

CONSTRUCTION DOCUMENTS

FOR

CONTRACT FCD 2010C034
WHITE TANKS FLOOD RETARDING STRUCTURE NO.4
REHABILITATION - PHASE 1
PCN 201.02.31



Flood Control District
of Maricopa County

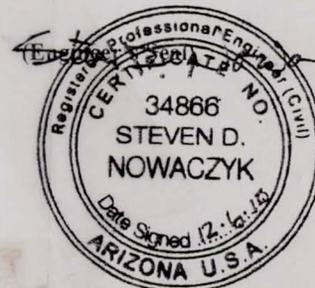
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EXPIRES: 06/30/12

NINYO & MOORE, GEOTECHNICAL CONSULTANTS INC.

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Phoenix, Arizona 85034

Recommended for Construction by: Dave Degerness Date: 12/6/2010
Dave Degerness, P.E.
Project Manager

Recommended by: Edward A. Raleigh Date: 12/6/2010
Edward A. Raleigh, P.E.
Manager Engineering Division

Issued for Public Bidding by: Timothy S. Phillips Date: 12/6/10
Timothy S. Phillips, P.E.
Chief Engineer and General Manager

SUPPLEMENTARY TO MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM
STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION EDITION OF 1998
AND REVISIONS AND SUPPLEMENTS THROUGH 2015.

AGENDA ITEM C-69-11-016-5-00

ATTENTION
ALL PROSPECTIVE BIDDERS

A.R.S. § 34-201 requires that construction bid proposals be accompanied by a certified check, cashiers check, or surety bond for ten percent (10%) of the total amount of the bid.

All bonds must be executed solely by a surety company or companies holding a Certificate of Authority to transact surety business in Arizona, issued by the Director of the Arizona Department of Insurance.

Bonds (bid, payment, and performance) executed by an individual surety or sureties are not in compliance with the Arizona Revised Statutes.

Bids received containing bid bonds not in compliance with the Arizona Revised Statutes will be considered as being non-responsive.

The use of Flood Control District of Maricopa County (District) supplied bond forms is required.

Please submit your bids accordingly.

FLOOD CONTROL DISTRICT
OF MARICOPA COUNTY

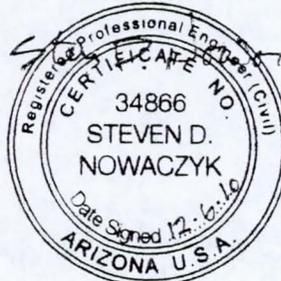
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Coffman

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
 CONTRACT FCD 2010C034
 PCN 201.02.31

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for Engineer's Seal)

EXPIRES: 06/30/12

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

INVITATION FOR BID

BID OPENING DATE: Wednesday, January 19, 2011

PROJECT LOCATION: White Tanks Flood Retarding Structure (FRS) #4 Rehabilitation – Phase 1

PROPOSED WORK: The project will entail the removal of the existing central filter and finger drains which are not up to current design standards and replacement with a suitably engineered filter material that will prevent a crack from progressing through the dam. To accomplish this effort the top two feet of the dam will be removed to provide a wider base for construction equipment. The existing filter material will be broadcast on the downstream slope for erosion protection and the filling of any existing rills. As an additional protection measure a geotextile filter will be placed on the downstream side of the central filter trench. Aggregate base will be placed on top of the crest to provide a surface to drive upon and to also protect the newly placed central filter.

BIDS:

SEALED BIDS for the proposed work will be received by the Flood Control District of Maricopa County, 2801 West Durango Street, Phoenix, Arizona 85009 until 2:00 PM (Phoenix Time) on Wednesday, January 19, 2011 and then publicly opened and read at 2801 West Durango Street, Phoenix, Arizona 85009. All bids are to be marked in accordance with Section 102.9 of the MAG Uniform Standard Specifications and addressed to the General Manager, Flood Control District of Maricopa County, 2801 West Durango Street, Phoenix, Arizona 85009. No bids will be received after the time specified for bid opening. All bids must be submitted on proposal forms furnished by the Flood Control District of Maricopa County and included in the Construction Specifications. The Board of Directors reserves the right to reject any and all bids and to waive minor informalities in any bid received if advantageous to the Flood Control District of Maricopa County.

ELIGIBILITY OF CONTRACTOR:

The bidder shall be required to certify that it has the appropriate "A" Contractor's license in the State of Arizona to perform the above referenced type of work. Certification shall be on the form provided herein.

The bidder may be required to furnish an affidavit as evidence of previous satisfactory performance in the above referenced type of work.

PRE-BID CONFERENCE:

A MANDATORY Pre-Bid conference will be held on Tuesday, December 21, 2010 at 10:00 A.M. (Phoenix Time) at the project site. The meeting location will be held in the open area just inside the gated area. The directions to the site are as follows: Exit I-10 at Jack Rabbit Trail (195th Ave); Drive approximately 1 mile south to Van Buren Road; Turn Right (west) on Van Buren for 650 feet; FCD gate located on north side. Attendance will be recorded during the pre-bid conference. Only those firms that are recorded as being represented will be eligible to submit a bid. The District will provide access to the project site from this location.

QUESTIONS AND CLARIFICATIONS:

Questions or items for clarification may be addressed to the Contracts Branch Manager, in writing, by 5:00 PM (Phoenix time) on Monday, January 10, 2011. Questions received after this deadline may not be accepted. Responses to all questions submitted will be sent to all planholders by addenda. Verbal interpretations, unless specifically addressed by an addendum, shall not be binding nor have any legal effect.

CONTRACT TIME:

All work on this contract is to be completed within two hundred twenty (220) calendar days from the date of Notice to Proceed.

Contractor shall achieve substantial completion of all major construction activities within two hundred twenty (220) calendar days from Notice to Proceed, beyond which time liquidated damages may be enforced.

PROJECT PLANS, SPECIAL PROVISIONS AND CONTRACT DOCUMENTS:

Plans, Special Provisions and Bid/Contract Documents may be obtained by downloading the project documents or ordering a CD-Rom or a hard copy via the Flood Control District Web page – Procurement/Contracting Section at www.fcd.maricopa.gov.

Each bid must be accompanied by a Bid Bond executed on the District-supplied bond form, cashier's or certified check or postal money order equal to ten percent (10%) of the bid, made payable to the FLOOD CONTROL DISTRICT OF MARICOPA COUNTY as a guarantee that if the work is awarded to the bidder, the bidder will within ten (10) days of receipt of the Proposal Acceptance, enter into proper contract and bond condition for the faithful performance of the work otherwise, said amount may be forfeited to the said BOARD OF DIRECTORS.

BID PREPARATION

BID PREPARATION

It shall be the responsibility of the prospective bidder to determine, prior to the submittal of its bid, if any addendum to the project have been issued by the FCDMC. All addenda issued, if not already bound in the Supplementary General Conditions (SGC) or Special Provisions (SP), shall be submitted by the bidder with its bid and noted in the Bid section.

Bids which do not reflect the appropriate changes to the bidding schedule, do not have all issued addenda attached and noted in the Bid section of the Contract, may be rejected by the FCDMC.

Prospective bidders may contact Contracts Branch of the Flood Control District of Maricopa County to ascertain if addenda have been issued for this project.

ALL BIDS SUBMITTED MUST BE BOUND IN ITS ENTIRETY. FAILURE TO DO SO MAY RESULT IN THE BID BEING REJECTED.

Bidder shall submit the entire Construction Bid Document manual and shall complete and submit the following documents with its bid:

1. Bid Form – appropriate section of the form must be filled out, addendum listed, if any, and signed.
2. Bidding Schedule – must include all unit costs, amounts per bid item, and total bid amount. Addendum changes, if any must be listed. All notations in the bidding schedule must be legible and in pen or ink. All changes to the bidding schedule must be initialed.
3. Subcontractor List – must be completed and signed. If no subcontractors will be used, indicate “None” on the form.
4. Surety Bond – Bids must be accompanied by a surety bond, certified check, or cashier’s check for an amount equal to ten percent (10%) of the total amount bid.
5. No Collusion Affidavit – form must be filled out, signed and notarized.
6. Certification of License – form must be filled out, dated and signed.
7. All addenda issued by FCDMC for the specific project must be included with the bid in their entirety and acknowledged on the bid form.

Note: Failure by the bidder to comply with the bid submittal requirements may result in rejection of the bid.

Other Forms – Execution of the Contract, submittal of the Performance/Payment Bond and the Certificate of Insurance are not required at the time of bid submittal. These documents must be submitted to FCDMC by the successful bidder at time of contract execution.

PRINCIPLE ITEMS AND APPROXIMATE QUANTITIES

QUANTITY	UNIT	DESCRIPTION
6,629	CY	Embankment Crest Excavation
9,958	CY	Centerline Trench Excavation
1,768	CY	Lateral Finger Drain Trench Excavation
9,952	CY	Foundation Excavation
21,678	CY	Filter
1,301	CY	Aggregate Base
21,430	SY	Geotextile

BID

TO THE BOARD OF DIRECTORS
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
PHOENIX, ARIZONA

Gentlemen:

The following Bid is made for Contract **FCD 2010C034, White Tanks FRS #4 Rehabilitation – Phase 1** in the County of Maricopa, State of Arizona.

The following Bid is made on behalf of

Coffman Specialties, Inc.

and no others. Evidence of authority to submit the bid is herewith furnished. The bid is in all respects fair and is made without collusion on the part of any person, firm, or corporation mentioned above, and no member or employee of the Flood Control District of Maricopa County Board of Directors is personally or financially interested, directly or indirectly, in the bid, or in any purchase or sale of any materials or supplies for the work in which it relates, or in any portion of the profits thereof.

The Undersigned certifies that the approved Plans, Supplementary General Conditions, Special Provisions, Forms of Contract, Bonds, and Sureties authorized by the Board of Directors and constituting essential parts of the bid, have been carefully examined and also that the work site has been personally inspected.

The Undersigned declares that the amount and nature of the work to be done is understood and that at no time will misunderstanding of the Plans, Construction Specifications, Special Provisions, Supplementary General Conditions, or conditions to be overcome, be pled. On the basis of the Plans, Construction Specifications, Special Provisions, Supplementary General Conditions, the Forms of Contract, Bonds, and Sureties proposed for use, the Undersigned proposes to furnish all the necessary machinery, equipment, tools, apparatus, and other means of construction, to do all the work and to furnish all the materials in the manner specified and to finish the entire project within the time hereinafter proposed and to accept, as full compensation therefore, the sum of various products obtained by multiplying each unit price, herein bid for the work or materials, by the quantity thereof actually incorporated in the complete project, as determined by the Engineer or Architect.

The Undersigned understands that the quantities mentioned herein are approximate only and are subject to increase or decrease and hereby proposes to perform all quantities of work, as either increased or decreased, in accordance with the provisions of the Specifications, at the unit price bid in the Bidding Schedule.

The Undersigned further proposes to perform all extra work that may be required on the basis provided in the Specifications and to give such work personal attention and to secure economical performance.

The Undersigned further proposes to execute the Contract Agreement and furnish satisfactory Bonds and Sureties within ten (10) days of receipt of Notice of Bid acceptance, **TIME BEING OF THE ESSENCE**. The Undersigned further proposes to begin work as specified in the contract attached hereto, and to complete the work within two hundred twenty (220) calendar days from the effective date specified in the Notice to Proceed, and maintain at all times a Payment and Performance Bond, approved by the

Board of Directors, each in an amount equal to one hundred percent (100%) of the contract amount. This Bond shall serve not only to guarantee the completion of the work on the part of the Undersigned, but also to guarantee the excellence of both workmanship and material and the payment of all obligations incurred, said Bonds and Sureties to be in full force and effect until the work is finally accepted and the provisions of the Plans, Specifications, and Special Provisions fulfilled.

A bid bond in the amount and character named in the Invitation to Bid, and amounting to not less than ten percent (10%) of the total bid, is enclosed. The bid bond is submitted as a guaranty of good faith that the Bidder will enter into a written contract to do the work, as provided, if successful in securing the award thereof. It is therefore agreed that if the Undersigned withdraws its bid at any time except as herein provided, or if the bid is accepted and the Undersigned fails to execute the contract and furnish satisfactory Bonds and Sureties as herein provided, the Flood Control District of Maricopa County shall be entitled and is hereby given the right to retain the said Bid Bond as liquidated damages.

The Undersigned acknowledges receipt of the following addenda, has attached these to the bid package, and has included their provisions in the bid:

Addendum No. <u>1</u>	Dated <u>1/14/2011</u>
Addendum No. <u>2</u>	Dated <u>1/25/2011</u>
Addendum No. _____	Dated _____

The Undersigned has enclosed the required bid security to the Bid.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

Project No. 201.02.31

ADDENDUM NO. 1

Date: January 14, 2011
Contract: FCD 2010C034
Title: White Tanks Flood Retarding Structure (FRS) #4 Rehabilitation – Phase 1
Owner: Flood Control District of Maricopa County

To Contract Documents

This Addendum No. 1 modifies or clarifies Contract FCD 2010C034, White Tanks FRS #4 Rehabilitation – Phase 1. All other provisions of the contract remain unchanged unless specifically modified herein. Addendum No. 1 forms a part of the Construction Documents and modifies the construction documents as follows:

I. Revisions to Invitation for Bid:

A. Invitation for Bid Page 4 of 27 – Bid Opening Date – Delete and replace with the following:

“Wednesday, February 2, 2011.”

B. Invitation for Bid Page 4 of 27 – Bids – Delete the first sentence of the first paragraph and replace with the following:

“SEALED BIDS for the proposed work will be received by the Flood Control District of Maricopa County, 2801 West Durango Street, Phoenix, Arizona 85009 until 2:00 PM (Phoenix Time) on Wednesday, February 2, 2011 and then publicly opened and read at 2801 West Durango Street, Phoenix, Arizona 85009.”

C. Invitation for Bid Page 5 of 27 – Questions and Clarifications – Delete the first sentence of the first paragraph and replace with the following:

“Questions or items for clarification may be addressed to the Contracts Branch Manager, in writing, by 5:00 PM (Phoenix time) on Wednesday, January 26, 2011.”

II. Revisions to Bid Schedule – Not applicable for this Addendum.

III. Revisions to Supplementary General Conditions – Not applicable for this Addendum

IV. Revisions to Special Provisions:

A. Page 3 of 37, Subsection 201.3 – Construction Methods: – Delete the entire section and replace with the following:

“The construction site and any borrow or disposal areas shall be cleared of all trees, stumps, brush, roots (in excess of 1-inch in diameter), rubbish, debris and other objectionable matter, except as follows.

All trees and shrubs found suitable for improvement and beautification, which will not interfere with excavation or embankment or cause disintegration of the improvements shall not be disturbed. In any event, the Contractor shall avoid, as far as practicable, injury to shrubbery, vines, plants, grasses and other vegetation growing outside of the clearing limits. The dragging and the piling of materials of various kinds and the performing of other work which may be injurious to vegetation shall, insofar as practicable, be confined to areas which have no vegetation or which will be covered by embankment or disturbed by excavation during grading operations.

Vegetative and deleterious material shall be carefully removed and discarded from fill material. Hand removal of roots in excess of one (1) inch diameter may be required. Material generated from clearing and grubbing activities shall be disposed off site, at an approved landfill or greenwaste recycling facility. Cavities left below subgrade elevation by removal of stumps or roots shall be carefully backfilled and compacted. Any debris generated and encountered shall be removed and disposed of so as to leave the construction site and adjacent areas in a neat and finished condition, free from unsightly debris.”

- B. Page 11 of 37, Subsection 206.8 – Inspection:** – Delete the entire section and replace with the following:

“All excavations will be inspected by the Engineer as stated in Subsection 206.5 within two (2) working days of exposing the excavation bottom. No filter material shall be placed until the excavation surface has been approved by the Engineer. The Engineer will require concurrence from an ADWR representative before providing approval to the Contractor. Any loose or disturbed zones shall be cleaned with a flat plate bucket. Any removed soils shall be replaced with filter material. Inspection of the excavation limits is required to verify lines and grades.”

- C. Page 15 of 37, Subsection 211.1.1 – Filter:** – Delete the entire section and replace with the following:

“The work under this subsection shall consist of filter construction to the lines and grades shown on the Plans. The minimum limits of filter are delineated on the Plans. The earthwork described in this section shall be coordinated with the requirements specific to fill construction and associated subsections.

The backfill material for the filter shall be a sub-rounded or rounded, non-crushed material. The filter shall be imported, commercially manufactured material, shall be uniformly washed and conform to the following requirements:

- A) Certificates of compliance or recent test results signed and stamped by a representative of the commercial supplier that ensures the filter material delivered to the site meets the filter requirements listed in these Special Provisions.
- B) Filter certified by the supplier shall be subject to further laboratory testing in accordance with these Special Provisions and as specified in Table D-1 (see Appendix D of the Contract Documents) to ensure uniformity in material delivered to the site in accordance with these Special Provisions.

- C) A lime additive, or any additive, to control the percent passing the No. 200 sieve and/or the plasticity index shall not be allowed. The addition of lime and other additives will prevent the filter from performing as designed.
- D) Filter shall not be produced by crushing materials.
- E) Filter materials shall not contain or be processed with known calcium carbonate origin or content.
- F) The filter materials shall be non-plastic when tested in accordance with ASTM D 4318.
- G) The filter shall be manufactured by a commercial material supplier. Both the coarse and fine fractions of the material for the filter, shall have the gradation requirements shown in Table 211-1 when tested in accordance with ASTM C 136 and C 117.
- H) The filter material shall have a compressive strength less than or equal to fifteen (15) psi when tested using the procedures and methods presented in Appendix E of the Contract Documents. The minimum required testing frequencies are presented on Table D-1 (see Appendix D of the Contract Documents).

TABLE 211-1

FILTER	
Sieve	Percent Passing
1-1/2 inch	100
1 inch	100
3/4 inch	100
1/2 inch	100
3/8 inch	100
No. 4	95-100
No. 8	80-100
No. 16	50-85
No. 30	25-60
No. 50	5-30
No. 100	0-10
No. 200	0-3

The Contractor shall identify the methods, approach, and equipment to be incorporated for the construction of the filter in the Work Plan discussed in Subsection 206.1.1. Due to the potential for segregation of the filter material, extreme care shall be used in transport and delivery of filter material to the site. The Contractor's transport and delivery method shall be detailed in the Work Plan. This plan shall be submitted to the Engineer and approved prior to trenching for filter construction.

The Contractor will be required to stockpile all filter material on-site at pre-approved locations prior to placement. Stockpiling of filter material is necessary to sample and perform laboratory testing before it is **placed to verify that segregation of the material has not occurred**. Samples shall be taken by the Contractor and tested for gradation and moisture content in accordance with the methods and frequencies identified in Table D-1 (see Appendix D of the Contract Documents).

It may be necessary to blend and/or screen the filter material to meet the gradation requirements of the filter. Blending is not required if a single component filter material is used. The filter material shall not be gap graded. The additional handling and processing of the filter material to meet the gradation specification shall be the responsibility of the Contractor. To prevent contamination or degradation, filter material shall not be stockpiled onsite longer than seven (7) days unless approved by the Engineer nor shall the height of the stockpile exceed seven (7) feet.

During placement, the filter material shall be in-place tested for gradation and moisture content using down trench "bucket" testing or other methods approved by the Engineer."

D. Page 20 of 37, Subsection 211.3.1 – Filter: – Delete the entire section and replace with the following:

"Mechanical compaction of the center filter material shall not be required, therefore it is anticipated that some post-construction settlement of the center filter material will occur. To reduce this settlement, the embankment fill above the center filter material shall be placed with a mound (per the Plans) to account for future settlement. The Contractor is responsible for selecting a placement procedure. Water settling or jetting shall not be permitted."

E. Page 21 of 37, Subsection 211.4 – Tests: – Delete the entire section and replace with the following:

"Pre-qualification testing and conformance testing prior to and during placement shall be conducted on the filter material, embankment fill, and AB. Quality Control testing shall be conducted by the Contractor on the fill materials in accordance with the test methods and minimum testing frequencies listed in Table D-1 (see Appendix D of the Construction Documents) and with the Construction Quality Control (CQC) Plan developed by the Contractor and approved by the Engineer prior to any fill construction.

The embankment fill and AB materials shall be thoroughly compacted to not less than the stated densities when tested and determined by ASTM D 6938 (nuclear gauge) and D1556 (sand cone), with the density and moisture content adjusted in accordance with the rock correction procedure for maximum density determination ASTM D 4718. The sampling method and size for oversize correction of the nuclear gauge result shall be as specified in Section 10.6.3 of ASTM D 6938.

The Contractor shall determine the maximum dry density and optimum moisture content of the embankment fill and AB in accordance with ASTM D 698 (Standard Proctor).

Either a failing QA or QC test results are the responsibility of the Contractor. Any re-working, fill removal, fill replacement, and re-testing shall be at the Contractor's expense."

V. Revisions/Replacements to Construction Plans:

- A. Plan Sheet 1 of 22** – Delete Title Page (Sheet 1) and replace with the revised Title Page (Revised 1-13-2011) (Sheet 1A). This replacement sheet revises the NRCS Job Classification and National Inventory of Dams Number.

