding the bell over the spigot in a manner that will allow the spigot to enter squarely into the bell.

In Section 5, Pressure testing, Method 1 shall apply. Pressure testing is not required.

In Section 6, Measurement and payment, Method 2 shall apply. The quantity is determined as the sum of the nominal laying lengths of the pipe sections used. This includes all accessories necessary and incidental to the completion of the work.

45 - PLASTIC PIPE

Bid Item 25 - Plastic Pipe, PVC 6" I.D.

This item shall consist of furnishing and installing the 6-inch diameter slotted and non-slotted PVC pipe for the impact basin, filter diaphragm, foundation drain systems, and RCC drain systems including all necessary fittings, couplings, cleanout covers, concrete for the cleanouts and all other items and appurtenances necessary and incidental to completion of the work as shown on the drawings.

In Section 2, Material, pipe material shall be PVC plastic pipe and shall be Schedule 80.

In Material Specification 547, Section 3, Perforations, item c. shall not apply. Slotted pipe shall be used. Slot dimensions and geometry shall be as shown on the drawings.

In Section 6, Pipe embedment, earth bedding and pipe encased in drainfill shall apply. In addition to the details stated in Section 6 for bedding of PVC pipe, the bedding shall be as shown on the drawings.

In Section 10, Fittings, fittings shall be PVC and shall be Schedule 80 for PVC pressure pipe. PVC fittings shall be one-piece injection molded or fabricated from PVC pipe and one-piece injection molded PVC fittings.

In Section 12, Pressure testing, Method 1 shall apply. Pressure testing is not required.

In Section 13, Measurement and payment, Method 3 shall apply. The quantity is determined to the nearest foot by measurement of the laid length along the crown centerline of the conduit. This includes all accessories necessary and incidental to the completion of the work.

53 - DUCTILE-IRON PIPE

Subsidiary Item - Ductile-Iron Pipe

This item shall consist of furnishing and installing the one, ten (10) feet long, 6-inch I.D. ductile iron pipe as the termination joint for the 6-inch I.D. P.V.C. foundation trench-drain outfall line as described in the drawings.

In Section 7, Backfill, no method shall apply. The ductile-iron pipe will be placed in rock riprap and no compaction is required. Contractor shall hand place all required rock riprap to ensure there is no damage to the ductile-iron pipe. Any damages occurred by construction activities shall be the financial responsibility of the contractor.

Compensation for this item is to be included in Bid Item 25 - Plastic Pipe, PVC 6" I.D.

61 - ROCK RIPRAP

Bid Item 26 - Rock Riprap

This item shall include furnishing and placing the rock riprap to construct the impact basin, embankment upstream rock blanket, rock lined outlet, and rock scour pads as shown on the drawings.

Rock for use as riprap shall comply with the requirements of Material Specification 523, Rock Type 1.

Rock gradation requirements are shown on the drawings and meet the gradations of ASTM D6092; R-150 and R-300 size rock; respectively.

Riprap shall be equipment placed. Equipment shall not be allowed on the rock during or after placement.

In Section 7, Measurement and payment, Method 1 shall apply and is computed to the nearest ton by actual weight. A statement of delivery ticket showing the weight to the nearest 0.1 ton is required.

71 - WATER CONTROL GATES

Bid Item 27 - Slide Gate, 12" x 12"

This item shall consist of furnishing and installing the 12" x 12" slide gate on the principal spillway inlet including the wall thimble, gate, stem, stem guides, lift pedestal, and associated appurtenances.

In Section 2, Material Specifications 572 and 573 shall not apply.

The gate shall conform to the requirements of Material Specification 571 for Type MHS-2, and shall be Class 55-20, Square Opening.

Anchor bolts shall be stainless steel.

The gate frame shall be of the flat back or flange back type.

The gate stem shall be the rising type and shall be stainless steel.

The wall thimble shall be of cast iron and shall be Type F, twelve (12) inches in length and shall have a square opening.

All bolts shall be furnished with flat washers and lock washers or with flat washers and double nuts for lock nuts. All washers and nuts shall be of the same materials and have the same coatings as the bolts on which applied.

Payment is made at the contract lump sum price and includes all accessories necessary and incidental to the completion of the work.