VI. Bidder Questions and Responses:

- A. **Question:** Is the contractor responsible for the clearing and grubbing of the downstream slope prior to placement of the filter material?

Response: No, refer to Subsection 206.1.1 of the Special Provisions for the sequence of construction

- B. **Question:** Is the gradation of the new filter material in the specs?

Response: Yes, see Section 211 of the Special Provisions.

- C. **Question:** How do you gain access to the floodpool area?

Response: Access can be either through the gate at the left auxiliary spillway or across the concrete paved channel crossing and then take a left.

- D. **Question:** What is the gradation of the existing filter sand?

Response: It is fairly uniformly graded with some large cobble sized pieces. Refer to the Geotechnical Report for more details.

- E. **Question:** Can the new filter material be angular or crushed?

Response: No, refer to Subsection 211.1.1 of the Special Provisions.

- F. **Question:** Is the new filter material similar to the material that was recently used for the exploration work at the Buckeye FRS No.1 project?

Response: Yes.

- G. **Question:** Is the new filter material similar to the material that is being used for the White Tanks FRS No.3 project?

Response: Yes.

- H. **Question:** Will there be a need for any Rip Rap on the project?

Response: No.

- I. **Question:** Is there a Special Provision for the uniform thickness for the fill material?

Response: No, refer to Section 206.1.1 of the Special Provisions for the instructions on the placement of fill material.

- J. **Question:** Under the mobilization section, it calls to provide Maricopa County with Office facilities. Curious if there was a mistake, as there calls to be 2 trailers, 1 being for your engineers and 1 as a conference trailer. The project is only 220 calendar days. Is this really what you would like as this is the first time CSI has seen this on such a short project.

Response: Two trailers are needed for the Flood Control District of Maricopa County as Specified in the Supplementary General Conditions.

- K. Question:** Page 26 of 29, Subsection 108.1 of the Supplementary General Conditions: (A) States "it is recommended that the Contractor allow at least sixty (60) days in the construction schedule to meet this requirement prior to beginning of mobilization work" but Subsection 206.1 Sequence of Construction paragraph two States " The Work Plan..... will require a minimum of five (5) working days to review the draft work plan" Do we need to a lot an additional fifty five (55) days for acceptance?

Response: The 60 days that is mentioned in Subsection 108.1 is meant to allow enough time for multiple revisions and reviews of the items outlined in Subsection 206.1.1 of the Special Provisions; not just one iteration.

- L. Question:** On Page 8 of 37 of the Special Provisions, Subsection 206.1 - Third paragraph: "The work includes structure excavation and shoring / retention system, if any, required for the construction as designated on the plans or in these specifications". Was it the designers concept that the center line trench and foundation excavation would require shoring for construction, or is the shoring required if any unknown conditions exists and becomes apparent during excavation and requires shoring?

Response: It is the contractor's responsibility to determine if the centerline trench and foundation excavations will stand vertically during the anticipated construction activities without shoring or a retention system. However, test trenching that was done for this project did show favorable results (see Test Trenching Technical Memorandum dated July 30, 2010 for more detail) and can be used in making this determination.

- M. Question:** Page 10 of 37, Subsection 206.5 of the Special Provisions - Foundation Excavation; 4th paragraph, 3rd sentence: "The foundation testing may include, but not be limited to, in-place density tests using the nuclear or sand cone methods". Are you going to have the contractor perform in-place densities at the bottom of the thirty foot deep excavation, if so how large of an area will you be requiring for this operation so the Engineer can determine acceptability?

Response: The intent is to check the foundations soils from the embankment crest; however, if unacceptable soil materials are found, the contractor should plan for some quality assurance testing to identify unacceptable soil materials in the foundation. These foundation tests may include, but not be limited to, in-place density tests using the nuclear or sand cone methods; which would call for an area at the foundation level that will be 3 feet wide and on the order of 20 feet long (as measured along the embankment centerline).

- N. Question:** Page 11 of 37, Subsections 206.6, 206.7 and 206.8 of the Special Provisions have the same requirements for inspections as stated in question 'M' above. Please address these requirements also.

Response: Please see the above response to question 'M'.

- O. Question:** For Bid Item 107-4 Restricted Area Delineation, I have not been able to identify any restricted area, if there are any could you please identify.

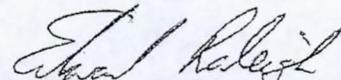
Response: Restricted areas for this project should include Water of the United States (see Drawing C4) and the Principal Spillway Buffer Areas (see Drawing C8).

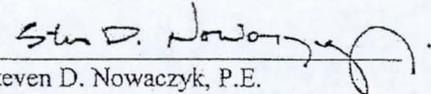
NOTE: The due date of all bids under this Invitation for Bids has changed and is now scheduled for Wednesday, February 2, 2011 at 2:00 PM (Phoenix time).

Bidders are reminded that each addendum must be acknowledged on page 9 of 27 of the Invitation for Bids and a copy of addenda attached to the bid package.

Flood Control District of Maricopa County

Ninyo & Moore Geotechnical Consultants

By: 
Timothy S. Phillips, P.E.
Chief Engineer and General Manager

By: 
Steven D. Nowaczyk, P.E.
Project Engineer

Attachments:

Replacement Plan Sheets:
Title Page - 1A of 22



EXPIRES: 06/30/12



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

IN COOPERATION WITH NATURAL RESOURCES CONSERVATION SERVICE
 PLANS FOR THE CONSTRUCTION OF
 WHITE TANKS FRS NO. 4 REHABILITATION PROJECT - PHASE I
 MARICOPA COUNTY



AUTHORITY: PL 106-472
 NRCS JOB CLASSIFICATION: VII
 NATIONAL INVENTORY OF DAMS (NID) NUMBER: AZ00109
 DAM HAZARD CLASSIFICATION: HIGH

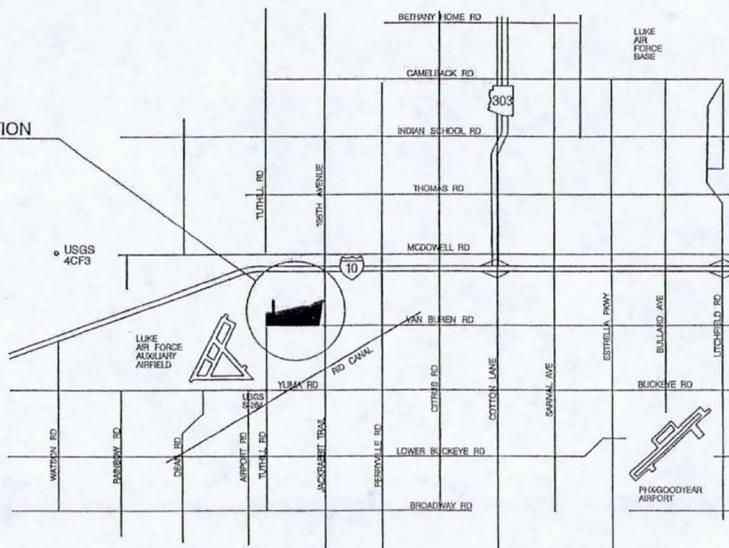
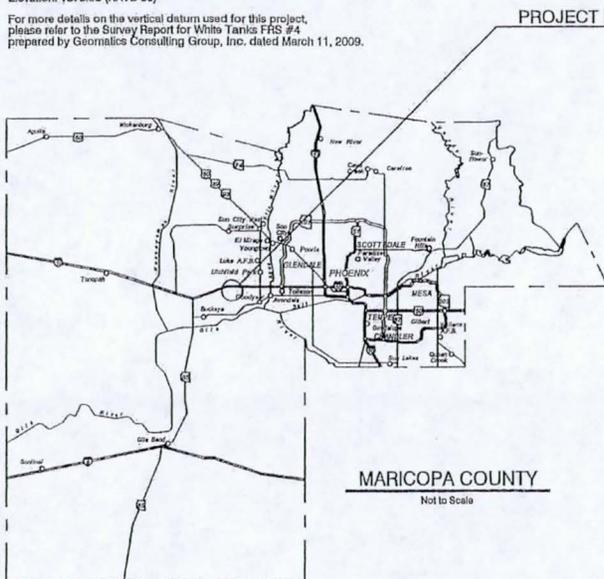
PCN 201.02.31
 FCD CONTRACT NO. 2010C034

**100% SUBMITTAL
 NOVEMBER 2010**

BENCHMARK:

NGS Station Name: 4CF3
 Location: 33° 27' 49.16160"N, 112° 33' 33.88349"W
 Description: 3 1/4 Inch Maricopa County D.O.T. Brass Disk,
 Stamped 4CF3 1999, Set in a Rock Outcrop, Witnessed by a
 White Carsonite Marker East 2 ft
 Elevation: 1375.05 (NAVD 88)

For more details on the vertical datum used for this project,
 please refer to the Survey Report for White Tanks FRS #4
 prepared by Geomatics Consulting Group, Inc. dated March 11, 2009.



TWO WORKING DAYS
 BEFORE YOU DIG CALL
263-1100
 BLUE STAKE

3			
2			
1	NRCS JOB CLASS. & NID No.	SDN	1/12/11
NO	REVISION	BY	DATE
ADWR APPROVAL			
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY			
ISSUE RECOMMENDED BY:			
<i>Denise Dugan</i>		1/12/11	
PROJECT MANAGER		DATE	
ISSUED FOR PUBLIC BIDDING BY:			
<i>Don Stapley</i>		11/2/2010	
CHIEF ENGINEER & GENERAL MANAGER		DATE	
BOARD OF DIRECTORS OF THE FLOOD CONTROL DISTRICT			
DON STAPLEY - CHAIRMAN			
DISTRICT 1	FULTON BROCK		
DISTRICT 2	DON STAPLEY		
DISTRICT 3	ANDY KUNASEK		
DISTRICT 4	MAX W. WILSON		
DISTRICT 5	MARY ROSE WILCOX		

To the best of my professional knowledge,
 judgement and belief, the plans meet the
 applicable NRCS standards.



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

Project No. 201.02.31

ADDENDUM NO. 2

Date: January 25, 2011
Contract: FCD 2010C034
Title: White Tanks Flood Retarding Structure (FRS) #4 Rehabilitation – Phase 1
Owner: Flood Control District of Maricopa County

To Contract Documents

This Addendum No. 2 modifies or clarifies Contract FCD 2010C034, White Tanks FRS #4 Rehabilitation – Phase 1. All other provisions of the contract remain unchanged unless specifically modified herein. Addendum No. 2 forms a part of the Construction Documents and modifies the construction documents as follows:

- I. Revisions to Invitation for Bid – Not applicable for this Addendum.
- II. Revisions to Bid Schedule – Not applicable for this Addendum.
- III. Revisions to Supplementary General Conditions – Not applicable for this Addendum
- IV. Revisions to Special Provisions:
 - A. Page 18 of 37, Subsection 211.2.1 – Filter: – Delete the entire Subsection and replace with the following:

Specific approval of the filter upon review of laboratory conformance testing results shall be obtained from the Engineer prior to placement. The Contractor's Work Plan identifying the methods, approach, and equipment to be incorporated for the construction of the filter shall be reviewed and approved prior to beginning work by the District, NRCS and ADWR.. The results of such review shall be communicated to the Contractor by the District or its designated agent.

Placement shall be conducted using the appropriate combination of heavy equipment, small equipment, and labor. Placement of filter material to accurate lines, grades, and thickness, without contamination, is essential. Deviations from dimensions shall not be permitted without the Engineer's approval. Placement of the filter requires a well-planned method and approach from the Contractor which shall be outlined in the Work Plan prepared by the Contractor and approved by the Engineer. These placement methods shall utilize equipment that will prevent segregation of the filter material.

Filter shall be placed in a moist condition to minimize segregation and bulking. The required moisture content of the filter material during placement must be at a moisture content that achieves a filter material bulking ratio less than twenty percent (20%); however, the moisture content of the filter material during placement shall not exceed five percent (5%). The Contractor shall perform laboratory testing on the stockpiled filter material to verify that these filter material saturation ranges are appropriate. The contractor shall perform this verification testing by conducting laboratory testing at various moisture ranges in accordance with the testing procedures outline in Appendix E of the Contract Documents to determine the bulking moisture content and subsequent saturation percentage. The moisture content of the filter material at placement must allow for placement of the filter material in accordance with these Special Provisions. The filter material lift thickness shall not exceed five (5) vertical feet and the maximum allowable placement slope angle shall be forty-five (45) degrees. It is anticipated the placement of the filter will be in conjunction with excavation operations. A minimum separation distance of thirty (30) feet, measured from the filter leading edge toe to the excavation leading edge toe, will be required to ensure the filter is not contaminated by excavation spoils. In addition, the Contractor shall make sure the new filter material is not contaminated due to raveling and spalling of the existing filter material

Filter shall be placed by tremie method or other methods as approved by the Engineer. The maximum drop height for the placement of the filter into the excavated trench shall not exceed three (3) feet to minimize segregation. The Contractor is responsible for preventing contamination of the filter from sediments during rain events. In addition, the Contractor shall make sure the new filter material is not contaminated by spoils from the vertical excavation. The Contractor shall remove and replace any contaminated filter. Removal and replacement of commingled and contaminated filter material shall be at the Contractor's expense.

B. Appendix E: – Delete and replace with the new document.

Delete the existing Appendix E, and replace it with the revised Appendix E which attached to and made a part of this Addendum No.2.

V. Revisions/Replacements to Construction Plans – Not applicable for this Addendum.

VI. Bidder Questions and Responses:

A. Question: Is there any “desert varnish” or Natina Concrete Formula needed for this project?

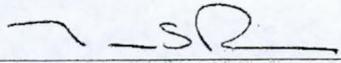
Response: There is no need for “desert varnish” in this phase of the project.

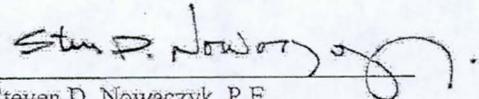
NOTE: The due date of all bids under this Invitation for Bids remains the same and is scheduled for Wednesday, February 2, 2011 at 2:00 PM (Phoenix time).

Bidders are reminded that each addendum must be acknowledged on page 9 of 27 of the Invitation for Bids and a copy of addenda attached to the bid package.

Flood Control District of Maricopa County

Ninyo & Moore Geotechnical Consultants

By: 
Timothy S. Phillips, P.E.
Chief Engineer and General Manager

By: 
Steven D. Nowaczyk, P.E.
Project Engineer

Attachments:

Revised Appendix E of the Special Provisions



EXPIRES: 06/30/12

BID SCHEDULE

BID SCHEDULE - CONTRACT FCD 2010C034, WHITE TANKS FRS #4 REHABILITATION - PHASE 1					
ITEM No.	DESCRIPTION	UNIT	PROJECT QUANTITY	UNIT NUMBERS	EXTENDED AMOUNT
104 - 1	CQC PLAN AND TESTING	LS	1	35,000. ⁰⁰	35,000. ⁰⁰
104 - 2	CQC TESTING ALLOWANCE	LS	1	\$10,000	\$10,000
105 - 1	PARTNERING ALLOWANCE	LS	1	\$10,000	\$10,000
107 - 1	AZPDES/SWPPP PERMITS	LS	1	10,000. ⁰⁰	10,000. ⁰⁰
107 - 2	PUBLIC INFORMATION AND NOTIFICATION ALLOWANCE	LS	1	\$14,000	\$14,000
107 - 3	PROJECT SIGNS ALLOWANCE	LS	1	\$4,000	\$4,000
107 - 4	RESTRICTED AREAS DELINEATION	LS	1	5,000. ⁰⁰	5,000. ⁰⁰
108 - 1	WORK PLAN ALLOWANCE	LS	1	\$10,000	\$10,000
202 - 1	MOBILIZATION	LS	1	41,680. ⁶⁰	41,680. ⁶⁰
206 - 1	EMBANKMENT CREST EXCAVATION	CY	6,629	9. ⁰⁰	59,661. ⁰⁰
206 - 2	CENTERLINE TRENCH EXCAVATION	CY	9,958	9. ⁰⁰	89,622. ⁰⁰
206 - 3	LATERAL FINGER DRAIN TRENCH EXCAVATION	CY	1,768	14. ⁰⁰	24,752. ⁰⁰
206 - 4	FOUNDATION EXCAVATION	CY	9,952	10. ⁰⁰	99,520. ⁰⁰
206 - 5	FOUNDATION EXCAVATION ALLOWANCE < 25 FEET DEEP	CY	500	10. ⁵⁰	5,250. ⁰⁰
206 - 6	FOUNDATION EXCAVATION ALLOWANCE > 25 FEET DEEP	CY	1,000	15. ⁵⁰	15,500. ⁰⁰
210 - 1	LOCAL BORROW EXCAVATION - FLOOD POOL AREA ALLOWANCE	CY	1,000	8. ⁵⁰	8,500. ⁰⁰
211 - 1	EMBANKMENT FILL	CY	2,586	12. ⁰⁰	31,032. ⁰⁰
211 - 2	FILTER	CY	21,678	32. ⁴⁵	703,451. ¹⁰
211 - 3	AGGREGATE BASE	CY	1,301	35. ⁰⁰	45,535. ⁰⁰
211 - 4	FILTER MATERIAL ALLOWANCE	CY	3,000	28. ⁰⁰	84,000. ⁰⁰
231 - 1	GEOTEXTILE	SY	21,430	4. ⁰⁰	85,720. ⁰⁰
231 - 2	GEOTEXTILE ALLOWANCE	SY	3,000	4. ⁰⁰	12,000. ⁰⁰
401 - 1	TRAFFIC CONTROL	LS	1	3,500. ⁰⁰	3,500. ⁰⁰
420 - 2	FENCE GATE	EA	9	1,200. ⁰⁰	10,800. ⁰⁰
TOTAL BID AMOUNT IN WRITTEN NUMBERS:		1,418,523. ⁷⁰			
TOTAL BID AMOUNT IN WRITTEN WORDS		One million four hundred eighteen thousand five hundred twenty three dollars + 70/100 -			
SUBMITTING FIRM (Please print):		Coffman Specialties, Inc.			

IF BY AN INDIVIDUAL:

By: _____
(Printed Name) (Title) (Address)

(Signature) (Date) (Telephone Number) (Fax Number)

(e-mail address)

IF BY A FIRM, PARTNERSHIP OR L.L.C. (LIMITED LIABILITY CORPORATION):

(Firm Name) (Firm Address)

(Signature - Title) (Date) (Telephone Number) (Fax Number)

(e-mail address)

**Name and Address of each Member, or each Manager of L.L.C. per Operating Agreement

**The name and post office address of each Member of the Firm or Partnership must be shown, or of each Manager of an L.L.C., also address of the registered office of the L.L.C.

IF BY A CORPORATION:

Coffman Specialties, Inc _____ 9685 Via Excelencia, Ste 200, San Diego, CA 92126
(Corporate Name) (Corporation Address)

Colleen Coffman, _____ President 858-536-3100 858-536-3131
(Printed Name) (Title) (Telephone Number) (Fax Number)

By: *Colleen Coffman* 1/19/11 _____
(Signature) (Date) (e-mail address) colleen@coffmanspecialties.com

*Incorporated under the Laws of the State of California and Names and Addresses of Officers:

Colleen Coffman _____ 9685 Via Excelencia, Ste 200, San Diego, CA 92126
(President) (Address)

Cynthia Sargent _____ 9685 Via Excelencia, Ste 200, San Diego, CA 92126
(Secretary) (Address)

John Palmer, CFO _____ 9685 Via Excelencia, Ste 200, San Diego, CA 92126
(Treasurer) (Address)

*The name of the State under which the Laws of the Corporation was Chartered, and the name, title, and business address of the President, Secretary, and Treasurer must be shown.

SUBCONTRACTOR LISTING

As required in Section 102.6 of the Supplementary General Conditions, the following is a listing of Subcontractors and material suppliers (including any minority and women-owned business enterprises participation) that are to be used in the event the undersigned should enter into contract with the Owner. Although this list will not be considered as final commitment on the part of the successful proposer, any Subcontractor changes from those listed must have Owner's written approval prior to commencement of Subcontractor work on site.

Speedie and Associates (Quality Control), Hunter Guard Rail & Fence Inc
(Chain Link Fence Gate Type 1, Remove + Install fence), Structural Grace Inc (Survey),
Vulcan Materials (aggregates), Field Lining Systems Inc (Geotextile)

Calleen Crossman
(Signature)

SURETY BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, COFFMAN SPECIALTIES, INC., as Principal, (hereinafter called the Principal), and the SAFECO INSURANCE COMPANY OF AMERICA, a corporation duly organized under the laws of the State of WASHINGTON, as Surety, (hereinafter called the Surety), are held and firmly bound unto the Flood Control District of Maricopa County (hereinafter called the Obligee), in the sum of ten percent (10%) of the total amount of the bid of Principal, submitted by him to the Obligee, for the work described below, for the payment of which sum, well and truly to be made, the said Principal and the said Surety, bind themselves, their heirs, executors, and administrators, successors and assigns, jointly and severally, firmly by these presents, and in conformance with the Arizona Revised Statutes.

WHEREAS, the said Principal is herewith submitting its proposal for Contract FCD 2010C034, White Tanks FRS #4 Rehabilitation - Phase 1.