81 - METAL FABRICATION AND INSTALLATION

Bid Item 28 – Principal Spillway Metal Work

This item shall consist of furnishing, fabricating, and installing metal works for the existing principal spillway trash rack, manhole ring and manhole cover.

All metal parts, except for the manhole frame and cover shall be galvanized after fabrication and meet the requirements of MS 582 – Galvanizing.

In Section 6, Measurement and payment, Method 3 shall apply. Work is not measured. Payment is made at the contract price for that item.

Subsidiary Item - 6" Pipe Rodent Guard

This item shall consist of furnishing, fabricating, galvanizing, and installing the pipe rodent guard on the right-side foundation trench drain that empties into the RCC rock outlet as shown on the drawings.

Compensation for this item is to be included in Bid Item 25 - Plastic Pipe, PVC 6" I.D.

Subsidiary Item – Metal Cleanout Cover

This item shall consist of furnishing, fabricating, galvanizing, and installing the metal cleanout cover as shown on the drawings.

Compensation for this item is to be included in Bid Item 25 - Plastic Pipe, PVC 6" I.D.

Subsidiary Item – Post Mounting Brackets

This item shall consist of furnishing, fabricating, galvanizing, and installing the post mounting brackets for the RCC chute spillway chain link fence as shown on the drawings.

Compensation for this item is to be included in Bid Item 29 - Fence, Chain Link.

Subsidiary Item - Stiles

This item shall consist of furnishing, fabricating, galvanizing, and installing the fence stiles as shown on the drawings.

Compensation for this item is to be included in Bid Item 30 - Fence, Barbed Wire.

91 - CHAIN LINK FENCE

Bid Item 29 - Fence, Chain Link

This item shall consist of furnishing all materials required and all work necessary for installation of the chain link safety fence on top of the impact basin and RCC chute spillway as shown on the drawings.

In Section 2, Material, Galvanized and PVC coated shall apply. The PVC coating shall be black.

In Section 5, Measurement and Payment, Method 1 shall apply. The length of fence is measured to the nearest 0.1 foot along the fence, including any gates.

92 - FIELD FENCE

Bid Item 30 - Fence, Barbed Wire

Field fence consists of furnishing all materials required and constructing the barb wire fences as designated on the drawings. The approximate locations of the fences to be constructed are shown on the drawings. The final location of the fences shall be as staked by the Engineer.

In Section 10, Measurement and Payment, Method 1 shall apply and measured to the nearest foot along the profile of the fence, including any gate openings.

94 - CONTRACTOR QUALITY CONTROL

Bid Item 31 – Contractor Quality Control

This item shall consist of furnishing all equipment, tools, materials, and labor and performing all work to accomplish the work defined in Section 1 of this specification.

It is the Contractor's responsibility to perform tests to prove and ensure that all work performed meets the contract requirements. Any testing done by the Government is for the sole benefit of the Government. All tests must be conducted in accordance with the appropriate ASTM method and with equipment that meets the requirements of the specified ASTM test method.

Daily QC reports are required to be submitted to the Engineer.

In Section 3, Quality Control System, Method 2 shall apply. The system established shall be documented in a written plan developed by the Contractor and approved by the CO. The plan shall be submitted to the CO within 10 calendar days after notice of award. No construction activity that requires inspection shall not proceed until the plan is approved by the CO.

In Section 4, Quality Control Personnel, Method 2 shall apply. This requires the quality control activities to be performed by competent personnel who are separate and apart from 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 CO for approval.

Section 10.a.(8) lists items of work that require CQC and the degree of inspection each requires (periodic, full time, or continuous).

Section 10.a.(9) lists the skills, knowledge, and abilities that are required for CQC personnel.

Per Section 10.a.(9)(r) Contractor is required to maintain a record of progress with photographs and to submit to Contracting Officer no later than date of final invoice.

In Section 9, Measurement and Payment, Method 2 shall apply and paid in equal amounts on each monthly estimate.

95 - GEOTEXTILE

Bid Item 32 - Geotextile

This item shall consist of furnishing and placing the geotextile for embankment upstream rock blanket, rock around the impact basin, RCC chute spillway, and rock lined outlet as shown on the drawings.