NOW, THEREFORE, if the Obligee accepts the proposal of the Principal and the Principal enters into a contract with the Obligee in accordance with the terms of the proposal and give the Bonds and Certificates of Insurance as specified in the Standard Specifications with good and sufficient Surety for the faithful performance of the contract and for the prompt payment of labor and material furnished in the prosecution of the contract, or in the event of the failure of the Principal to enter into the contract and give the Bonds and Certificates of Insurance, if the Principal pays the Obligee the difference not to exceed the penalty of the bond between the amount specified in the proposal and such larger amount for which the Obligee may in good faith contract with another party to perform the work covered by the proposal then this obligation is void. Otherwise it remains in full force and effect, provided however, that this bond is executed pursuant to the provisions of Section 34-201, Arizona Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions of the section to the extent as if it were copied at length herein.

Signed and sealed this 11TH day of JANUARY, A.D., 2011.

GARRETT/MOSIER INSURANCE SERVICES, INC.
Agent of Record, State of Arizona

Agent Address and Phone Number:
12 TRUMAN
IRVINE, CA 92620
949-559-6700

COFFMAN SPECIALTIES, INC.

Principal
By: Colleen Coffman
(Printed Name)

Colleen Coffman
(Signature)

(Title)
SAFECO INSURANCE COMPANY OF AMERICA

Surety Name

Bond Number: N/A

By: CYNTHIA S. WOZNEY
(Printed Name)

By: Cynthia S. Wozney
(Signature)

ATTORNEY-IN-FACT

(Title)

ATTACH SURETY POWER OF ATTORNEY

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of Orange

On January 11, 2011 before me, Andrea Chastain, Notary Public

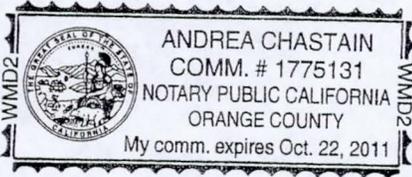
Personally appeared Cynthia S. Wozney

Who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of The State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Andrea Chastain
Signature of Notary Public



OPTIONAL

Capacity(ies) Claimed by Signer(s)

- Individual
- Partner Limited General
- Attorney-in-Fact
- Trustee
- Guardian of Conservator
- Other

Signer is Representing:

SAFECO INSURANCE COMPANY OF AMERICA

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

SAFECO INSURANCE COMPANY OF AMERICA
SEATTLE, WASHINGTON
POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS: That Safeco Insurance Company of America (the "Company"), a Washington stock insurance company, pursuant to and by authority of the By-law and Authorization hereinafter set forth, does hereby name, constitute and appoint **JOHN M. GARRETT, STEVEN C. MOSIER, DENISE BENNETT, ERIKA A. NICHOLAS, CYNTHIA S. WOZNEY, CHARISE EBERHARD, PAUL A. BLAND, ALL OF THE CITY OF IRVINE, STATE OF CALIFORNIA**

, each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations in the penal sum not exceeding **SEVENTY FIVE MILLION AND 00/100***** ***** DOLLARS (\$ 75,000,000.00***** *****)** each, and the execution of such undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents, shall be as binding upon the Company as if they had been duly signed by the president and attested by the secretary of the Company in their own proper persons.

That this power is made and executed pursuant to and by authority of the following By-law and Authorization:

ARTICLE IV - Execution of Contracts: Section 12. Surety Bonds and Undertakings.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitations as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and executed, such instruments shall be as binding as if signed by the president and attested by the secretary.

By the following instrument the chairman or the president has authorized the officer or other official named therein to appoint attorneys-in-fact:

Pursuant to Article IV, Section 12 of the By-laws, Garnet W. Elliott, Assistant Secretary of Safeco Insurance Company of America, is authorized to appoint such attorneys-in-fact as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

That the By-law and the Authorization set forth above are true copies thereof and are now in full force and effect.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Company and the corporate seal of Safeco Insurance Company of America has been affixed thereto in Plymouth Meeting, Pennsylvania this 21st day of October, 2010.



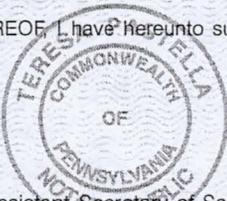
SAFECO INSURANCE COMPANY OF AMERICA

By Garnet W. Elliott
Garnet W. Elliott, Assistant Secretary

COMMONWEALTH OF PENNSYLVANIA ss
COUNTY OF MONTGOMERY

On this 21st day of October, 2010, before me, a Notary Public, personally came Garnet W. Elliott, to me known, and acknowledged that he is an Assistant Secretary of Safeco Insurance Company of America; that he knows the seal of said corporation; and that he executed the above Power of Attorney and affixed the corporate seal of Safeco Insurance Company of America thereto with the authority and at the direction of said corporation.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



Notarial Seal
Teresa Pastella, Notary Public
Plymouth Twp., Montgomery County
My Commission Expires Mar. 28, 2013
Member, Pennsylvania Association of Notaries

By Teresa Pastella
Teresa Pastella, Notary Public

CERTIFICATE

I, the undersigned, Assistant Secretary of Safeco Insurance Company of America, do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy, is in full force and effect on the date of this certificate; and I do further certify that the officer or official who executed the said power of attorney is an Assistant Secretary specially authorized by the chairman or the president to appoint attorneys-in-fact as provided in Article IV, Section 12 of the By-laws of Safeco Insurance Company of America.

This certificate and the above power of attorney may be signed by facsimile or mechanically reproduced signatures under and by authority of the following vote of the board of directors of Safeco Insurance Company of America at a meeting duly called and held on the 18th day of September, 2009.

VOTED that the facsimile or mechanically reproduced signature of any assistant secretary of the company, wherever appearing upon a certified copy of any power of attorney issued by the company in connection with surety bonds, shall be valid and binding upon the company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the said company, this 11TH day of JANUARY, 2011.



By David M. Carey
David M. Carey, Assistant Secretary

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

NO COLLUSION AFFIDAVIT

AFFIDAVIT BY CONTRACTOR CERTIFYING THAT THERE WAS
NO COLLUSION IN BIDDING FOR CONTRACT

STATE OF California)
County of San Diego)§

Colleen Coffman being first duly sworn, deposes and says:

That he/she is President of Coffman Specialties, Inc

bidding on Contract FCD 2010C034 for **White Tanks FRS #4 Rehabilitation – Phase 1**, in the County of Maricopa, State of Arizona.

That, in connection with the above-referenced project, neither he/she, nor anyone associated with the aforesaid business, has, directly or indirectly, participated in any collusion, entered into any contract, combination, conspiracy or other act in restraint of trade or commerce in violation of the provisions of Arizona Revised Statutes, Title 34, Chapter 2, Article 4, as amended.

Colleen Coffman
(Signature of Affiant)

Subscribed and sworn to before me this _____ day of _____, 201__.

See Attached

(Notary Public)

My Commission Expires

CALIFORNIA JURAT WITH AFFIANT STATEMENT

- See Attached Document (Notary to cross out lines 1-6 below)
 See Statement Below (Lines 1-5 to be completed only by document signer[s], *not* Notary)

1 _____
2 _____
3 _____
4 _____
5 _____
6 _____

Signature of Document Signer No. 1 _____ Signature of Document Signer No. 2 (if any) _____

State of California

County of San Diego

Subscribed and sworn to (or affirmed) before me on this

18th day of January, 2011, by
Date Month Year

(1) Colleen Coffman,
Name of Signer

proved to me on the basis of satisfactory evidence to be the person who appeared before me (.) (.)

(and

(2) _____,
Name of Signer

proved to me on the basis of satisfactory evidence to be the person who appeared before me.)

Signature Maria Corrao
Signature of Notary Public



Place Notary Seal Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Further Description of Any Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

RIGHT THUMBPRINT
OF SIGNER #1

Top of thumb here

RIGHT THUMBPRINT
OF SIGNER #2

Top of thumb here

CERTIFICATION OF LICENSE

Pursuant to A.R.S. Section 32-1169, I hereby state that I hold a current contractor's license, duly issued by the office of the Registrar of Contractors for the State of Arizona, said license has not been revoked, that the license number is 130277 A that my privilege license number (as required by A.R.S. Section 42-5005) is 07547942-K; and that, if any exemption to the above licensing requirements is claimed;

1. The basis for the claimed exemption is _____ and;
2. The name(s) and license number(s) of any general, mechanical, electrical, or plumbing contractor(s) to be employed on the work are:

IT IS UNDERSTOOD THAT THE FILING OF AN APPLICATION CONTAINING FALSE OR INCORRECT INFORMATION CONCERNING AN APPLICANT'S CONTRACTOR'S LICENSE OR PRIVILEGE LICENSE WITH THE INTENT TO VOID SUCH LICENSING REQUIREMENTS IS UNSWORN FALSIFICATION PUNISHABLE ACCORDING TO A.R.S. SECTION 13-2704.

Gellen Coffman
Signature of Licensee

Date: 1/19/11

Company: Coffman Specialties, Inc

CONTRACT AGREEMENT

THIS AGREEMENT, made and entered into this 23rd day of February, 2011 by and between the Flood Control District of Maricopa County, hereinafter called the Owner, acting by and through its BOARD OF DIRECTORS, and Coffman Specialties, Inc., hereinafter called the Contractor.

WITNESSETH: That the said Contractor, for and in the consideration of the sum of **one million, four hundred eighteen thousand, five hundred twenty-three dollars and seventy cents (\$1,418,523.70)** to be paid to him by the Owner, in the manner and at the times hereinafter provided, and of the other covenants and agreements herein contained, hereby agrees for himself, heirs, executors, administrators, successors, and assigns as follows:

ARTICLE I – SCOPE OF WORK: The Contractor shall construct, and complete in a workmanlike and substantial manner and to the satisfaction of the Owner, a project for the Flood Control District of Maricopa County, designated as **Contract FCD 2010C034, White Tanks FRS #4 Rehabilitation – Phase 1**, and furnish at its own cost and expense all necessary machinery, equipment, tools, apparatus, materials, and labor to complete the work in the most substantial and workmanlike manner according to the Plans and Construction Specifications on file with the Flood Control District of Maricopa County, 2801 West Durango Street, Phoenix, Arizona 85009, and such modifications of the same and other directions that may be made by the Flood Control District of Maricopa County, as provided herein.

ARTICLE II – CONTRACT DOCUMENTS: The Construction Documents, i.e., Invitation to Bid, Plans, Standard Specifications and Details, Supplementary General Conditions, Special Provisions, Addenda, if any, Proposal, Affidavits, Performance Bond, Payment Bond, Indemnification, Insurance Requirements, Certificates of Insurance, and Change Orders, if any, are by this reference made a part of this contract and shall have the same effect as though all of the same were fully inserted herein.

ARTICLE III – TIME OF COMPLETION: The Contractor further covenants and agrees at its own proper cost and expense, to do all work as aforesaid for the construction of said improvements and to completely construct the same and install the material therein, as called for by this agreement free and clear of all claims, liens, and charges whatsoever, in the manner and under the conditions specified and shall achieve substantial completion of all major construction activities within two hundred twenty (220) calendar days from Notice to Proceed, beyond which time liquidated damages may be enforced.

ARTICLE IV – PAYMENTS: For and in consideration of the faithful performance of the work herein embraced as set forth in the contract documents, which are a part hereof and in accordance with the directions of the Owner, through its Engineer and to its satisfaction, the Owner agrees to pay the said Contractor the amount earned, computed from actual quantities of work performed and accepted or materials furnished at the unit bid price on the Proposal made a part hereof, and to make such payment in accordance with the requirements of A.R.S. Section 34-221, as amended. The Contractor agrees to discharge its obligations and make payments to its subcontractors and suppliers in accordance with A.R.S. Section 34-221.

With each request for payment, the Contractor shall complete and provide the “Maricopa County Small Business Enterprise Program Participation Reporting Form” which is included with this contract document.

ARTICLE V – TERMINATION: The Owner hereby gives notice that pursuant to A.R.S. Section 38-511(A) this contract may be canceled without penalty or further obligation within three (3) years after execution if any person significantly involved in initiation, negotiation, securing, drafting or creating a contract on behalf of the Owner is, at any time while the contract or any extension of the contract is in effect, an employee or agent of any other party to the contract in any capacity or a consultant to any other party of the contract with respect to the subject matter of the contract. Cancellation under this section shall be effective when written notice from the Chief Engineer and General Manager of the Owner is received by all of the parties to the contract. In addition, the Owner may recoup any fee for commission paid or due to any person significantly involved in initiation, negotiation, securing, drafting or creating the contract on behalf of the Owner from any other party to the contract arising as a result of the contract.

ARTICLE VI – NEGOTIATION CLAUSE: Recovery of damages related to expenses incurred by the Contractor for a delay for which the Owner is responsible, which is unreasonable under the circumstances and which was not within the contemplation of the parties to the contract, shall be negotiated between the Contractor and the Owner. This provision shall be construed so as to give full effect to any provision in the contract which requires notice of delays, provides for arbitration or other procedure for settlement or provides for liquidated damages.

ARTICLE VII – COMPLIANCE WITH LAWS: The Contractor is required to comply with all Federal, State and local ordinances and regulations. The Contractor's signature on this contract certifies compliance with the provisions of the I-9 requirements of the Immigration Reform Control Act of 1986 for all personnel that the Contractor and any subcontractors employ to complete this project. It is understood that the Owner shall conduct itself in accordance with the provisions of the Maricopa County Procurement Code. The consultant warrants that it is in compliance with A.R.S. §41-4401 and further acknowledges:

- (1) That the consultant and its sub-consultants, if any, warrant their compliance with all federal immigration laws and regulations that relate to their employees and their compliance with A.R.S. §23-214, subsection A; *After December 31, 2007, every employer, after hiring an employee, shall verify the employment eligibility of the employee through the e-verify program and shall keep a record of the verification for the duration of the employee's employment or at least three years, whichever is longer.*
- (2) That a breach of a warranty under subsection 1 above, shall be deemed a material breach of the contract that is subject to penalties up to and including termination of the contracts;
- (3) That the contracting government entity retains the legal right to inspect the papers of any consultant or sub-consultant employee who works on the contract to ensure that the consultant or sub-consultant is complying with the warranty provided under subsection 1 above and that the consultant agrees to make all papers and employment records of said employee(s) available during normal working hours in order to facilitate such an inspection.
- (4) That nothing herein shall make any consultant or sub-consultant an agent or employee of the contracting government entity.

Verification regarding compliance with A.R.S. §35-391.06 and §35-393.06 Business Relations with Sudan and Iran:

- (1) By entering into the Contract, the Contractor certifies it does not have scrutinized business operations in Sudan or Iran. The contractor shall obtain statements from its subcontractors certifying compliance and shall furnish the statements to the Procurement Officer upon request. These warranties shall remain in effect through the term of the Contract.

- (2) The District may request verification of compliance for any contractor or subcontractor performing work under the Contract. Should the District suspect or find that the Contractor or any of its subcontractors are not in compliance, the District may pursue any and all remedies allowed by law, including, but not limited to: suspension of work, termination of the Contract for default, and suspension and/or debarment of the Contractor. All costs necessary to verify compliance are the responsibility of the Contractor.

ARTICLE VIII – ANTI-DISCRIMINATION PROVISION: The Contractor agrees not to discriminate against any employee or applicant for employment because of race, religion, gender, age, disability, or national origin and further agrees not to engage in any unlawful employment practices. The Contractor further agrees to insert the foregoing provision in all subcontracts hereunder.

ARTICLE IX – SMALL BUSINESS ENTERPRISE PROGRAM: The Maricopa County Small Business Enterprise (SBE) Program is incorporated by reference. It is Maricopa County's policy to provide small businesses the opportunity to participate in the District's solicitation process and to be considered to fulfill the requirements for various commodities and services. No specific SBE participation percentage goal or dollar amount has been established for the contract.

IN WITNESS WHEREOF: Five (5) identical counterparts of this contract, each of which shall for all purposes be deemed an original thereof, have been duly executed by the parties hereinabove named, on the date and year first above written.

COFFMAN SPECIALTIES, INC.

Party of the First Part

Colleen Coffman
Signature

COLLEEN COFFMAN
Printed Name of Signatory

PRESIDENT
Title of Signatory

02/10/2011
Date of Signing

33-0483378
Tax Identification Number

**FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
PARTY OF THE SECOND PART**

RECOMMENDED BY:

[Signature] 2/22/11
Chief Engineer and General Manager Date
Flood Control District of Maricopa County

By: *[Signature]* FEB 23 2011
Chairman, Board of Directors Date

ATTEST:
[Signature] FEB 23 2011
Clerk of the Board 110310 Date

LEGAL REVIEW

Approved as to form and within the powers and authority granted under the laws of the State of Arizona to the Flood Control District of Maricopa County.

[Signature] 2/10/11
Flood Control District General Counsel Date

**STATUTORY PAYMENT BOND PURSUANT TO TITLE 34
CHAPTER 2, ARTICLE 2, OF THE ARIZONA REVISED STATUTES
(Penalty of this bond must be 100% of the Contract amount)**

KNOW ALL MEN BY THESE PRESENTS:

That, COFFMAN SPECIALTIES, INC. (hereinafter called the Principal), as Principal, and SAFECO INSURANCE COMPANY OF AMERICA, a corporation organized and existing under the laws of the State of WASHINGTON, with its principal office in the City of SEATTLE, WASHINGTON (hereinafter called the Surety), as Surety, are held and firmly bound unto the Flood Control District of Maricopa County, in the County of Maricopa, State of Arizona (hereinafter called the Oblige), in the amount of ONE MILLION FOUR HUNDRED EIGHTEEN THOUSAND FIVE HUNDRED TWENTY-THREE (\$1,418,523.70- - -), for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

* AND 70/100- - -

WHEREAS, the Principal has entered into a certain written contract with the Oblige, dated the 23rd day of February, 2011 for the **Contract FCD 2010C034, White Tanks FRS #4 Rehabilitation - Phase 1**, which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal promptly pays all monies due to all persons supplying labor or materials to the Principal or the Principal's subcontractors in the prosecution of the work provided for in the contract, this obligation is void. Otherwise it remains in full force and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of the Title 34, Chapter 2, Article 2, of the Arizona Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions, conditions, and limitations of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, to the same extent as if it was copied at length in this Agreement.

The prevailing party in a suit on this bond shall recover as a part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this 8TH day of FEBRUARY, 2011.

GARRETT/MOSIER INSURANCE SERVICES, INC.
Agent of Record, State of Arizona

Agent Address and Phone Number:
12 TRUMAN
IRVINE, CA 92620
949-559-6700

Bond Number: 6710605

ATTACH SURETY POWER OF ATTORNEY

COFFMAN SPECIALTIES, INC.
Principal Colleen Coffman
Signature
By: COLLEEN COFFMAN
Printed Name
Title: PRESIDENT

SAFECO INSURANCE COMPANY OF AMERICA
Surety [Signature] Seal
Signature
By: CYNTHIA S. WOZNEY, ATTORNEY-IN-FACT
Printed Name

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

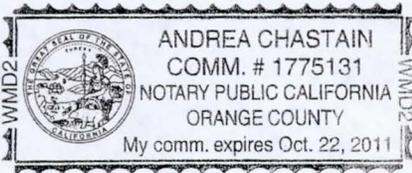
State of California

County of Orange

On February 8, 2011 before me, Andrea Chastain, Notary Public

Personally appeared Cynthia S. Wozney

Who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



I certify under PENALTY OF PERJURY under the laws of The State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Andrea Chastain
Signature of Notary Public

OPTIONAL

Capacity(ies) Claimed by Signer(s)

- Individual
- Partner Limited General
- Attorney-in-Fact
- Trustee
- Guardian of Conservator
- Other _____

Signer is Representing:

SAFECO INSURANCE COMPANY OF AMERICA

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

**SAFECO INSURANCE COMPANY OF AMERICA
SEATTLE, WASHINGTON
POWER OF ATTORNEY**

KNOW ALL PERSONS BY THESE PRESENTS: That Safeco Insurance Company of America (the "Company"), a Washington stock insurance company, pursuant to and by authority of the By-law and Authorization hereinafter set forth, does hereby name, constitute and appoint **JOHN M. GARRETT, STEVEN C. MOSIER, DENISE BENNETT, ERIKA A. NICHOLAS, CYNTHIA S. WOZNEY, CHARISE EBERHARD, PAUL A. BLAND, ALL OF THE CITY OF IRVINE, STATE OF CALIFORNIA**

, each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations in the penal sum not exceeding **SEVENTY FIVE MILLION AND 00/100***** DOLLARS (\$ 75,000,000.00*****)** each, and the execution of such undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents, shall be as binding upon the Company as if they had been duly signed by the president and attested by the secretary of the Company in their own proper persons.

That this power is made and executed pursuant to and by authority of the following By-law and Authorization:

ARTICLE IV - Execution of Contracts: Section 12. Surety Bonds and Undertakings.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitations as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and executed, such instruments shall be as binding as if signed by the president and attested by the secretary.

By the following instrument the chairman or the president has authorized the officer or other official named therein to appoint attorneys-in-fact:

Pursuant to Article IV, Section 12 of the By-laws, Garnet W. Elliott, Assistant Secretary of Safeco Insurance Company of America, is authorized to appoint such attorneys-in-fact as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

That the By-law and the Authorization set forth above are true copies thereof and are now in full force and effect.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Company and the corporate seal of Safeco Insurance Company of America has been affixed thereto in Plymouth Meeting, Pennsylvania this 21st day of October, 2010.



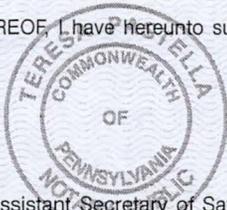
SAFECO INSURANCE COMPANY OF AMERICA

By Garnet W. Elliott
Garnet W. Elliott, Assistant Secretary

COMMONWEALTH OF PENNSYLVANIA ss
COUNTY OF MONTGOMERY

On this 21st day of October, 2010, before me, a Notary Public, personally came Garnet W. Elliott, to me known, and acknowledged that he is an Assistant Secretary of Safeco Insurance Company of America; that he knows the seal of said corporation; and that he executed the above Power of Attorney and affixed the corporate seal of Safeco Insurance Company of America thereto with the authority and at the direction of said corporation.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



Notarial Seal
Teresa Pastella, Notary Public
Plymouth Twp., Montgomery County
My Commission Expires Mar. 28, 2013
Member, Pennsylvania Association of Notaries

By Teresa Pastella
Teresa Pastella, Notary Public

CERTIFICATE

I, the undersigned, Assistant Secretary of Safeco Insurance Company of America, do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy, is in full force and effect on the date of this certificate; and I do further certify that the officer or official who executed the said power of attorney is an Assistant Secretary specially authorized by the chairman or the president to appoint attorneys-in-fact as provided in Article IV, Section 12 of the By-laws of Safeco Insurance Company of America.

This certificate and the above power of attorney may be signed by facsimile or mechanically reproduced signatures under and by authority of the following vote of the board of directors of Safeco Insurance Company of America at a meeting duly called and held on the 18th day of September, 2009.

VOTED that the facsimile or mechanically reproduced signature of any assistant secretary of the company, wherever appearing upon a certified copy of any power of attorney issued by the company in connection with surety bonds, shall be valid and binding upon the company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the said company, this 8TH day of FEBRUARY, 2011.



By David M. Carey
David M. Carey, Assistant Secretary

Not for [gag] [te], [lett] [cre] [ank] [osit], [curr] [rate] or [resid] [value] [guarantees].

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

STATUTORY PERFORMANCE BOND PURSUANT TO TITLE 34
CHAPTER 2, ARTICLE 2, OF THE ARIZONA REVISED STATUTES
(Penalty of this bond must be 100% of the Contract amount)

KNOW ALL MEN BY THESE PRESENTS:

That, COFFMAN SPECIALTIES, INC. (hereinafter called the Principal), as Principal, and SAFECO INSURANCE COMPANY OF AMERICA, a corporation organized and existing under the laws of the State of WASHINGTON, with its principal office in the City of SEATTLE, WASHINGTON (hereinafter called the Surety), as Surety, are held and firmly bound unto the Flood Control District of Maricopa County, in the County of Maricopa, State of Arizona, (hereinafter called the Obligee) in the amount of ONE MILLION FOUR HUNDRED EIGHTEEN THOUSAND FIVE HUNDRED TWENTY-THREE AND 70/100- - - (\$1,418,523.70- -), for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Obligee, dated the 23rd day of February, 2011 the Contract **FCD 2010C034, White Tanks FRS #4 Rehabilitation - Phase 1**, which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal faithfully performs and fulfills all of the undertakings, covenants, terms, conditions and agreements of the contract during the original term of the contract and any extension of the contract, with or without notice to the Surety, and during the life of any guaranty required under the contract, and also performs and fulfills all of the undertakings, covenants, terms, conditions and agreements of all duly authorized modifications of the contract that may hereafter be made, notice of which modifications to the Surety being hereby waived; the above obligation is void. Otherwise it remains in full force and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of the Title 34, Chapter 2, Article 2, of the Arizona Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions, conditions, and limitations of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, to the extent as if it was copied at length in this agreement.

The prevailing party in a suit on this bond shall recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this 8TH day of FEBRUARY, 2011.

GARRETT/MOSIER INSURANCE SERVICES, INC.

Agent of Record, State of Arizona

Agent Address and Phone Number:

12 TRUMAN

IRVINE, CA 92620

949-559-6700

Bond Number: 6710605

ATTACH SURETY POWER OF ATTORNEY

COFFMAN SPECIALTIES, INC.

Principal Colleen Coffman

Signature

By: COLLEEN COFFMAN

Printed Name

Title: PRESIDENT

SAFECO INSURANCE COMPANY OF AMERICA

Surety Cynthia S. Wozney Seal

Signature

By: CYNTHIA S. WOZNEY, ATTORNEY-IN-FACT

Printed Name

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of Orange

On February 8, 2011 before me, Andrea Chastain, Notary Public

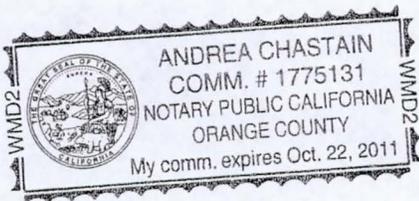
Personally appeared Cynthia S. Wozney

Who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of The State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Andrea Chastain
Signature of Notary Public



OPTIONAL

Capacity(ies) Claimed by Signer(s)

- Individual
- Partner Limited General
- Attorney-in-Fact
- Trustee
- Guardian of Conservator
- Other _____

Signer is Representing:

SAFECO INSURANCE COMPANY OF AMERICA

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

SAFECO INSURANCE COMPANY OF AMERICA
SEATTLE, WASHINGTON
POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS: That Safeco Insurance Company of America (the "Company"), a Washington stock insurance company, pursuant to and by authority of the By-law and Authorization hereinafter set forth, does hereby name, constitute and appoint **JOHN M. GARRETT, STEVEN C. MOSIER, DENISE BENNETT, ERIKA A. NICHOLAS, CYNTHIA S. WOZNEY, CHARISE EBERHARD, PAUL A. BLAND, ALL OF THE CITY OF IRVINE, STATE OF CALIFORNIA**

, each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations in the penal sum not exceeding **SEVENTY FIVE MILLION AND 00/100***** DOLLARS (\$ 75,000,000.00*****)** each, and the execution of such undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents, shall be as binding upon the Company as if they had been duly signed by the president and attested by the secretary of the Company in their own proper persons.

That this power is made and executed pursuant to and by authority of the following By-law and Authorization:

ARTICLE IV - Execution of Contracts: Section 12. Surety Bonds and Undertakings.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitations as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and executed, such instruments shall be as binding as if signed by the president and attested by the secretary.

By the following instrument the chairman or the president has authorized the officer or other official named therein to appoint attorneys-in-fact:

Pursuant to Article IV, Section 12 of the By-laws, Garnet W. Elliott, Assistant Secretary of Safeco Insurance Company of America, is authorized to appoint such attorneys-in-fact as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

That the By-law and the Authorization set forth above are true copies thereof and are now in full force and effect.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Company and the corporate seal of Safeco Insurance Company of America has been affixed thereto in Plymouth Meeting, Pennsylvania this 21st day of October, 2010.



SAFECO INSURANCE COMPANY OF AMERICA

By Garnet W. Elliott
Garnet W. Elliott, Assistant Secretary

COMMONWEALTH OF PENNSYLVANIA ss
COUNTY OF MONTGOMERY

On this 21st day of October, 2010, before me, a Notary Public, personally came Garnet W. Elliott, to me known, and acknowledged that he is an Assistant Secretary of Safeco Insurance Company of America; that he knows the seal of said corporation; and that he executed the above Power of Attorney and affixed the corporate seal of Safeco Insurance Company of America thereto with the authority and at the direction of said corporation.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



Notarial Seal
Teresa Pastella, Notary Public
Plymouth Twp., Montgomery County
My Commission Expires Mar. 28, 2013
Member, Pennsylvania Association of Notaries

By Teresa Pastella
Teresa Pastella, Notary Public

CERTIFICATE

I, the undersigned, Assistant Secretary of Safeco Insurance Company of America, do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy, is in full force and effect on the date of this certificate; and I do further certify that the officer or official who executed the said power of attorney is an Assistant Secretary specially authorized by the chairman or the president to appoint attorneys-in-fact as provided in Article IV, Section 12 of the By-laws of Safeco Insurance Company of America.

This certificate and the above power of attorney may be signed by facsimile or mechanically reproduced signatures under and by authority of the following vote of the board of directors of Safeco Insurance Company of America at a meeting duly called and held on the 18th day of September, 2009.

VOTED that the facsimile or mechanically reproduced signature of any assistant secretary of the company, wherever appearing upon a certified copy of any power of attorney issued by the company in connection with surety bonds, shall be valid and binding upon the company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the said company, this 8TH day of FEBRUARY, 2011.



David M. Carey
David M. Carey, Assistant Secretary

Not for gag, te, lett, cre, ank, sit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

INDEMNIFICATION

To the fullest extent permitted by law, the Contractor shall defend, indemnify, and hold harmless the Flood Control District of Maricopa County, Maricopa County, Town of Buckeye, and their agents, representatives, officers, directors, officials, and employees from and against all claims, damages, losses, and expenses including, but not limited to, attorney fees, court costs, expert witness fees, and the cost of appellate proceedings, relating to, arising out of, or alleged to have resulted from the negligent acts, errors, omissions or mistakes relating to the performance of this Contract. The Contractor's duty to defend, indemnify, and hold harmless the Flood Control District of Maricopa County, Maricopa County, Town of Buckeye, and their agents, representatives, officers, directors, officials, and employees shall arise in connection with any claim, damage, loss or expense that is attributable to bodily injury, sickness, disease, death, or injury to, impairment, or destruction of property, including loss of use resulting therefrom, caused by any negligent acts, errors, omissions, or mistakes in the performance of this Contract including any person for whose negligent acts, errors, omissions, or mistakes the Contractor may be legally liable.

The amount and type of insurance coverage requirements set forth herein will in no way be construed as limiting the scope of the indemnity in this paragraph.

INSURANCE REQUIREMENTS

The Contractor, at the Contractor's own expense, shall purchase and maintain the herein stipulated minimum insurance from a company or companies duly licensed by the State of Arizona and possessing a current A.M. Best, Inc. rating of B++6. In lieu of State of Arizona licensing, the stipulated insurance may be purchased from a company or companies, which are authorized to do business in the State of Arizona, provided that said insurance companies meet the approval of the Flood Control District of Maricopa County. The form of any insurance policies and forms must be acceptable to the Flood Control District of Maricopa County.

All insurance required herein shall be maintained in full force and effect until all work or service required to be performed under the terms of the Contract is satisfactorily completed and formally accepted with the submittal of the Certificate of Performance. Failure to do so may, at the sole discretion of the Flood Control District of Maricopa County, constitute a material breach of this Contract.

The Contractor's insurance shall be primary insurance as respects the Flood Control District of Maricopa County and Maricopa County, and any insurance or self-insurance maintained by the Flood Control District of Maricopa County or Maricopa County shall not contribute to it.

Any failure to comply with the claim reporting provisions of the insurance policies or any breach of an insurance policy warranty shall not affect the Flood Control District of Maricopa County's right to coverage afforded under the insurance policies.

The insurance policies may provide coverage that contains deductibles or self-insured retentions. Such deductible and/or self-insured retentions shall not be applicable with respect to the coverage provided to the Flood Control District of Maricopa County under such policies. The Contractor shall be solely responsible for the deductible and/or self-insured retention and the Flood Control District of Maricopa County, at its option, may require the Contractor to secure payment of such deductibles or self-insured retentions by a surety bond or an irrevocable and unconditional letter of credit.

The Flood Control District of Maricopa County reserves the right to request and to receive, within ten (10) working days, certified copies of any or all of the herein required insurance policies and/or endorsements. The Flood Control District of Maricopa County shall not be obligated, however, to review such policies and/or endorsements or to advise the Contractor of any deficiencies in such policies and endorsements, and such receipt shall not relieve the Contractor from, or be deemed a waiver of the Flood Control District of Maricopa County's right to insist on strict fulfillment of the Contractor's obligations under this Contract.

The insurance policies required by this Contract, except Workers' Compensation and Errors and Omissions, shall name the Flood Control District of Maricopa County, Maricopa County, and their agents, representatives, officers, directors, officials, and employees as Additional Insureds'.

The policies required hereunder, except Workers' Compensation and Errors and Omissions, shall contain a waiver of transfer of rights of recovery (subrogation) against the Flood Control District of Maricopa County, Maricopa County and their agents, representatives, officers, directors, officials, and employees for any claims arising out of the Contractor's work or service.

REQUIRED COVERAGES

Commercial General Liability.

Commercial General Liability insurance and, when necessary, Commercial Umbrella insurance with a limit of not less than \$1,000,000 for each occurrence, \$2,000,000 Products/Completed Operations Aggregate, and \$2,000,000 General Aggregate Limit. The policy shall include coverage for bodily injury, broad form property damage, personal injury, products, and completed operations and blanket contractual coverage, and shall not contain any provision that would serve to limit third party action over claims. There shall be no endorsement or modification of the CGL limiting the scope of coverage for liability arising from explosion, collapse, or underground property damage.

Automobile Liability.

Commercial/Business Automobile Liability insurance and, if necessary, Commercial Umbrella insurance with a combined single limit for bodily injury and property damage of not less than \$1,000,000 each occurrence with respect to any of the Contractor's owned, hired, and non-owned vehicles assigned to or used in performance of the Contractor's work or services under this Contract.

Workers' Compensation.

Workers' Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of the Contractor's employees engaged in the performance of the work or services under this Contract; and Employer's Liability insurance of not less than \$1,000,000 for each accident, \$1,000,000 disease for each employee, and \$1,000,000 disease policy limit.

The Contractor waives all rights against the Flood Control District of Maricopa County, Maricopa County, and their agents, officers, directors, and employees for recovery of damages to the extent these damages are covered by the Workers' Compensation and Employer's Liability or commercial umbrella liability insurance obtained by the Contractor pursuant to this contract.

Builder's Risk (Property) Insurance.

The Contractor shall purchase and maintain, on a replacement cost basis, Builders' Risk insurance and, when necessary, Commercial Umbrella insurance in the amount of the initial Contract amount as well as subsequent modifications thereto for the entire work at the site. Such Builders' Risk insurance shall be maintained until the submittal of the Certificate of Performance and final payment has been made or until

no person or entity other than the Flood Control District of Maricopa County has an insurable interest in the property required to be covered, whichever is earlier. This insurance shall include the interests of the Flood Control District of Maricopa County, the Contractor, and all subcontractors, and sub-subcontractors in the work during the life of the Contract and course of construction, and shall continue until the work is completed and accepted by the Flood Control District of Maricopa County. For new construction projects, the Contractor agrees to assume full responsibility for loss or damage to the work being performed and to the structures under construction. For renovation construction projects, the Contractor agrees to assume responsibility for loss or damage to the work being performed at least up to the full Contract amount, unless otherwise required by the Contract documents or amendments thereto.

Builders' Risk insurance shall be on a special form and shall also cover false work and temporary buildings and shall insure against risk of direct physical loss or damage from external causes including debris removal, demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for architect's service and expenses required as a result of such insured loss and other "soft costs" as required by the Contract.

Builders' Risk insurance must provide coverage from the time any covered property comes under the Contractor's control and/or responsibility, and continue without interruption during construction, renovation, installation, landscape/plant maintenance period, including any time during which the covered property is being transported to the construction installation site, and while on the construction or installation site awaiting installation. The policy will provide coverage while the covered premises or any part thereof are occupied. Builders' Risk insurance shall be primary and not contributory.

If the Contract requires testing of equipment or other similar operations, at the option of the Flood Control District of Maricopa County, the Contractor will be responsible for providing property insurance for these exposures under a Boiler Machinery insurance policy.

Certificates of Insurance

Prior to commencing work or services under this Contract, the Contractor shall furnish the Flood Control District of Maricopa County with Certificates of Insurance in a form acceptable to the Flood Control District of Maricopa County, or formal endorsements as required by the Contract in the form provided by the Flood Control District of Maricopa County, issued by the Contractor's insurer(s), as evidence that policies providing the required coverage's, conditions, and limits required by this Contract are in full force and effect. Such certificates shall identify this contract number and contract title.

In the event any insurance policy(ies) required by this contract is(are) written on a "claims made" basis, coverage shall extend for two (2) years past completion and acceptance of the Contractor's work or services and as evidenced by annual Certificates of Insurance.

If a policy does expire during the life of the Contract, a renewal certificate must be sent to the Flood Control District of Maricopa County fifteen (15) days prior to the expiration date.

Cancellation and Expiration Notice

Insurance required herein shall not expire, be canceled, or materially changed without thirty (30) days prior written notice to the Flood Control District of Maricopa County.

**Flood Control District of Maricopa County
CERTIFICATE OF INSURANCE**

CONTRACT FCD 2010C034

PROJECT TITLE: White Tanks FRS #4 Rehab – Phase 1

NAME AND ADDRESS OF INSURANCE AGENCY:	Company Letter	A
	Company Letter	B
	Company Letter	C
NAME AND ADDRESS OF INSURED:	Company Letter	D
	Company Letter	E
	Company Letter	F

This certificate of insurance certifies that policies of insurance listed below have been issued to the insured named above and are in full force at this time.

*CO. LTR.	TYPE OF INSURANCE	POLICY NUMBER	EFFECTIVE DATE (MM/DD/YY)	EXPIRATION DATE (MM/DD/YY)	LIMITS
	GENERAL LIABILITY: <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> Claims Made <input type="checkbox"/> Occur <input checked="" type="checkbox"/> PREMISES OPERATIONS <input checked="" type="checkbox"/> BLANKET CONTRACTURAL <input checked="" type="checkbox"/> BROAD FORM PROPERTY DAMAGE <input checked="" type="checkbox"/> PERSONAL INJURY <input checked="" type="checkbox"/> PRODUCTS AND COMPLETED OPERATIONS HAZARD <input checked="" type="checkbox"/> XCU HAZARDS <input checked="" type="checkbox"/> INDEPENDENT CONTRACTORS <input checked="" type="checkbox"/> OWNER'S AND CONTRACTOR'S PROTECTIVE LIABILITY				GENERAL AGGREGATE \$2,000,000 PRODUCTS/COMPLETED OPERATIONS AGGREGATE \$2,000,000 EACH OCCURRENCE \$1,000,000
	AUTOMOBILE LIABILITY: <input checked="" type="checkbox"/> ANY AUTO <input checked="" type="checkbox"/> ALL OWNED AND NON-OWNED AUTOS				Combined Single Limit \$1,000,000 Bodily Injury \$1,000,000 Property Damage \$1,000,000 Per person/Per accident \$1,000,000
	<input type="checkbox"/> EXCESS LIABILITY <input type="checkbox"/> Umbrella Form <input type="checkbox"/> Other than Umbrella Form				Each occurrence \$ Aggregate \$
	<input checked="" type="checkbox"/> WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY				STATUTORY LIMITS AND EMPLOYER'S LIABILITY: EACH ACCIDENT \$1,000,000 DISEASE: EACH EMPLOYEE \$1,000,000 DISEASE: POLICY LIMIT \$1,000,000
	<input checked="" type="checkbox"/> BUILDERS' RISK ALL-RISK FORM				REPLACEMENT COSTS
	<input checked="" type="checkbox"/> OTHER:	Except for Workers' Compensation and Professional Liability Insurance, the Flood Control District of Maricopa County, Maricopa County, Town of Buckeye, and their agents, representatives, officers, Directors, Officials, and employees are named as Additional Insured's.			

Except for Workers' Compensation and Professional Liability Insurance, the Flood Control District of Maricopa County (District), Maricopa County, Town of Buckeye, and their agents, representatives, officers, Directors, Officials, and employees are named as Additional Insured's on those types of policies described herein which are required to be furnished by this contract entered into between the insured and the District. To the extent provided in this, insured shall hold harmless the District from liability arising out of any services provided or duty performed by insured as required by statute, law, purchase order or otherwise required, with the exception of liability for loss or damage resulting from the sole negligence of the District, its agents, employees, or indemnities. It is agreed that any insurance available to the named insured shall be primary of other sources that may be available. It is further agreed that no policy shall expire, be cancelled, or materially changed to affect the coverage available to the District without thirty (30) days written notice to the District. **THIS CERTIFICATE IS NOT VALID UNLESS COUNTERSIGNED BY AN AUTHORIZED REPRESENTATIVE OF THE INSURANCE COMPANY.**

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY 2801 WEST DURANGO STREET PHOENIX, ARIZONA 85009	DATE ISSUED: _____ _____ AUTHORIZED REPRESENTATIVE
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**CERTIFICATE OF PERFORMANCE
OF CONSTRUCTION CONTRACT AND PAYMENT OF ALL CLAIMS**

_____ hereby certifies to the Flood Control District of Maricopa
(Name of Signer)

County (District) that all lawful claims for labor, rental of equipment, material used, and any other claims by **Coffman Specialties, Inc.** (Firm) or its subcontractors and suppliers in connection with performance on **FCD 2010C034** for **White Tanks FRS #4 Rehabilitation – Phase 1** have been duly discharged as required by Arizona Revised Statutes, Section 34-221 and Maricopa Association of Governments Uniform Standard Specifications for Public Works Construction (MAG), Section 109.7.