Placing the geotextile for the rock riprap includes all excavation, fill, and backfill required for keying geotextile into the slope, as shown on the drawings.

The geotextile shall be placed immediately prior to the placement of rock riprap.

Geotextiles shall be non-woven Class I and meet Material Specification 592.

In Section 5, Placement, Method 2 shall apply. The geotextile shall be joined by overlapping a minimum of 18" and secured against the underlying foundation material.

In Section 6, Measurement and payment, Method 1 shall apply. The quantity is determined to the nearest SY of the covered surfaces only, disregarding that required for anchorage, seams, and overlaps.

Subsidiary Item - Geotextile, Crushed Stone Pad

This item shall consist of furnishing and placing the geotextile for the crushed stone pad as shown on the drawings. The geotextile shall be placed on the sides and bottom of the pad.

Compensation for this item is to be included in Bid Item 19 - Concrete, Structural.

99 - CONDUIT ABANDONMENT

Bid Item 33 - Conduit Abandonment

This item consists of filling the existing principal spillway conduit designated to be abandoned with the job mix as specified in Section 5 of this specification.

A written plan for the grouting operation shall be furnish to the engineer at least 14 days prior to filling the conduit.

Pipe shall be cleaned and flushed with water prior to placing grout.

The upstream and downstream ends of the abandoned, grouted pipe shall be covered with a minimum of 3 feet of earthfill and blended into adjacent surfaces.

Payment will be made at the contract lump sum price and will constitute full compensation for all items necessary and incidental to the completion of the work.

PART V - DRAWINGS

Drawing TX-EN-0740, Cover + Sheets 1 thru 45 for Plum Creek Site 10 Rehab was reviewed.

PHOTOS OF PROJECT SITE

PCCD gave a presentation of photographs of the project site taken on 5/24/21. A copy is attached to this Amendment #1, labeled as ATTACHMENT B.

VISIT TO PROJECT SITE

A field visit was made to Plum Creek Site 10. All locations and works of improvement from the drawings were shown on the ground.

Stop #1: Waste area between the auxiliary spillway berm and downstream embankment berm was pointed out from the top of the embankment.

<u>Stop #2</u>: Location of the two borrow areas located along the shoreline of the reservoir were pointed out from the top of the embankment.

<u>Stop #3</u>: Location of the areas to be cleared and fencing to be removed and replaced were pointed out from the top of the embankment.

<u>Stop #4</u>: Location of the new principal spillway and RRC structure was pointed out in reference to the existing principal spillway from the top of the dam.

<u>Stop #5</u>: Location of the downstream pond embankment to be breached was pointed out from the top of the dam.

<u>Stop #6</u>: Location of the campsite and lime treatment processing areas was pointed out from the top of the dam.

<u>Stop #7</u>: Approximate location of the two construction entrances were pointed from the top of the dam.

ATTACHMENTS:

- A: 5/15/2021 Site Showing Attendance list (1 page)
- B: Photographs of Site 10 Taken 5/24/21 (15 pages)

DISTRIBUTION:

To be posted on PCCD website. All registered plan holders and 5/25/21 site showing attendees will be advised via email (or otherwise) when Amendment #1 is available for downloading from www.pccd.org/ (Job Bids tab)

"Internal" personnel, via email 5/27/2021

FILECODE: IFB Tab 4A (Site Showing)

PRE-BID CONFERENCE ATTENDANCE (5/25/21)

Plum Creek Conservation District Personnel

Daniel Meyer, Contracting Officer and Executive Manager Alan Burklund, Alternate Contracting Officer and Staff Member Matt Shaw, Staff Member Jean Ann Maynard, PCCD Contracting Consultant

USDA Natural Resources Conservation Service

Shane Ice, Project Engineer, Temple, TX
Tony Barley, Construction Inspector, Temple, TX