Coffman Specialties, Inc. understands that with receipt of payment for previously invoiced amounts plus any retained funds and/or release of escrow funds, that this is a settlement of all claims of every nature and kind against the District arising out of the performance of the District's Contract **FCD 2010C034** relating to the material, equipment, and work covered in and required by this contract.

The undersigned hereby certifies that to his/her knowledge no contractual disputes exist in regard to this contract, and that he/she has no knowledge of any pending or potential claim in regard to this contract.

Upon submission of this Certificate of Performance and an invoice for any applicable retained funds, the District will process final payment and release applicable escrow funds in accordance with the Contract and MAG requirements.

State of Arizona)
)§
County of Maricopa)

Signed this _____ day of _____, 201__.

Signature

Title

SUBSCRIBED AND SWORN TO before me this _____ day of _____, 201__.

Notary Public

My Commission Expires: _____



Maricopa County Small Business Enterprise Program Participation Reporting Form

This form is to be submitted with each pay application or invoice. Any pay application or invoice without this form attached is subject to rejection as not being a completed pay application or invoice pursuant to the terms of the contract.

Name of Prime Consultant/Contractor

Contract No.

Contact Person

Project No.

Street Address

\$ _____
Amount of this Pay Application/Invoice

City, State ZIP

Complete below with information on the SBE firms utilized as subconsultants/subcontractors for this pay application/invoice. If work was self-performed and your firm, as the prime, is an SBE firm pursuant to A.R.S. § 41-1001, et seq., then you may list your firm as the SBE firm.

SBE Firm Name	SBE Firm Address	Type of Work Performed	\$ Pd to SBE this App/Inv
			\$
			\$
			\$
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			\$
			\$
			\$
			\$
			\$

A mark in this box certifies that no SBE firms were utilized as the prime, subconsultant or subcontractor with respect to this pay application/invoice.

Date: _____

Signature



SUPPLEMENTARY GENERAL CONDITIONS

**CONTRACT FCD 2010C034
WHITE TANKS FLOOD RETARDING STRUCTURE NO.4
REHABILITATION – PHASE 1**

PCN 201.02.31

DECEMBER 2010

Prepared by:

**Ninyo & Moore Geotechnical Consultants, Inc.
3001 South 35th Street, Suite 6
Phoenix, Arizona 85034**

SUPPLEMENTARY GENERAL CONDITIONS

SPECIFICATIONS

Except as otherwise amended in these Supplementary General Conditions and the Special Provisions, this project shall be constructed in accordance with all applicable Maricopa Association of Governments (MAG) Uniform Standard Specifications and Uniform Standard Details, dated 1998, and including revisions through 2010; Maricopa County Department of Transportation (MCDOT) English Supplement to the MAG Uniform Standard Specifications and Details for Public Works Construction, dated 2008; ADOT Standard Structure Drawings, dated June 1992; ADOT Construction Standard Drawings, dated November 2007; Standard Specifications for Road and Bridge Construction, 2008; Manual On Uniform Traffic Control Devices For Streets And Highways, 2003 Edition; and the City of Phoenix Traffic Barricade Manual, 2007. All references herein to MAG refer to the Uniform Standard Specifications for Public Works Construction by the Maricopa Association of Governments 1998 edition, including all revisions through 2010.

PRECEDENCE OF CONSTRUCTION DOCUMENTS

This Contract and its designated documents, whether taken separately or together, are to be interpreted according to full intent, meaning, and spirit, and shall be deemed to mutually explain each other and to be descriptive of any materials to be furnished and the work to be performed under this Contract. In cases of any difference or discrepancy between the Construction Documents, the order of precedence shall be a) Addendum to the Invitation for Bids, b) the Contract Agreement, c) Supplementary General Conditions, d) Special Provisions, e) Project Plans, f) MAG Uniform Standard Specifications and Uniform Standard Details, g) MCDOT English Supplement to the MAG Uniform Standard Specifications and Details for Public Works Construction, h) ADOT Standard Specifications for Road and Bridge Construction and Standard Details.

Subsection 101.2 – Definitions and Terms:

1. Change the definition of the phrase “Board of Supervisors” to being the Board of Directors acting under the authority of the laws of the State of Arizona and in their capacity of the Board of Directors of the Flood Control District of Maricopa County.
2. Change the definition of the phrase “Budget Project” to being a project financed by funds set aside in the annual budget or otherwise approved by the Flood Control District of Maricopa County Board of Directors.
3. Add to the definition of the phrase “Construction Documents,” the phrase “Supplementary General Conditions”.
4. Change the definition of the term “Engineer” to being the person appointed by the Flood Control District of Maricopa County Board of Directors to the office of Chief Engineer and General Manager of the Flood Control District of Maricopa County acting directly or through its authorized representative, the Division Manager of Planning and Project Management Division. Engineer may include Project Manager, Construction Manager, Engineer-of-Record or other designees.
5. Change the definition for the phrase “Notice of Award” to a letter from the Flood Control District of Maricopa County advising Contractor that it is the successful bidder and the Flood Control District of Maricopa County has accepted its proposal.

6. Change the definition of the term "Owner" to the Flood Control District of Maricopa County, acting through its legally constituted officials, officers, or employees.
7. Whenever the word "District" is used in these Specifications, it shall mean the Flood Control District of Maricopa County.
8. Add the definition for the Maricopa County Small Business Enterprise Program as being the Program adopted by the Board of Supervisors effective December, 2006.

Subsection 102.4 – Examination of the Plans, Special Provisions, and Site Work:

Add the following:

The Invitation to Bid which includes plans and specifications are available for download from the District Procurement Website.

The following reference materials are available on a CD-ROM from the District Receptionist at a charge of \$6.50. Contractors are encouraged to review these materials:

- A) Field Exploration Data Report for the White Tanks FRS No. 4 Rehabilitation Project;
- B) Geotechnical Design & Appraisal Reports for the White Tanks FRS No. 4 Rehabilitation Project;
- C) Land Subsidence-Earth Fissure Report for the White Tanks FRS No. 4 Rehabilitation Project;
- D) Seismic Refraction Evaluation Report for the White Tanks FRS No. 4 Rehabilitation Project; and
- E) Test Trenching Technical Memorandum for the White Tanks FRS No. 4 Rehabilitation Project.

Existing moisture conditions shall be no basis for claim for additional money or time extensions. The Contractor shall manipulate the existing soil as required to achieve stable soil conditions and the required densities, as well as safe and stable side slopes during construction activities.

The project intercepts scattered man-made and natural drainages. These drainages can convey considerable flood flows as well as low flow nuisance flows. The Owner is not responsible for monitoring these flows or notifying the Contractor of flood flows within these drainage courses.

Subsection 102.5 – Preparation of Bid:

Add the following:

Proposals, including the Bidding Schedule, must be legibly written in ink or typed, with all prices given in numerals. In case of a conflict between the unit bid price and the extension, the unit bid price will govern.

It shall be the responsibility of prospective bidders to determine, prior to submission of a bid, if any addenda have been issued by the Flood Control District. This may be accomplished by checking the Flood Control District's website, Procurement/Contracting page. **Any addendum issued, if not already bound into the Special Provisions, must be attached and included as part of the Specifications** and any quantities on the Bidding Schedule requiring change shall be adjusted to the new figure by pen and ink.

The bidder's Arizona State Contractor's License number and the classification under which it proposes to perform the work shall be shown on the proposal. An "A" **General Engineering** License is required for this contract.

Allowances as shown on the Bid Schedule shall cover the cost of the materials, handling, equipment, labor costs, permits, and fees to complete or supply the referenced items. The Contractor's taxes, bonds, insurance, overhead, profit, and other expenses anticipated for the original Allowance items shall be included in the Base Bid, and not in the Allowance. Whenever the actual costs are more than or less than the Allowance, the Contract Sum shall be adjusted accordingly by Change Order, the amount of which will recognize proportionate changes, if any, in handling costs on the site, labor, installation costs, taxes, bonds, insurance, overhead, profit, and other expenses. All Change Orders shall be approved by the Owner. Contractor's Application for Payment shall include supporting documentation of Allowance funds.

Subsection 102.6 – Subcontractors' List:

Add the following:

A list of subcontractors to be employed on the project shall be submitted with the bid, on the form provided in the Proposal. Following Notice of Award, no change of the subcontractors named therein will be made unless first approved in writing by Owner.

Subsection 102.7 – Irregular Proposals:

Add the following:

(F) If any addenda are not acknowledged and attached.

(G) If the entire book of Construction Documents (less the plans) are not returned.

Subsection 103.6 – Contractor's Insurance:

Add the following:

Concurrently with the execution of the contract, Contractor shall furnish a Certificate of Insurance using the included Certificate that names the additional insureds as set out in the Certificate. The Certificate shall also name the additional insureds as Certificate Holders. The types of insurance and the limits of liability shall be as indicated on the included form.

Subsection 103.6.1(D) – Contractor's Insurance:

Add the following:

Include additional insureds as indicated on the included Certificate of Insurance.

Subsection 103.6.2 – Indemnification of the Contracting Agency against Liability:

Add the following:

Additionally, Contractor shall execute the Indemnification found in the Construction Documents.

Subsection 104.1 – Work to be Done:

Add the following:

Plant Material:

Removal of all protected native plant material will follow applicable federal and state regulations. Ultimately, the Contractor is responsible for the salvage, storage and replanting of existing plant material as part of the constructed project.

Subsection 104.1.1 – General:

Add the following:

The proposed work is located in the Town of Buckeye. The site is approximately thirty (30) miles west of Phoenix and can be reached by proceeding south on Jackrabbit Trail and west on Van Buren Street. The gate to the site is located on the north side of Van Buren Street, west of the Jackrabbit Trail. The overall construction activities associated with the remediation of the White Tanks Flood Retarding Structure (FRS) No. 4 will be completed in two (2) phases. The proposed Work outlined in these construction documents relates to the first phase (Phase 1) construction activities. Phase 2 activities are not part of this scope.

Principal construction features for the Phase 1 portion of the project include:

- Remove the existing crest survey monuments;
- Excavate the top two (2) feet of the existing embankment;
- Remove the existing center filter material along centerline and lateral finger drain trenches;
- Remove the existing filter material within lateral finger drain trenches (where applicable);
- Excavate the foundation soils to the appropriate depth below the centerline trench;
- Place the geotextile on the downstream side of the centerline trench excavation;
- Place the new filter material within the centerline and lateral finger drain trenches;
- Cover the top of the centerline trench with geotextile and cut at downstream corner;
- Place 8 inches of embankment fill on the exposed embankment crest so that the center portion is situated at Elevation 1056.67; and
- Place 4 inches of aggregate base on the exposed embankment fill so that the enter portion is situated at Elevation 1057.0.

The embankment crest may be used as a haul road during construction.

No ramp building to access the top of the embankment is planned for this construction. If the Contractor deems that ramp building is needed for construction activities, the limits, material properties, engineering analysis, placement technique, and removal of the ramp should be included in the Work Plan for Engineer review and approval.

The average elevation of the project (within the existing flood pool area) is 1050 feet (NAVD 1988).

All water, including construction and potable, lighting, temporary electric power, heat, and telephone service shall be arranged and provided for as per the requirements of the work by the Contractor at the Contractor's expense.

The Owner and Contractor shall have pre-start meetings at times agreed upon during the pre-construction meeting. These pre-start meetings shall be held prior to all major work elements. The Engineer's approval shall be obtained before commencing work.

A Corps of Engineers Section 404 permit will not be needed for this phase of the project. Jurisdictional Waters of the United States identified at the site have been delineated on the Plans.

Inspection and Testing:

The Contractor will be responsible for all quality control for the project and will provide the Engineer with copies of the results of all tests performed by the Contractor Quality Control within 48 hours of the testing. The Owner and Engineer will provide quality assurance for the project.

Quality Control (QC) refers to those actions taken by all parties involved in the construction, including the Contractor, those parties charged with procurement and installation of manufactured materials, and the placement and compaction of the soil materials, which provide a means to determine and sometimes quantify the characteristics of the product. The results of a quality control program are compared to the Special Provisions or other contractual or regulatory requirements. During each aspect of the handling of these materials, quality control is provided by the manufacturer, fabricator, or installer of materials, or the supplier and earthworks contractor for the soils, to ensure that the materials and workmanship conform to the plans and Special Provisions. Quality control responsibility is retained by the Contractor, suppliers, and manufacturers because these entities have the most direct control over qualifications of personnel, specialized experience or expertise, choice in type and quantity of equipment, scheduling, sequencing and workmanship that all factor in to the quality of the finished project.

QC testing shall be conducted by the Contractor on the earthwork in accordance with a construction quality control (CQC) Plan developed by the Contractor and approved by the Engineer prior to any fill construction. The CQC Plan shall include a table summarizing the testing requirements and shall meet the minimum CQC testing requirements indicated on Table D-1 (see Appendix D of the Contract Documents). The CQC Plan shall designate as CQC Manager an individual within the on site work organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. The CQC Manager shall be a construction person with a minimum of 5 years in related work. This CQC Manager shall be on the site at all times during construction and shall be employed by the Contractor. The CQC Manager shall have no other duties in addition to quality control. An alternate for the CQC Manager shall be identified in the CQC Plan to serve in the event of the CQC Manager's absence. The requirements for the alternate shall be the same as for the designated CQC Manager. The CQC Plan shall be provided to the Owner and Engineer for review and approval.

Quality Assurance (QA) is a planned and systematic pattern of all means and actions intended to provide adequate confidence that the materials and procedures conform to the plans and Special Provisions, and any applicable regulatory requirements. Quality assurance can be provided by the Owner, or its designated representative, which often is an independent consulting, engineering or construction management firm. Activities performed by quality assurance personnel include: observing construction methods and procedures, reviewing the contractor's quality control testing, conducting materials testing for evaluation of contractor's quality control, and other measures to ensure compliance with the contract Special Provisions. Although quality assurance is as important during all phases of the project, construction quality assurance is often in association with those actions taken in relation to the installation of the geosynthetics materials, and the placement and compaction of the materials. Quality assurance is a critical component of a project because field conditions are the most variable and the most difficult to control and documentation is being recognized as invaluable to Owners and regulatory agencies. The

activities and duties for quality assurance personnel are outlined in a separate Construction Quality Assurance Plan.

A Equipment and Materials

Equipment and material used for quality control shall be of the quality and condition required to meet the test specifications cited in the contract. Testing equipment shall be properly adjusted and calibrated at the start of operations and the calibration maintained at the frequency specified. Records of equipment calibration tests shall be available to the engineer at all times. Equipment shall be operated and maintained by qualified operators as prescribed in the manufacturer's operating instructions. All equipment and materials used in performing quality control testing shall be as prescribed by the test standards referenced in the contract or in this document.

All equipment and materials shall be handled and operated in a safe and proper manner and shall comply with all applicable regulations pertaining to their use, operation, handling, storage, and transportation.

B Quality Control System

The contractor shall develop, implement, and maintain a system adequate to achieve the specified quality of all work performed, material incorporated, and equipment furnished before use. The system established shall be documented in a written plan developed by the contractor and approved by the contracting officer. The system activities shall include the material testing and inspection needed to verify the adequacy of completed work and procedures to be followed when corrective action is required. Daily records to substantiate the conduct of the system shall be maintained by the contractor. The quality control plan shall cover all aspects of quality control and shall address, as a minimum, all specified testing and inspection requirements. The plan provided shall be consistent with the planned performance in the contractor's approved construction schedule. The plan shall identify the contractor's onsite quality control manager and provide an organizational listing of all quality control personnel and their specific duties. The written plan shall be submitted to the contracting officer within 15 calendar days after notice of award. The contractor shall not proceed with any construction activity that requires inspection until the written plan is approved by the contracting officer.

The quality control system shall include, but not be limited to, a rigorous examination of construction material, processes, and operation, including testing of material and examination of manufacturer's certifications as required, to verify that work meets contract requirements and is performed in a competent manner.

C Quality Control Personnel

Quality control activities shall be accomplished by competent personnel who are separate and apart from line supervision and who report directly to management. A competent person is one who is experienced and capable of identifying, evaluating, and documenting that material and processes being used will result in work that complies with the contract, and who has authorization to take prompt action to remove, replace, or correct such work or products not in compliance. Off site testing laboratories shall be certified or inspected by a nationally recognized entity. The Contractor shall submit to the Contracting Officer, for approval, laboratory certification or inspection information. The contractor shall submit to the contracting officer, for approval, the names, qualifications, authorities, certifications, and availability of the competent personnel who will perform the quality control activities.

D Post-Award Conference

The contractor shall meet with the contracting officer before any work begins and discuss the contractor's quality control system. The contracting officer and the contractor shall develop a mutual understanding regarding the quality control system, including procedures for correcting quality control issues.

E Records

The contractor's quality control records shall document both acceptable and deficient features of the work and corrective actions taken. All records shall be on forms approved by the contracting officer, be legible, and be dated and signed by the competent person creating the record.

Unless otherwise specified in this document, records shall include:

- a. Documentation of shop drawings including date submitted to and date approved by the contracting officer, results of examinations, any need for changes or modifications, manufacturer's recommendations and certifications, if any, and signature of the authorized examiner.
- b. Documentation of material delivered including quantity, storage location, and results of quality control examinations and tests.
- c. Type, number, date, time, and name of individual performing quality control activities.
- d. The material or item inspected and tested, the location and extent of such material or item, and a description of conditions observed and test results obtained during the quality control activity.
- e. The determination that the material or item met the contract provisions and documentation that the engineer was notified.
- f. For deficient work, the nature of the defects, specifications not met, corrective action taken, and results of quality control activities on the corrected material or item.

F Reporting Results

The results of contractor quality control inspections and tests shall be communicated to the engineer immediately upon completion of the inspection or test. Unless otherwise specified in this document, the original plus one copy of all records, inspections, tests performed, and material testing reports shall be submitted to the engineer within one working day of completion. The original plus one copy of documentation of material delivered shall be submitted to the engineer before the material is used.

G Access

The contracting officer and the engineer shall be given free access to all testing equipment, facilities, sites, and related records for the duration of the contract.

H Payment

Payment for preparation of an approved CQC Plan and performance of CQC testing will be on a lump sum basis. The minimum required testing frequencies are provided in Appendix D of the Contract Documents. Failing test results are the responsibility of the Contractor and any retesting shall be at the Contractor's expense. Any failing quality assurance or quality control test requires a retest. Some level of rework or physical effort is required prior to the retesting. Failing tests are tests that do not meet the minimum requirements identified in the Special Provisions from either quality assurance or quality control testing. **ITEM 104-1 – CQC PLAN AND TESTING**

Additional CQC testing will be required in areas of additional foundation excavation and backfill. The additional testing shall include material tests required for installation, placement, and compaction of embankment fill, select fill, filter material, and geotextile.

ITEM 104-2 – CQC TESTING ALLOWANCE

Subsection 104.1.2 – Maintenance of Traffic:

Add the following:

Traffic control shall conform to Section 401 of the MAG Uniform Standard Specifications, and Section 401 of the Maricopa County Department of Transportation Supplement to the MAG Uniform Standard Specifications, except as modified herein.

In all cases during construction, access will be provided for emergency vehicles, trash collection, and school buses as required. The Contractor will notify schools, trash collection, emergency services, etc. at least thirty (30) calendar days in advance of implementing the traffic control plans that may affect their activities. Full closure of any public road is not permitted during the construction of this project without prior approval of MCDOT. The Contractor shall refer to the Special Provisions Section 401.

Subsection 104.2 – Alteration of Work:

Add the following:

Any deviation from the approved plans, specifications and Construction Quality Assurance Plan shall require a request for variance from FDC and concurrence from ADWR.

The Contractor shall submit itemized cost estimates or price proposals for any owner-directed change order or Contractor-initiated claim.

Cost estimates or pricing proposals shall be itemized to include direct labor by man-hours, individual craft, hourly wage rate and verifiable labor burden. Other direct costs shall include rental and operator rates for rented or owned equipment, material trucking expenses and other costs clearly identified and directly allocable to contract performance. Material costs shall be itemized by item description, quantity(s) for each item, unit price per item, including applicable sales tax markup, and extended total price per item. The Contractor shall provide copies of material supplier quote sheets, invoices or purchase orders, as appropriate. In the case of a conflict between the unit price and the extended total for a specific item, the unit price will govern.

Unless otherwise authorized or directed by the Engineer, lump sum cost estimates or price proposals shall be rejected and returned to the Contractor for itemization as described above. Failure of the Contractor to submit properly itemized cost estimates or price proposals shall not constitute an excusable delay.

Subsection 104.2.1 – By the Contracting Agency:

Add the following:

The Owner may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this contract in any one or more of the following:

- (A) Drawings, designs, or specifications;
- (B) Method or manner of performance of the work;

- (C) Owner-furnished facilities, equipment, materials, services, or site; and/or
- (D) Directing acceleration in the performance of the work.

Any other written or oral order from the Owner that causes a change shall be treated as a change order under this section provided that the Contractor gives the Owner written notification within two work days after receipt of such direction stating:

- (A) The date, nature, and circumstances of the conduct regarded as a change;
- (B) The particular elements of the contract performance for which the Contractor is seeking an equitable adjustment under this section, including any price or schedule adjustments; and
- (C) The Contractor's estimate of the time by which the Owner must respond to the Contractor's notice to minimize cost, delay, or disruption of performance.