Others

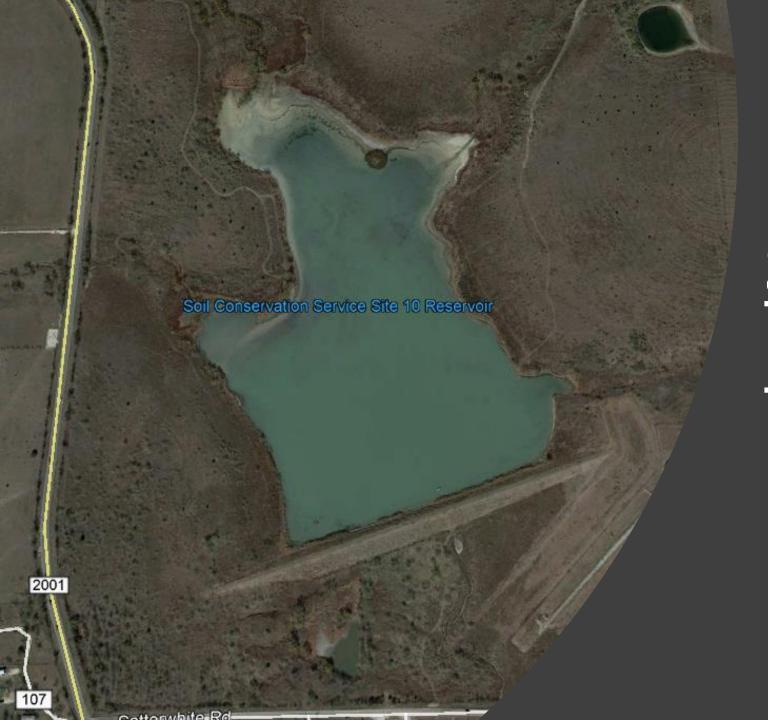
Thalle Construction Company, Inc., Alvarado, TX (Rich King, Doss Whetstone)
Jerdon Enterprise, LP, San Antonio, TX (Brandon White)
Accelerated Critical Path, Inc., Plano, TX (Jason Burns)

ATTACHMENT B

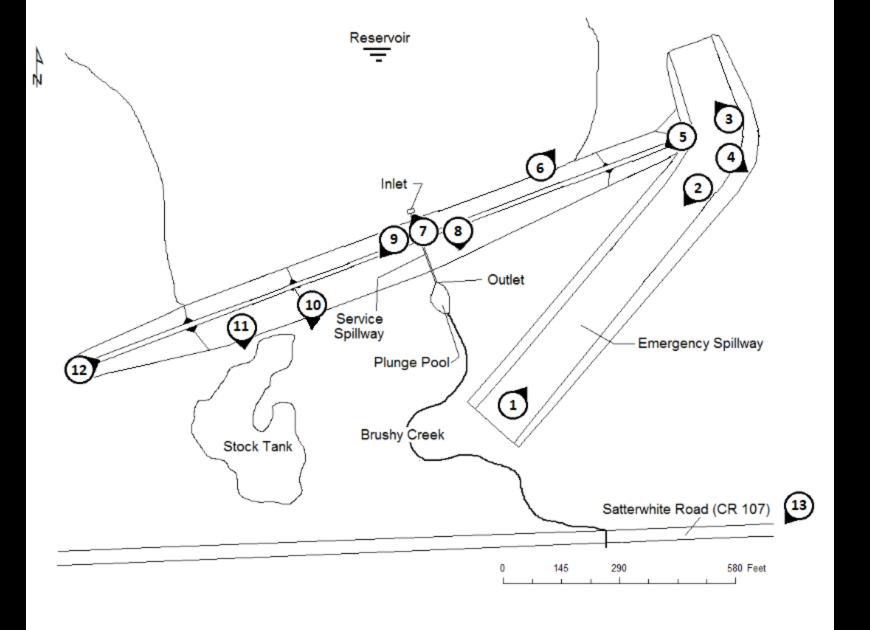
PHOTOGRAPHS (15 pages)

Taken 5/24/2021

Site 10 Rehabilitation



Site 10 Rehabilitation





1. Auxiliary Spillway - NNW



2. Auxiliary Spillway - SSW



3. Auxiliary Spillway - North



4. Auxiliary Spillway - East



5. Top of Dam - SSW



6. Barrow Area (Approximate location) - North



7. Riser/Inlet (*submerged) - North



8. Plunge Basin - South



9. Top of Dam - West



10. Down Stream - South



11. Stock Tank - South



12. Top of Dam - East



13. Satterwhite Road - West