The Contractor shall diligently continue performance of this contract to the maximum extent possible in accordance with its provisions. Except as provided in this section, no order, statement, or conduct of the Owner shall be treated as a change or entitle the Contractor to an equitable adjustment. If any change under this section causes an increase or decrease in the Contractor's cost of, or the time required for the performance of any part of the work under this contract, the Owner shall make an equitable adjustment and modify the contract in writing. The equitable adjustment shall not include increased costs or time extensions for delay resulting from the Contractor's failure to provide notice or to diligently continue performance. No proposal for the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this contract.

Add the following subsection:

Subsection 104.2.6 – Value Engineering:

(A) **General.** The Contractor is encouraged to voluntarily develop, prepare, and submit to the Engineer value engineering change proposals (VECPs). The Contractor shall share in any instant contract savings realized from accepted VECPs, in accordance with paragraph (F) below. The Owner reserves the right to make alterations to the contract, in accordance with procedures elsewhere within this contract. Such alterations will not be eligible for inclusion in any VECP.

(B) **Definitions.**

Contractor's development and implementation costs means those costs the Contractor incurs on a VECP in developing, testing, preparing, and submitting the VECP as well as those costs incurred by the Contractor to make the changes required by the Owner's acceptance of the VECP.

Owner costs means those owner costs that result directly from developing and implementing the VECP, such as any net increases in the cost of testing, operations, maintenance, and logistical support. The term does not include the normal administrative costs of processing the VECP.

Instant contract savings means the estimated reduction in Contract cost of performance resulting from acceptance of the VECP, minus the allowable Contractor's development and implementation costs, minus subcontractor's development and implementation costs (see paragraph (G) below).

Value engineering change proposal (VECP) means a proposal that 1) requires a change to the contract; 2) results in reducing the contract price or estimated cost without impairing essential functions or characteristics; and 3) does not involve a change in deliverable end item quantities, schedule, or a change to the contract type.

- (C) **VECP Preparation.** As a minimum, the Contractor shall include in each VECP the information described in subparagraphs (1) through (7) below. If the proposed change affects contractually required schedule and cost reporting, it shall be revised to incorporate proposed VECP modifications. The VECP shall include the following:
- (1) A description of the difference between the existing contract requirement and that proposed, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, and the effects of the change on the end item's performance. All design changes must be submitted on twenty-four (24) inch by thirty-six (36) inch standard drawing sheets along with supporting calculations. An Engineer registered in the State of Arizona shall seal each drawing sheet and at least the content sheet of the calculations.
 - (2) A list and analysis of the contract requirements that must be changed if the VECP is accepted, including any suggested specification revision.
 - (3) A separate, detailed cost estimate for the affected portions of the existing contract requirements and the VECP. The cost reduction associated with the VECP shall take into account the Contractor's allowable development and implementation costs, including any amount attributable to subcontracts under paragraph (G) below.
 - (4) A description and estimate of costs the Owner may incur implementing the VECP, such as test and evaluation and operating and support costs. This is an estimate based only on the Contractor's understanding of additional efforts to be expended by the Owner, should the VECP be accepted. The final cost will be determined by the Owner.
 - (5) A prediction of any effects the proposed change would have on collateral costs to the agency, i.e., costs of operation or maintenance.
 - (6) A statement of the time by which a contract modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the contract completion time or delivery schedule.
 - (7) Identification of any previous submissions of the VECP, including the dates submitted, the agencies and contract numbers involved and previous Owner actions, if known.
- (D) **Submission.** The Contractor shall submit VECPs to the Owner's Engineer. All submissions (plans, specifications, etc.) that involve an engineering change to the original construction plans and specifications shall be sealed by an Engineer registered in the State of Arizona.
- (E) **Owner Action.**
- (1) The Owner shall notify the Contractor of the status of the VECP within fifteen (15) calendar days after receipt from the Contractor. If additional time is required, the Owner shall notify the Contractor within the fifteen (15) day period and provide the reason for the delay and the expected date of the decision. The Owner will process VECPs expeditiously; however, it shall not be liable for any delay in acting upon a VECP.
 - (2) If the VECP is not accepted, the Owner shall notify the Contractor in writing, explaining the reasons for rejection.
 - (3) The Contractor may withdraw any VECP, in whole or in part, at any time before it is accepted by the Owner.

(4) Any VECP may be accepted, in whole or in part, by the Owner's award of a change order to this contract, citing this subsection. The Owner may accept the VECP, even though an agreement on price reduction has not been reached, by issuing the Contractor a notice to proceed with the change. Until a notice to proceed is issued or a change order incorporates a VECP to this contract, the Contractor shall perform in accordance with the existing contract. The Owner's decision to accept or reject all or any part of any VECP shall be final and not subject to disputes or otherwise subject to litigation.

(F) **Cost Sharing.**

(1) **Rates.** The Owner's share of savings is determined by subtracting the Owner's costs from instant contract savings and multiplying the result by fifty (50) percent. The Contractor's share shall be the remaining amount.

(2) **Payment.** Payment of any share due the Contractor for use of a VECP on this contract shall be authorized by a change order to this contract to accept the VECP, reduce the contract price or estimated cost by the amount of instant contract savings, and provide the Contractor's share of savings by adding the amount calculated to the contract price.

(G) **Subcontracts.** The Contractor may include an appropriate value engineering clause in any subcontract. In computing any adjustment in this contract's price under paragraph (F) above, the Contractor's allowable development and implementation costs shall include any subcontractor's allowable development and implementation costs clearly resulting from a VECP accepted by the Owner under this contract, but shall exclude any value engineering incentive payments; provided that these payments shall not reduce the Owner's share of the savings resulting from the VECP.

Subsection 105.1 – Authority of Engineer:

Add the following subsection:

Subsection 105.1.1 – Engineer's Evaluation: Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to subsections 105.3 and 106.4. The Engineer will be the sole judge of acceptability. No "or-equal" or substitute will be ordered, installed or utilized without Engineer's prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing. Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any "or-equal" or substitute. Engineer will record time required by Engineer and Engineer's Consultants in evaluating substitutes proposed or submitted by Contractor pursuant to subparagraphs 105.3 and 106.4(B) and in making changes in the Construction Documents (or in the provisions of any other direct contract with Owner for work on the project) occasioned thereby. Whether or not Engineer accepts a substitute item so proposed or submitted by Contractor, Contractor shall reimburse Owner for the charges of Engineer and Engineer's Consultants for evaluating each such proposed substitute item.

All submissions (plans, specifications, etc.) prepared and/or submitted by the Contractor that involves an engineering change to the original construction plan and specifications shall be sealed by an Engineer registered in the State of Arizona.

Subsection 105.2 – Plans and Shop Drawings:

Add the following:

- (A) Shop drawings are defined as drawings submitted to the Engineer by the Contractor pursuant to the contract, showing in detail (i) the proposed fabrication and assembly of structural elements and (ii) the installation (i.e., form, fit and attachment details) of materials or equipment. It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the Contractor to explain in detail specific portions of the work required by the contract.

- (B) Product Data is information on manufactured items, either stock or modified, and includes descriptive literature, operating data, performance curves, certified dimensional drawings, wiring or schematic control diagrams, piping, instrumentation, parts lists, and operating, maintenance and lubrication manuals.

Subsection 105.3 – Conformity with Plans and Specifications:

Add the following Subsection:

105.3.1 – Substitute Construction Methods or Procedures

If a specific means, method, technique, sequence, or procedure of construction is shown or indicated and expressly required by the Construction Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence or procedure of construction acceptable to Engineer. Contractor shall submit at least two (2) weeks prior to construction sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Construction Documents. The procedure for review by Engineer will be similar to that provided in subparagraph 106.4(B).

Subsection 105.5 – Cooperation of Contractor:

Add the following subsection:

105.5.1 – Partnering

The Owner intends to encourage the foundation of a partnering relationship with the Contractor and its subcontractors. This partnering relationship will be structured to draw on the strength of each organization to identify and achieve reciprocal goals. The objectives are effective and efficient contract performance intended to achieve completion within budget, on schedule, and in accordance with plans and specifications.

This partnering relationship will be bilateral in makeup. Any cost associated with effectuating partnering will be covered by the bid item. The initial partnering workshop shall be scheduled after award of the contract, and prior to the Notice to Proceed, and shall be facilitated by a third party competent in the fundamentals of partnering, and mutually acceptable to Contractor and Owner. The Contractor shall be responsible for scheduling, coordinating, and hiring the third party facilitator, and planning all of the partnering meetings in consultation with the Engineer. The Owner will be responsible to notify and coordinate attendance at the partnering meetings by other agencies. To achieve the desired partnering relationships, the Contractor will need to encourage attendance by its major subcontractors on the project. Follow-up workshops will be held periodically throughout the duration of the contract as agreed to by the Contractor and Owner.

An integral aspect of partnering is the resolution of disputes in a timely, professional, and non-adversarial manner. Alternative dispute resolution (ADR) methodologies will be encouraged in place of the more formal dispute resolution procedures. ADR will assist in promoting and maintaining an amicable working relationship to preserve the partnering relationship. ADR in this context is intended to be a voluntary, non-binding procedure available for use by the parties to this contract to resolve any dispute that may arise during performance.

Payment for Partnering Allowance will be made on the basis of invoices of actual costs, and will be for a total amount not to exceed the amount shown in the bid schedule for the item.

ITEM 105-1 – PARTNERING ALLOWANCE

Add the following subsection:

Subsection 105.5.2 – Pre-Construction Meeting:

After award of the contract and prior to the commencement of the work or mobilization, a pre-construction meeting shall be scheduled at a location and time (prior to mobilization and start of construction) to be agreed upon between the Owner and the Contractor. The Contractor shall make all necessary arrangements to have key personnel of the Contractor's company and of the Contractor's principal subcontractors present at the meeting. Each representative shall have authority to make commitments and act for their firm. The purpose of the pre-construction meeting is to discuss any specific concerns or potential problems that the Contractor is aware of, to provide general information appropriate to the contract, to identify responsible individuals for various functions within each organization, and to develop tentative dates for the start of construction. The Contractor shall submit to the Engineer during the pre-construction meeting the following documents:

1. Preliminary work schedule/sequence of construction;
2. Preliminary traffic control plan and Contractor Contact;
3. Emergency telephone numbers;
4. Signing authority letter;
5. Name and telephone number of the certified safety professional;
6. Preliminary copies of the NOI and SWPPP per Subsection 107.2.1;
7. Qualifications outlined in Subsection 105.6 and 107.6.3;
8. Estimated billing schedule;
9. Shop drawings;
10. Manufacturer's certification for all materials;
11. Material data safety sheets;
12. Preliminary survey layout, staking and excavation plans;
13. Contractor bid item cost breakdown as noted in the Special Provisions; and
14. Any other documents specified in the SGC's and SP's.

The pre-construction meeting will cover topics such as critical elements of the work schedule, payment application and processing of invoices. Additionally, a scheduled start date for the work will be determined.

The Contractor shall be responsible to take minutes of the pre-construction meeting and distribute copies to all meeting participants. The meeting minutes shall be distributed within forty-eight (48) hours of the meeting. At the subsequent construction progress meeting, the minutes will be attested or revised, as appropriate. The cost for attendance at the pre-construction meeting, and preparation and distribution of meeting minutes shall be incidental to the project and no extra payment will be made.

Add the following subsection:

Subsection 105.5.3 – Construction Progress Meetings:

Construction progress meetings shall be scheduled weekly, or as considered necessary by the Owner. The Contractor shall make all arrangements to have key personnel of the Contractor's company and of the Contractor's principal subcontractors present at all progress meetings; representatives shall have authority to make commitments and act for their firms. The Contractor shall assume full responsibility to act for and commit any subcontractor employed by the Contractor, whether or not such subcontractor is represented at the meeting.

During the construction progress meeting, the Owner's representative will act as chairman and will advise the Contractor of any administrative matters connected with the contract. The Contractor shall submit for review the Contractor's two (2) week rolling schedule. The Contractor's representative at these meetings shall be prepared to discuss and resolve construction problems and concerns, material delivery and vendor data submittals status, construction progress as measured against the Contractor's approved construction schedule and the Contractor's short range construction activities as provided on the Contractor's two (2) week rolling schedule. The Contractor shall not be relieved of the Contractor's responsibility to fulfill all of the terms of the contract as a result of any inferences drawn or suggestions made available at these meetings.

The Contractor shall be responsible to take minutes of the construction progress meetings and distribute copies to all meeting participants. The meeting minutes shall be distributed within forty-eight (48) hours of the meeting. At the subsequent construction progress meeting, the minutes will be attested or revised, as appropriate. The cost for attendance at meetings, and preparation and distribution of meeting minutes shall be incidental to the project and no extra payment will be made.

Subsection 105.6 – Cooperation with Utilities:

Add the following:

An attempt has been made to determine the location of all underground utilities, drainage pipes, and structures; however, it shall be the Contractor's responsibility to cooperate with the pertinent utility companies and private irrigation owners so that any obstructing utility installation(s) or private irrigation systems may be adjusted. The location of the underground and overhead utilities as shown on the plans is based on the best available information. The Contractor shall not assume that this represents an exact location of the utility line. No guarantee is made to the accuracy of the location shown on the plans. The Contractor shall determine for himself the exact location of all utilities prior to starting construction. Should Contractor's operations result in damage to any utility the location of which has been brought to the Contractor's attention, the Contractor shall assume full responsibility for such damage. Contractor shall contact Arizona Blue Stake (telephone number 602-263-1100) a minimum of two (2) working days before beginning any underground work. In addition, Blue Stake notification(s) shall be maintained on a current basis.

The Contractor shall bid their work recognizing that utilities may exist that are not shown on the plans. The Contractor shall consider these utility interferences when bidding the project. All existing utilities, unless otherwise noted shall be protected-in-place (PIP).

The Contractor shall ensure that utility interruptions are kept to a minimum. The Contractor shall notify the Engineer and affected landowners of utility interruptions at least two (2) days in advance of any interruptions, and Contractor shall ensure all utilities are connected and operable by the end of the workday that the interruption occurs.

It shall be the responsibility of the Contractor to verify the location of all utilities prior to any construction activities in a particular area where such facilities exist. All existing overhead and underground utilities shall be protected-in-place unless otherwise noted on the plans, these Supplementary General Conditions and/or Special Provisions.

At all times during construction, the Contractor shall comply with all laws, ordinances, rules, regulations, and safety requirements, including, but not limited to, the National Electric Safety Code and the Occupational Safety and Health Standards for General Industry when working in the vicinity of utilities.

Note: The cost for the repair of any damage to utilities, and any loss of revenue due to the loss of service of a utility that is in any way caused by the Contractor's actions shall be the sole responsibility of the Contractor at no cost to the project, Owner, or Engineer.

The following phone numbers should put the Contractor in contact with the proper personnel:

Flood Control District of Maricopa County, Construction Branch Manager	602-506-1501 or 4728
Arizona Public Service (APS) John Rael	602-371-6945
Qwest Communications Matthew Phillips	602-360-1393
Southwest Gas (SWG) Valerie Weller	602-484-5342
AT&T Fiber Optic Telephone Franco Jauregui	909-898-4776
Cox Communications (Cable TV) Terran Guterrez	623-328-3514
Cox Communications (Fiber Optics) Randy Sims	602-694-1783
El Paso Natural Gas Dennis Segars	602-438-4229
Maricopa Municipal Water District #1 Glen Vortherms	623-546-8266
Salt River Project - Distribution Mariann Ward	602-236-6389
Salt River Project - Transmission Steven Lopez	602-236-3786
Salt River Project - Irrigation	

Kyle Tilghman
Verizon Communications (Fiber Optics)
Dave Jordan

602-236-4884

602-241-6408

Add the following subsection:

Subsection 105.6.3 – Construction Water:

The costs for fees, permits, obtaining, transporting, distributions, and use of water for construction activities is considered incidental to the project. The cost for such uses of these water resources is considered incidental to the project.

Subsection 105.8 – Construction Stakes, Lines and Grades:

Add the following:

The Contractor must obtain in advance the approval of the Engineer to begin construction. Before such construction can begin, the Contractor will perform a survey check of existing ground elevations at the upstream and downstream ends of the project and provide such survey to the Engineer for review. This survey will be compared against the plan and finished grade elevations required at the upstream and downstream end of the improvements to ensure that construction can be completed as shown in the plans and will match the design elevations without the need to make any adjustments in the profile and grade.

- (A) The Contractor will utilize benchmarks shown in the plans to set line and grade for all construction. All surveying required for the project shall be the Contractor's responsibility. The Engineer will not set any construction stakes.
- (B) Before any construction work is started the Contractor shall perform all base surveys and cross sections of existing conditions that may be required as a basis for quantity determination.
- (C) The Contractor shall submit original construction surveyor's notes duly signed by a Registered Land Surveyor in the State of Arizona to the Engineer at the end of the project. Copies of the survey notes shall be submitted to the Engineer at the first weekly meeting after being generated.
- (D) It is mandatory that prior to the commencement of any construction activities, the Contractor, the Engineer and the consultant who prepared the plans will field verify project control identified on the plans. The physical location and description will be verified. The horizontal and vertical monument data relative to the assigned datum's will be verified using conventional electronic measurement techniques. Traditional field notes will be compiled and the original field notes will be provide to the Engineer. Such field verification will not be accomplished solely using GPS technology and equipment.
- (E) Record Drawings will be prepared by the Engineer of Record utilizing red-line working drawings maintained on the project site by the Contractor. These paper red-line working drawings shall be maintained by the Contractor in a current condition at all times, and updated at least weekly until completion of the work and shall be available for review by the Engineer and the Engineer of Record at all times. A formal review of the status of the red-line drawings will be conducted monthly just prior to compiling the contractor's payment estimate. A color copy of the final red-line working drawings shall be provided by the Contractor to the Engineer prior to project close out and prior to the final contract payment. Final contract payment may be delayed if it is found that the red-line working drawings are incomplete or inaccurate, and until appropriate corrections are made by the Contractor to the red-line working drawings.

- (F) Final surveyor as-built mylar drawings sealed by a Land Surveyor registered in the State of Arizona shall be provided by the Contractor to the Engineer for review and approval prior to project close out and prior to the final project payment. Final contract payment may be delayed if it is found that the surveyor as-built mylar drawings are incomplete or inaccurate, and until appropriate corrections are made.

Subsection 106.1 – Source of Materials and Quality:

Add the following:

Select material, aggregate base, mineral aggregate (including filter), steel products and pipe shall be obtained from commercial sources. Contractor shall pay all royalties, or any other charges or expenses, incurred in connection with the securing and hauling of the material. Contractor will be required to furnish Engineer with a list of its proposed commercial sources prior to use, and shall present certificates stating that the material produced from any commercial sources is in accordance with the Uniform Standard Specifications and these Supplementary General Conditions.

Subsection 106.2 – Samples and Tests of Materials:

Add the following:

The Contractor is responsible for all quality control in accordance with these Supplementary General Conditions and the contract Special Provisions. The locations (station, elevation, offset from construction centerline) of all field quality control testing shall be recorded by the Contractor and submitted to the Engineer in accordance with the Special Provisions.

The Contractor shall be required to calibrate all material testing apparatus outlined in these specifications, or which may be required for quality control testing, in accordance with the requirements of the equipment manufacturer.

Subsection 106.4 – Trade Names and Substitutions:

Replace with the following:

Whenever an item of material or equipment is specified or described in the Construction Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function and quantity required. Unless the specification or description contains or is followed by words reading that no like, equivalent or “or-equal” item or no substitution is permitted, other items of material or equipment of other Suppliers may be accepted by Engineer under the following circumstances:

- (A) “Or-Equal”: If in the Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an “or-equal” item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for acceptance of proposed substitute items.
- (B) Substitute Items: If in Engineer's sole discretion an item does not qualify as an “or-equal” item under subparagraph 106.4 (A), it will be considered a proposed substitute item. Contractor shall submit sufficient information as provided below to allow Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefore. The procedure for review by Engineer will include the following and may be supplemented in the

Special Provisions and as Engineer may decide is appropriate under the circumstances. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor. If Contractor wishes to furnish or use a substitute item of material or equipment, Contractor shall first make written application to Engineer for acceptance thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar in substance to that specified and be suited to the same use as that specified. The application will state the extent, if any, to which the evaluation and acceptance of the proposed substitute will prejudice Contractor's achievement of completion on time, whether or not acceptance of the substitute for use in the Work will require a change in any of the Construction Documents (or in the provisions of any other direct contract with Owner for work on the project) to adapt the design to the proposed substitute and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs or credits that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other Contractors affected by the resulting change, all of which will be considered by Engineer in evaluating the proposed substitute. Engineer may require Contractor to furnish additional data about the proposed substitute.

- (C) Contractor's Expense: All data to be provided by Contractor in support of any proposed "or-equal" or substitute item will be at Contractor's expense.
- (D) If the final placement of a product will remain the property of the municipality or utility and/or owned by the municipality or utility, that entity is responsible for issuing written approval for any equivalent or "or-equal" products. The Contractor or Supplier will submit to that entity the request and documentation for written approval of a product substitution. The Contractor will provide the entity's written approval to the Engineer at the Pre-Construction Meeting.

Subsection 106.5 – Storage of Materials:

Add the following:

The Contractor shall obtain approval of the Engineer when using vacant property to park and service equipment and store materials for use. The Contractor will obtain prior written approval of the property owner for such use and submit a copy of the approval to the Engineer prior to use of the property. In particular, the principal and auxiliary spillways shall be at all times kept clear of equipment, materials, or other obstructions.

The Contractor will monitor on a daily basis all activities within the Contractor Work Area (CWA), whether on County, City, or private property, that may result in the leakage of oils, fuels, vehicle wash water, which may contaminate soils, and promptly report any suspected leaks to the Engineer. The Contractor will be solely responsible at the Contractor's cost to correct and clean up any such leakage or other related problems.

The Contractor shall grade and revegetate or rehabilitate all construction yards, easements and limits of construction which are disturbed by construction or construction related activities to a condition similar to or better than the pre-existing condition.

Subsection 107.1 – Laws to be Observed:

Add the following:

(G) The source of Federal-aid funds used on this project are from PL-566. The PL-566 funds are exempt from the provisions of the Davis-Bacon Act.

Subsection 107.2 – Permits:

Replace with the following:

The Contractor shall obtain all permits and licenses, including but not limited to those required by the State of Arizona, Maricopa County, U.S. Government, and any local or federal agency; and shall pay all charges, fees, taxes, and provide all notices necessary and incidental to the due and lawful prosecution of the work.

Permits for earth moving may be obtained from Air Pollution Control, Maricopa County Department of Environmental Management, 2406 South 24th Street, Suite E-214, Phoenix, Arizona 85034, telephone number 602-506-6700. It is the responsibility of the Contractor to verify permit application fees.

In particular the Contractor will obtain all necessary AZPDES and SWPPP permits as required and in accordance with subsection 107.2.1.

Corps of Engineers Section 404 Permit:

A Corps of Engineers Section 404 permit will not be needed for this phase of the project.

Subsection 107.2.1 – AZPDES Permit Requirements:

- (A) This project is subject to the Arizona Pollutant Discharge Elimination System (AZPDES) storm water requirements for construction sites under the Arizona Department of Environmental Quality's (ADEQ's) General Permit for Arizona. Under provisions of that permit, the Contractor shall be designated as permittee, and shall take all necessary measures to assure compliance with the AZPDES General Permit for Arizona as well as all other applicable federal, state and local laws, ordinances, statutes, rules and regulations pertaining to storm water discharge. As the permittee, the Contractor is responsible for preparing, in a manner acceptable to the ADEQ, all documents required by this regulation, including but not necessarily limited to:
1. Storm Water Pollution Prevention Plan (SWPPP) for the project, including certification of compliance form. Contractor shall be required to develop, implement, update and revise the SWPPP, as necessary, in order to assure compliance with the ADEQ permit requirements. The SWPPP shall be retained on the project site at all times during construction.
 2. Notice of Intent (NOI) to assure compliance with the AZPDES General Permit for Arizona, including certification of signatures.
 3. Notice of Termination (NOT) of coverage under AZPDES General Permit for Arizona.
- (B) Preliminary copies of the NOI and the SWPPP shall be submitted to Owner during the pre-construction meeting and shall be subject to review by Owner prior to implementation.

- (C) Contractor shall submit the completed and duly signed NOI forms to ADEQ no later than seven (7) days after contract award. Proof of the submittal date must be provided to the Owner. If the work is within one quarter ($\frac{1}{4}$)-mile of an Impaired or Unique Water, the SWPPP needs to be submitted with the NOI to ADEQ. If the location is farther away than that, no SWPPP needs to be submitted to ADEQ but it still must be available on site.
- (D) When the discharge is to an Impaired or Unique Water or is in or near endangered species habitat as identified by ADEQ's smart NOI permitting system, applicants are not authorized under this permit for a minimum of thirty-two (32) business days following the receipt of the NOI and SWPPP. ADEQ may notify operators within this timeframe that there is a cause for SWPPP amendment, or denial of coverage as specified in Parts 1.D.5 and 1.D.6 of the general permit. If notification is not received in the thirty-two (32) business day time-frame, the Contractor may assume coverage under this permit according to ADEQ requirements. Contractor must notify Owner of the status of the NOI prior to commencing work. The applicant shall submit the NOI (application) to:

Arizona Department of Environmental Quality
Water Permits Section/Stormwater NOI (5415B-3)
1110 W. Washington Street
Phoenix, Arizona 85007
or fax to (602) 771-4674

If the facility has the potential to discharge to a municipal separate stormwater sewer system (MS4), the applicant must also forward a copy of the completed NOI to the owner/operator of the MS4 system at the time it is submitted to the Department.

Failure by the Contractor (or Subcontractors of any tier) to submit NOI's within the mandated time frame shall result in delay of the construction start date, and no claim for extension of time will be granted for such delay. A copy of the completed NOI shall be posted at the construction site and a copy of the general permit and SWPPP shall be on-site at all times.

- (E) Inspections of all storm water pollution control devices on the project shall be performed by the Contractor every seven (7) days or at least once every fourteen (14) calendar days, and also within twenty-four (24) hours of the end of a storm event of 0.50 inches or greater as required under provisions of the AZPDES General Permit for Arizona. A reduced inspection frequency may be used provided the conditions in Part IV.H.2. of the general permit have been met. Contractor shall prepare reports on such inspections and retain the reports for a period of three years after permit coverage expires or is terminated. Inspection reports shall be submitted monthly to Owner along with progress payment requests. Additionally, Contractor shall maintain all storm water pollution control devices on the project in proper working order, which shall include cleaning and/or repair during the duration of the project.
- (F) Contractor warrants that its employees and Subcontractors of any tier and their employees shall at all times comply with all applicable laws, ordinances, statutes, rules and regulations set forth by all federal, state and local governments and the Arizona Department of Environmental Quality in connection with AZPDES Permitting requirements and laws and regulations pertaining to air, groundwater and surface water quality.

Fines and penalties imposed by the ADEQ against Owner or the Contractor for Contractor's failure to comply with any of the requirements of AZPDES General Permit of Arizona shall be borne by the Contractor at no cost to the project.

- (G) Upon project completion, acceptance and demobilization, Contractor shall submit its completed, duly executed NOI form to the Arizona Department of Environmental Quality (and the appropriate municipality), at the address listed in Section (C) above, thereby terminating all AZPDES permit coverage for the project. Contractor shall then surrender to Owner copies of the SWPPP, inspection information and all other documents prepared and maintained by the Contractor in compliance of the AZPDES General Permit. Contractor shall retain the originals of such documents for a period of three (3) years following the completion of the project.
- (H) The Lump Sum price for the SWPPP shall include all material, labor, and all other costs relating to the preparation, installation and maintenance of the SWPPP during project construction, including assuring proper operation of the pollution control devices installed, and all maintenance, cleaning, and disposal costs associated with clean-up and repair following storm events, runoff or releases on the project. The Lump Sum price for the SWPPP shall be inclusive of all costs, and no additional claims shall be made by Contractor under any other specification provision of these documents, including Changed Conditions. Payment for this bid item shall be upon final completion and acceptance of the project, per Section 109.1.
- (I) Copies of all required forms and guidance for preparing the SWPPP are available in the "Drainage Design Manual for Maricopa County, Volume III Erosion Control." The manual is available at the Flood Control District, 2801 West Durango Street, Phoenix, Arizona 85009. For appropriate guidance and forms as provided by ADEQ the Contractor should refer to the ADEQ website at: <http://www.azdeq.gov>

Payment for AZPDES/SWPPP permit requirements shall be made on the basis of lump sum for all work described in Subsection 107.2 .1. for:

ITEM 107-1 – AZPDES/SWPPP PERMITS

Subsection 107.4 – Archeological Reports:

Add the following:

Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the Contractor, or any person working on the Contractor's behalf, shall be immediately reported to the Engineer. The Contractor shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Engineer. An evaluation of the discovery will be made by authorized personnel and the Engineer to determine appropriate actions to prevent the loss of significant cultural or scientific resources. The Contractor shall prevent the Contractor's employees from removing or otherwise disturbing such resources.

Subsection 107.5 – Safety, Health and Sanitation Provisions:

Add the following:

The entire construction site shall be considered a "Hard Hat Area" and all personnel in the area will be required to wear a hard hat. This includes all Contractor personnel and Subcontractor's employees.

Add the following subsection:

Subsection 107.5.3 – Compliance with the Arizona Communication Standard:

Owner will provide Contractor with Material Safety Data Sheets (MSDS) for any products known to exist on the site that are deemed health hazards. Contractor will provide a copy of Owner-provided MSDS to all Subcontractors.

Contractor will provide Owner and all Subcontractors with MSDS for any products that have or are deemed health hazards that will be brought onto the site or created on the site by either Contractor or by any Subcontractors.

Contractor will provide Owner with a statement certifying that all personnel (Contractor and Subcontractor) employed by Contractor or by a Subcontractor on the job site have received the required Hazard Communication Standard training.

Subsection 107.6 – Public Convenience and Safety:

Add the following:

The work area is within and adjacent to areas of public use, including roadways and businesses. The contractor shall provide protection measures, including, but not limited to, temporary fencing, as required to ensure the safety of the public in areas adjacent to the work area.

Add the following subsection:

Subsection 107.6.3 – Public Information and Notification:

Informing the public on a regular basis of construction activities and associated disruptions and inconveniences will be extremely important on this project. The Contractor shall employ a specialty public information service as a subcontractor to provide the community relations program for the project as described herein. Contractor shall work closely with the Contractor's subcontractor in developing and carrying out the community relations program. Contractor shall submit a history of the subcontractor's qualifications and experience in public information services at the pre-construction meeting for acceptance by the Engineer. The community relations program shall be designed to run the full length of calendar days in the contract for this project. The program will include but not be limited to:

1. Distributing a pre-construction information letter to all residents, businesses, fire stations, churches, schools, etc. within one half (½)-mile from project improvements.
2. Printing and distribution of public notices and/or newsletters as required or as directed by the Engineer within the above described geographic areas.
3. All public involvement and information activities will be in accordance with the Owners "Public Involvement and Public Information Guidelines, Latest Edition (August 2004)", a copy of which can be obtained from the Flood Control District Public Involvement Office at 602-506-2983.

The Contractor will use these or other means to inform the local citizens of necessary operations which create high noise levels, street closures, limited access, detour locations, haul route and material delivery routes, hours of construction and disruption of bus, trash, school bus and other delivery/pick-up routes.

The Contractor will be required to furnish a private line telephone to be used solely for receiving incoming calls from local citizens with questions or complaints concerning construction operations or procedures.

The Contractor shall publish this phone number and maintain a twenty-four (24)-hour answering service. The answering service shall be operated by Contractor personnel during all hours that work is being performed on the job site. The Contractor shall maintain a log of incoming calls, responses, and action taken which shall be submitted to the Engineer weekly and/or upon request.

Prior to the start of work, the Contractor shall notify, by letter, all affected businesses, churches, schools, fire stations, and residents of construction plans and schedules within the geographic area identified above. In addition, all schools and emergency services which serve the geographic area will also be notified even though they may be located outside the geographic area described above. The letter shall contain, as a minimum, the following information:

1. Name of Contractor;
2. Contractor twenty-four (24)-hour telephone complaint number;
3. Brief description of the project;
4. Name of Contractor project superintendent;
5. Name of Engineer;
6. Name of area supervisor;
7. Construction schedule including anticipated work hours; and
8. Traffic regulations including lane restrictions.

The Contractor shall submit a Public Information and Notification Plan to the Engineer at the pre-construction meeting. No payments shall be made for this item until the Engineer approves the plan.

The plan and work which is eligible for reimbursement shall include: meetings with impacted businesses, schools, emergency services, residents, etc.; scheduling; preparation and distribution of newsletter at least monthly; and maintaining a twenty-four (24)-hour telephone hot line for complaints.

The Contractor shall submit a final report/evaluation of the Public Information and Notification process performed for this project. This report shall be submitted before the Contractor receives final payment.

Payment will be based on invoices, and will be for a total amount not to exceed the amount shown in the bid schedule for the item **PUBLIC INFORMATION AND NOTIFICATION ALLOWANCE**, for work performed in notifying and coordinating with the local population impacted by this project. To cover the cost for administration and supervision, the General Contractor may add an amount equal to not more than five percent (5%) of the accumulated total invoiced billing for actual public information services provided by a Subcontractor. This cost for administration and supervision will be considered included in the "PUBLIC INFORMATION AND NOTIFICATION ALLOWANCE".

ITEM 107-2 – PUBLIC INFORMATION AND NOTIFICATION ALLOWANCE

Add the following subsection:

Subsection 107.6.4 – Project Signs:

Contractor shall provide and install three project information signs, at locations to be determined by the Engineer, at the start of construction. The signs will inform the public of the forthcoming project,

construction dates, and suggested alternate travel routes. Project signs shall include the names of all agencies participating in the project. The signs shall include the Contractor twenty-four (24)-hour hot line complaint telephone number. Signs shall be constructed in accordance with the Project Sign Information drawing to be provided to the Contractor at the pre-construction meeting. The signs shall be installed at the location(s) approved by the Engineer. The Contractor shall maintain the signs as necessary, and update the information as requested by the Engineer. Payment shall be made according to the allowance in the Bidding Schedule in installments of fifty (50) percent upon installation, and the remaining fifty (50) percent upon final payment for the work.

ITEM 107-3 – PROJECT SIGNS ALLOWANCE

Subsection 107.8 – Use of Explosives:

Delete in its entirety and replace with the following:

The use of explosives or blasting has not been approved for any construction activities on the project.

Subsection 107.9 – Protection and Restoration of Property and Landscape:

Add the following:

Under no circumstances shall the disposal of debris from construction operations create a blemish on the landscape. Material, which is to be stockpiled or disposed of off-site, shall not encroach on running or intermittent streams, or other waters of the U.S. unless the Contractor has obtained the appropriate permits in accordance with applicable state and federal regulations.

The Contractor shall protect-in-place all existing structures and other features along the project corridor and as may be identified on the plans, including but not limited to existing utilities, mail boxes, chain link fences, irrigation facilities, roadways, traffic signs, fencing, block walls, signs, railroad, and other structures and features near construction activities and existing vegetation outside of the right-of-way limits.

The Contractor will grade all Temporary Construction and Permanent Easement areas, and project areas which are disturbed during construction to the lines and grades shown on the plans, or as a minimum, where no lines and grades are shown, to a condition similar to or better than the pre-existing condition. Any disturbed areas resulting from the construction activities shall be appropriately re-vegetated upon completion of the project.

Areas and features shown on the plans as restricted areas shall not be encroached upon by the contractor. The Restricted Areas shown on the plans are identified as “limits of grading” and are areas to be protected during construction. Any encroachment into these areas by the contractor may result in penalties to the Contractor from the Engineer. The contractor will be responsible for replacement of any habitat within the restricted areas that is disturbed during construction to the satisfaction of the Engineer. Prior to any activities, the contractor shall schedule with a minimum 7 days advance notice a field demarcation of the restricted areas with the owner’s representative. The Contractor shall provide labor and materials to delineate these areas, as directed by the owners representative, and shall maintain these through construction. These areas will be delineated using 2 strands of ¼” yellow rope, flagging, and steel T posts to accurately delineate the area. This delineation shall be maintained during the duration of the project, and shall be reset by the contractor if washed out or otherwise damaged. This work shall be paid for as a lump sum.

ITEM 107-4 – RESTRICTED AREAS DELINEATION

Subsection 107.10 – Contractor's Responsibility for Work:

Add the following:

- (A) The Contractor shall maintain dust control measures at all times during the project. This is especially important along the project in the vicinity of residential areas. The Engineer reserves the right to direct the Contractor to maintain dust control measures.
- (B) Contractor is advised that the work will be subject to stormwater flows of water of varying amounts. Owner assumes no responsibility for notifying Contractor of any anticipated flows, nor for any damages incurred by Contractor to equipment or to any of the Contractor's work as a result of any flows of water.
- (C) Storm water runoff in the area generally flows from the northwest. The project intercepts scattered drainages. These drainages can convey flood flows as well as low flow nuisance flows. The area within the project limits upstream of the existing White Tanks FRS No. 4 is subject to impoundment of these flows. The Contractor shall take all necessary precautions to protect his/her work from damage that may be caused by such runoff and ponding.
- (D) The Contractor shall take all necessary action to protect the public from the construction work area. The Contractor will also notify the Engineer of any unauthorized personnel in the project area, including the presence of the general public.
- (E) Management of surface flows, subsurface flows, and groundwater within the project limits will be necessary in order to construct the project. The Contractor will develop a plan for such water management and submit it to the Engineer for review. No separate payment will be made for water management. The cost of water management shall be incidental to the total cost of the project.
- (F) No payment will be made for providing excavation protective works for such things as dewatering. The cost thereof shall be included in the bid price for the construction or installation of the items to which said excavation protective works are incidental or appurtenant.
- (G) The Contractor shall maintain dust control measures at all times during the project. This is especially important along the project in the vicinity of residential areas. The Engineer reserves the right to direct the Contractor to maintain dust control measures.
- (H) The Contractor shall not remove any vegetation, plants and/or trees off site.
- (I) Where no fences exist, or where existing fences are to be removed, the Contractor shall provide temporary fencing.

Subsection 108.1 – Notice to Proceed:

Delete Paragraph (A) and replace with the following:

- (A) Contractor shall commence work at least four (4) weeks after the Notice to Proceed or receipt of the AZPDES General Permit, whichever is the first to occur. Prior to beginning of mobilization work as specified in Section 202, the Contractor shall prepare and submit a work plan specified in Section 206.1.1 for review and approval by the Engineer. Mobilization work shall not be initiated until the work plan specified in Section 206.1.1 have been approved by the Engineer. It is recommended that the Contractor allow at least sixty (60) days in the construction schedule to meet this requirement prior to beginning of mobilization work. No additional compensation or time will be allowed as a

result of this requirement. All work shall be completed within **two hundred twenty (220)** calendar days beginning with the date specified in the Notice to Proceed.

ITEM 108-1 – WORK PLAN ALLOWANCE

Subsection 108.2 – Subletting of Contract:

Add the following:

For this project, Contractor shall perform, with its own organization, work amounting to fifty (50) percent or more of the total contract cost.

Subsection 108.4 – Contractor's Construction Schedule:

Delete in its entirety and replace with the following:

Contractor shall submit a proposed cost loaded CPM work schedule to Engineer at the pre-construction meeting for review before starting work using a software program that is acceptable to the Engineer. The Contractor shall supply the Engineer with a copy of the scheduling software and valid license for use during construction. The Contractor shall submit 2-week look-ahead schedules to Engineer at the weekly coordination meeting. The Contractor shall be responsible for the preparation and submittal to the Engineer, fully updated project schedules on a bi-monthly basis.

Contractor shall be solely responsible for the planning, scheduling and execution of the work to assure timely completion of the project.

Add the following subsection:

Subsection 108.4.1 – Contractor's Billing Schedule:

The Contractor shall furnish the Engineer an Estimated Billing Schedule which shall include the estimated amount of each billing for the total project at the pre-construction conference, and thereafter at monthly intervals as agreed to between the Contractor and Engineer.

Subsection 108.5 – Limitation of Operations:

Add the following:

The normal workweek shall be forty (40) hours, Monday through Friday, and the work hours will be determined at the pre-construction meeting. This does not imply that this contract can be completed on time utilizing normal working hours. The Contractor shall furnish sufficient forces and shall work such hours including overtime operations as necessary to ensure the completion of the work within the time required. **No night work will be allowed on this project unless approved by the Engineer.** Night work is defined between the hours of 7:00 PM and 6:00 AM. To work other than normal working hours, for other than emergency situations, the Contractor shall give the Engineer at least twenty-four (24) hours advance written notification and receive written approval before working. The notification shall include: the working hours, the type of work to be performed, and the name of and a phone number for the person in charge. Should the Contractor elect to perform any work after regular working hours, on weekends, or legal holidays, any charges incurred by the Owner for inspection of the work, surveys or tests of materials will be deducted from monies due or to become due to the Contractor.

Subsection 108.9 – Failure to Complete on Time:

Add the following:

The actual cost per calendar day incurred by the District for Administrative and Inspection Services on this project will be added to the daily charges as indicated by MAG TABLE 108, LIQUIDATED DAMAGES, and will be deducted from monies due or to become due to the Contractor for each and every calendar day that work shall remain incomplete after the time specified for the completion of the work in the proposal, or as adjusted by the Engineer. Nothing contained in this provision shall prohibit the Owner from deducting from monies due or to become due to the Contractor for any other costs incurred by the Owner directly attributable to the delay in completing this contract.

Subsection 109.2 – Scope of Payment:

Add the following:

In addition to the contained provisions, the work under this section shall consist of preparatory work and operations, including but not limited to, the movement of personnel, equipment, supplies and incidentals to the project site; the establishment of all offices, buildings and other facilities necessary for work on the project, and for all other work operations that must be performed and costs incurred prior to beginning work on the various items on the project site.

The “complete-in-place” rate shall include but not necessarily be limited to all labor, material and equipment costs for preparation, installation, construction, modification, alteration or adjustment of the items, which shall include all costs for salaries and wages, all payroll additives to cover employee benefits, allowances for vacation and sick leave, company portion of employee insurance, social and retirement benefits, all payroll taxes, contributions and benefits imposed by any applicable law or regulation and any other direct or indirect payroll-related costs. The rate shall also include but not necessarily be limited to all costs for indirect charges or overhead, mileage, travel time, subsistence, materials, freight charges for material to Contractor’s facility or project site, equipment rental, consumables, tools, insurance to the levels specified in Section 103.6, CONTRACTOR’S INSURANCE, all applicable taxes, as well as Contractor’s fee and profit. This rate shall further include all site clean-up costs and hauling of construction debris to disposal sites designated by the Engineer.

Payment will be made for only those items listed in the proposal and will not be made in accordance with the measurement and payment provisions of the MAG Standard Specifications where this differs from the items listed in the proposal. All materials and work necessary for completion of this project are included in proposal items. Any work or materials not specifically referred to in these items are considered incidental to the item and are included in the unit price. **Payment shall not be made for unused materials.**

It is the responsibility of the bidders to contact all municipalities in the area to determine if they will charge Contractor sales taxes or any other fees for work on this project. Any such taxes or fees shall be paid by Contractor.

Subsection 109.7 – Payment for Bond Issue and Budget Projects:

(A) To third paragraph, add:

Payment or release of retained funds shall be made to the Contractor within thirty (30) calendar days following final payment to the Contractor [reference (B) following], and Contractor furnishing to Engineer satisfactory receipts for all labor and material billed and waivers of liens from any and all persons and Subcontractors holding claims against the work. Additionally, Contractor shall furnish a

completed Certificate of Performance to Engineer evidencing it has satisfactorily discharged all its duties in connection with the work to be performed under this Contract. The form of Certificate of Performance shall be provided to Contractor by attachment to the Construction document.

(B) Add the following:

The final payment will be made to Contractor by Owner within thirty (30) days following receipt and approval of the final red-line working drawings, receipt and approval of the final surveyor as-built mylar drawings, receipt and acceptance of the completed Certificate of performance, execution of the Engineer's final estimate, and receipt by Owner of the Consent of Contractor's Surety to said final payment. If payment will be longer than thirty (30) days as aforesaid, Owner will provide Contractor specific written findings for reasons justifying the delay in payment.

(C) The Contractor's monthly pay estimate will be processed by the Owner's Construction Branch during the last week of the month.

Subsection 110 – Notification of Changed Conditions and Dispute Resolution:

Delete in its entirety and replace with the following:

The Contractor and Owner shall follow the established rules in the Maricopa Procurement Code.



SPECIAL PROVISIONS

CONTRACT FCD 2010C034

WHITE TANKS FLOOD RETARDING STRUCTURE NO.4
REHABILITATION – PHASE 1

PCN 201.02.31

DECEMBER 2010

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SECTION 201 CLEARING AND GRUBBING

(Replace this section of the MAG Uniform Standard Specifications with the following.)

SUBSECTION 201.1 DESCRIPTION:

This work shall consist of removal and disposal of objectionable material including all vegetation including shrubs, trees of all sizes (those not specifically called for salvage and relocation or to be protected in place under these Special Provisions and as shown on the Plans), from the right-of-way, easements, limits of work and such other areas as may be specified in the Special Provisions, required to perform grading operations, or shown on the Plans. Clearing and grubbing shall be performed in advance of grading operations.

Flood Control District of Maricopa County (FCDMC) biologist or its designee will survey for active nests if clearing and grubbing occurs between February 15th and June 15th to avoid violation of the Federal Migratory Bird Treaty Act. Additionally, FCDMC wildlife services consultants will survey for Desert Tortoises and Burrowing Owls prior to the start of Clearing and Grubbing.

Contractor shall stake out limits of construction (also referred to as limits of disturbance or limits of excavation) as shown on the plans and obtain Engineer approval prior to the start of grading operations or any other construction.

Contractor shall install temporary protective fencing at the limits of excavation and around protected areas. Temporary protective fencing shall consist at a minimum of four (4) foot height T-bar stakes at thirty (30) feet on center with a double strand of gold nylon rope. Temporary protective fencing shall remain in place for the duration of construction. Contractor shall completely remove temporary protective fencing at the conclusion of construction.

Prior to starting clearing, grubbing and stripping the Contractor must verify the location of existing utilities that may be damaged during this work.

SUBSECTION 201.2 PRESERVATION OF PROPERTY:

Existing improvements, adjacent property, utilities and other facilities, and trees and plants not to be removed, shall be protected from injury or damage resulting from the Contractor's operations, see Section 107.9 of the Supplemental General Conditions.

SUBSECTION 201.3 CONSTRUCTION METHODS:

The construction site and any borrow or disposal areas shall be cleared of all trees, stumps, brush, roots (in excess of one (1) inch in diameter), rubbish, debris and other objectionable matter, except as follows.

All trees and shrubs found suitable for improvement and beautification, which will not interfere with excavation or embankment or cause disintegration of the improvements shall not be disturbed. In any event, the Contractor shall avoid, as far as practicable, injury to shrubbery, vines, plants, grasses and other vegetation growing outside of the clearing limits. The dragging and the piling of materials of various kinds and the performing of other work which may be injurious to vegetation shall, insofar as practicable, be confined to areas which have no vegetation or which will be covered by embankment or disturbed by excavation during grading operations.

Vegetative and deleterious material shall be carefully removed and discarded from fill material. Hand removal of roots in excess of one (1) inch diameter may be required. Dispose of material generated from clearing and grubbing activities shall be disposed off site, at an approved landfill or greenwaste recycling facility. Cavities left below subgrade elevation by removal of stumps or roots shall be carefully backfilled and compacted. Any debris generated and encountered shall be removed and disposed of so as to leave the construction site and adjacent areas in a neat and finished condition, free from unsightly debris.

SUBSECTION 201.4 REMOVAL AND DISPOSAL OF SALVAGEABLE ITEMS:

Items and materials of salvage value as determined by the Engineer, unless incorporated in the new work, shall remain the property of the Owner and shall be stored in adjacent areas as directed by the Engineer. Such items and materials shall be carefully removed and in such a manner as to permit reuse.

SUBSECTION 201.5 PAYMENT, CLEARING AND GRUBBING:

No payment will be made for clearing and grubbing as such; the cost thereof shall be included in the price bid for the construction or installation of the items for which said clearing and grubbing is incidental or appurtenant.

No payment will be made for the removal or disposal of trees regardless of size. The cost thereof shall be included in the price bid for the construction or installation of the items for which said removal or disposal of trees regardless of size is incidental or appurtenant.

End of Section

SECTION 202 MOBILIZATION

(Add this section to the MAG Uniform Standard Specifications.)

SUBSECTION 202.1 DESCRIPTION:

The work under this section shall consist of preparatory work and operations, including but not limited to, the movement of personnel, equipment, supplies and incidentals to the project site; the establishment of all offices, buildings, utilities and other facilities necessary for work on the project, permits and licenses, and for all other work and operations that must be performed and costs incurred prior to beginning work on various items on the project site. The work under this section also includes the maintenance and utilities costs for all offices, buildings, and facilities during construction, and removal of all offices, buildings, and facilities upon completion of construction.

As specified in Subsection 108.1 of the Supplemental General Conditions, mobilization work shall not be initiated until the work plans specified have been approved by the Engineer.

SUBSECTION 202.1.1 Engineer's Field Office:

This work shall consist of providing and maintaining furnished Field Offices for the exclusive use of and occupancy by the Engineer and the Engineer's staff.

The Engineer's office shall be a building or mobile trailer erected at a location convenient to the project and acceptable to the Engineer. The Contractor's and the Engineer's offices shall not be in the same building or mobile trailer although the offices shall be located next to each other or within reasonable walking distance.

A separate conference/meeting facility shall be a building or mobile trailer erected adjacent to the office trailer.

All field office trailers will comply with ADA access requirements for the general public's use.

The field office shall be an approved and weatherproof building or mobile trailer providing a minimum of 600 square feet of clear floor space, not including the toilet area. The interior shall be partitioned into two offices with privacy doors. The conference trailer shall be of similar size and configuration without the toilet facility. Both structures shall have a minimum ceiling height of seven (7) feet and shall be provided with weatherproof doors equipped with adequate locking devices. Windows shall also be provided with adequate locking devices. The Contractor shall also provide the following:

- a. Lighting – Electric light, non-glare type luminaries to provide a minimum illumination level at desk height surfaces. A supply of replacement lamps and bulbs shall be maintained on site.
- b. Heating & Cooling – Adequate electrically powered equipment to maintain an ambient air temperature of seventy-two (72) degrees Fahrenheit plus or minus eight (8) degrees.
- c. Office Trailer Toilet – A commode and wash sink in a separately enclosed room within the building or mobile trailer, properly lighted, ventilated and complying with applicable sanitary codes. Contractor shall provide a storage cabinet and maintain supplies of toilet paper, paper towels, and liquid hand soap. Water and sewer service shall be furnished and maintained.

- d. Maintenance – The Contractor shall maintain all facilities and furnished equipment in good working condition and the office shall be professionally cleaned weekly.
- e. Fire Extinguishers – Two (2) mounted non-toxic, dry chemical, fire extinguishers meeting Underwriters Laboratories, Inc. approval for Class A, Class B, and Class C fires with a minimum rating of 2A:20B:10C shall be mounted in each structure.
- f. Electricity – Contractor shall provide twenty-four (24) hour electric power and pay for all electric services.
- g. Office Furnishings – Four (4) office desks with drawers, four (4) office chairs (padded, swivel type), two (2) eight (8) foot conference tables, seating for ten (10) with six (6) additional folding chairs, two (2) four (4) drawer letter size file cabinets, two (2) dry erase white boards, two (2) wall calendars, two (2) wall clocks, and three (3) wastebaskets and a larger waste container near the copy machine. The conference facility will require two (2) desks, two (2) office chairs, a conference table and chairs to seat twenty (20) people and twelve (12) additional folding chairs. All furnishings shall be in good working order.
- h. Fax, Printer, Scanner, Copier – Contractor shall provide a new dedicated fax, printer, scanner and copier for the exclusive use of the Engineer. The printer and copier shall be capable of reproducing and collating 8.5 by 11 inch and 11 by 17 inch copied documents. Contractor is to furnish all associated consumables, i.e., paper, toner, staples, etc. The printer shall be networked to the Engineer's computers with all required hardware and software installed and maintained. The digital scanner shall also be similarly networked and maintained. The fax shall be capable of telecommunicating via a dedicated land line or through a wireless service with all necessary hardware, software and service agreements furnished and maintained.
- i. First Aid Kit – Contractor shall provide complete first aid kits mounted in each facility with the products replenished as needed.
- j. Potable Water Supply – Contractor shall provide a potable water supply to the office trailer and pay for all water service. The office will require an electric water cooler and a supply of with factory bottled water and cups shall also be provided and replenished as needed.
- k. Coffee Service – Contractor shall provide an electric coffee maker and all coffee, filters, disposable cups and supplies weekly.
- l. Parking spaces with dust proof surface for twenty (20) vehicles.
- m. Security – Window and door security bars will be provided on the field office. The field office will also include an interior alarm system, which is monitored by a security service approved by the Engineer for the duration of the contract. The vicinity of the office facilities and parking area shall be covered by continuous video surveillance. The Contractor shall pay for the security monitoring service for the duration of the project.
- n. Two high-speed/broad band internet connections and wireless network via land lines or wireless modems will be provided for the use of District personnel and the Engineer. All costs and equipment (i.e. hardware and software; cable installation) associated with this service shall be borne by the Contractor for the duration of the contract.

The office shall be fully equipped and made available for the Engineer's use and occupancy prior to the start of any Contract work and not later than ten (10) days following initiation of mobilization work as specified in Subsection 108.1 in the Supplementary General Conditions. The Engineer will notify the Contractor, in writing, of the acceptability of the Field Office provided. The Contractor shall maintain the field office in operating condition until seven (7) days after acceptance of the Contract work.

The Contractor shall maintain all facilities in good operating condition and appearance for the designated period, after which all portable buildings or trailers, fencing, surfacing, and utilities shall be removed from the site, the areas cleaned and seeded if required and left in a neat and acceptable condition.

SUBSECTION 202.2 PAYMENT:

Payment for mobilization shall be made in accordance with these Special Provisions on the basis of the lump sum price bid and shall be full compensation for supplying and furnishing all materials, facilities, and services and performing all work involved as specified herein. The lump sum price bid shall not exceed three percent (3%) of the total project bid amount inclusive of mobilization and permits and licenses. No additional payment will be made for occupancy and services during periods of contract extension of time due to engineering changes or shutdowns. Payment of the mobilization bid line item will be at the discretion of the Engineer.

BID ITEM 202-1 MOBILIZATION

End of Section

SECTION 206 STRUCTURE EXCAVATION AND BACKFILL

(Replace this section of the MAG Uniform Standard Specifications with the following.)

SUBSECTION 206.1 DESCRIPTION:

Structure excavation shall consist of the excavation of the existing embankment crest, filter material, crest survey monuments, foundation soil, unacceptable soils within the foundation zone for the new center filter and other excavation designated on the Plans or in these Special Provisions as structure excavation.

Structure backfill shall consist of fill materials as described in Section 211. Areas of incidental fill shall be further identified and approved as needed to complete the Work as designed.

Structure excavation shall include the furnishing of all materials and equipment and the providing of other facilities that may be necessary to perform the excavations and the subsequent removal of these facilities, except where they are required or permitted by the Plans, Special Provisions or Engineer to remain in place.

The work includes structure excavation and shoring/retention systems, if any, required for the construction as designated on the plans or in these specifications. The Contractor shall be responsible for all other shoring/retention systems at locations and as deemed necessary by the Contractor during construction to protect roads for traffic flow, surface drainage features, underground utilities, and other equipment as noted in the project drawings. The design of such temporary shoring/retention systems for the trench is the responsibility of the Contractor, and plans for such structures shall be sealed by an Arizona Registered Engineer and submitted to the Engineer prior to construction for review and approval.

SUBSECTION 206.1.1 Sequence of Construction:

The Contractor shall submit to the Engineer, a Work Plan for review and approval at least four (4) weeks after the Notice to Proceed or receipt of the AZPDES General Permit, whichever is the first to occur. The Work Plan shall contain details of the planned construction sequence of structure excavation and backfill, borrow excavation and backfill procedures, and filter and fill construction. The Contractor shall provide the method, approach and equipment to be used for the each construction item. The Work Plan shall include any necessary shoring/retention system measures. All shoring/retention systems and slope stabilization measures, if needed, shall include the required calculations and necessary details for construction, sealed by a Professional Engineer registered in the State of Arizona.

The Work Plan shall also specify locations and depths of trenching anticipated on a daily basis, the equipment that will be used, and the bucket widths. The work plan shall include provisions for sampling and laboratory analyses, as well as backfill and compaction after the work is complete. The work plan shall include a Construction Emergency Action Plan and a safety plan that addresses open trench safety, overnight safety, OSHA safety requirements, tie-off/harness, cave-in etc. The Work Plan shall also address measures to be taken by the Contractor in the case of a trench vertical wall failure. A draft work plan will be submitted for review and comment by the FCDMC, NRCS, and ADWR. FCDMC, NRCS, and ADWR will require a minimum of five (5) working days to review the draft work plan. The results of such review shall be communicated to the Contractor by the District or its designated agent.

The construction of the project shall be completed in stages such that work is started and finished in one (1) segment of the dam prior to beginning work in another segment. Work shall be done sequentially within the following general segments: Station 99+89 to 117+39; Station 119+80.5 to 136+50; Station

136+50 to 157+69.7; and Station 159+00 to 164+95. The construction sequence for each segment of the project will generally be as follows:

- Remove the existing crest survey monuments;
- Excavate the top two (2) feet of the existing embankment to elevation 1,056.0 feet;
- Remove the existing center filter material along centerline;
- Remove the existing filter material within lateral finger drain trenches (where applicable);
- Excavate the foundation soils to the appropriate depth below the centerline trench;
- Place the geotextile on the downstream side of the centerline trench excavation;
- Place the new filter material within the centerline and lateral finger drain trenches;
- Cover the top of the centerline trench with geotextile and cut at downstream corner;
- Place 8 inches of embankment fill on the exposed embankment crest so that the center portion is situated at Elevation 1,056.67; and
- Place 4 inches of aggregate base on the exposed embankment fill so that the center portion is situated at Elevation 1,057.0.

SUBSECTION 206.2 EMBANKMENT CREST EXCAVATION:

Excavation of the embankment to an elevation of 1,056 feet is required to establish a wider footprint for the construction equipment to work on. The excavated embankment material shall be stockpiled as noted in these Special Provisions. As part of this excavation, crest survey monuments shall also be removed. These monuments are Type B style survey markers that were installed in general accordance with MAG Detail 120-1. The location and number of these monuments is depicted on the Plans. The crest shall not be excavated below elevation 1,056 feet.

Existing station markers are located along the crest of the embankment and shall be removed as part of the embankment crest excavation. Station markers shall be replaced after crest construction is finished. Construction materials for station markers shall consist of galvanized steel posts, black plate, and high intensity silver reflector material. Construction materials for new station markers shall be reviewed and approved by the Engineer.

SUBSECTION 206.3 CENTERLINE TRENCH EXCAVATION:

The centerline trench excavations will consist of the following general activities:

- Excavation of the centerline trench to the lines, grades and elevations as shown on the Plans.
- Excavated existing filter material shall be side-cast on the downstream slope of the embankment in uniform layers not measuring more than 6 inches thick. Care should be taken to ensure that the final downstream slope does not contain ridges or rills that would cause runoff to be channelized and increase erosion potential.

SUBSECTION 206.4 LATERAL FINGER DRAIN TRENCH EXCAVATION:

The lateral finger drain trench excavations will consist of the following general activities:

- Excavation of the lateral finger drain trenches to the lines, grades and elevations as shown on the Plans.
- Excavated existing filter material shall be side-cast on the downstream slope of the embankment in uniform layers not measuring more than six (6) inches thick. Care should be taken to ensure that the final downstream slope does not contain ridges or rills that would cause runoff to be channelized and increase erosion potential.
- Lateral finger drain trench bottom surface cleaning.

SUBSECTION 206.5 FOUNDATION EXCAVATION:

The Contractor shall coordinate with the Engineer to allow for safe observation and access by the Engineer to obtain periodic samples from the trench in the excavation spoils. Excavation shall be coordinated with the placement of filter aggregate. Foundation excavation material shall be placed within the disposal areas designated on the Plans.

The Contractor shall sequence the excavation operations and filter material placement to limit the amount of open trench within the embankment to no more than five hundred (500) lineal feet. In the event an emergency condition is declared, the contractor shall immediately backfill and compact to the extent feasible the entire open excavation, in accordance with Section 211 of these Special Provisions.

The Contractor shall excavate the foundation materials beneath the existing centerline trench to construct the 3-foot wide center filter extension. The limits of the proposed extension for the various parts of the work are approximately as indicated on the Plans. The intent of the extension excavation depth is to remove, to the greatest extent possible, unacceptable foundation soil materials. Unacceptable foundation soil materials are generally defined as soils that exhibit low in-place densities, low exploration blow counts, low seismic velocities and/or high collapse potential. The required foundation excavation will be approximately 28 feet deep below the existing crest, on average, except for localized deeper zones where it may extend as deep as 33 feet. The Engineer reserves the right to change the depth of the center filter extension if unacceptable soil conditions are encountered at greater depths in the extension excavation. No trench extension excavation is needed below the lateral finger drain trenches.

The foundation excavation shall be visually inspected by the Engineer and a representative of ADWR to ensure unacceptable soil materials have been thoroughly removed. The Engineer may require quality assurance testing be performed to identify unacceptable soil materials in the foundation. The foundation testing may include, but not be limited to, in-place density tests using the nuclear or sand cone methods. Additional localized deeper zones of unacceptable soil materials will be quantified by the Engineer and removed by the Contractor in accordance with Subsection 206.6 of this Special Provision. It will be important for the Engineer to closely observe this construction activity, and for the Contractor to cooperate with the Engineer in completing the foundation preparation and treatment.

At the direction of the Engineer, the Contractor shall proceed with the surface preparation as specified in Subsection 206.7 of this Special Provision.

SUBSECTION 206.6 FOUNDATION EXCAVATION ALLOWANCE:

The Contractor shall be responsible for foundation excavation of localized deeper zones of unacceptable soil materials as directed by the Engineer. The bottom of the trench extension shall be visually inspected by the Engineer to ensure localized deeper zones of unacceptable soil materials have been thoroughly removed. Unacceptable soil materials may include, but not be limited to, loose soils, pervious zones, and other similar soils as determined by the Engineer.

At the direction of the Engineer, the Contractor shall proceed with the surface preparation as specified in Subsection 206.7 of this Special Provision.

SUBSECTION 206.7 TRENCH BOTTOM SURFACE PREPARATION:

No special treatment for the trench bottom is required; however, the bottom of the trenches shall be visually inspected by the Engineer to ensure unacceptable soil materials have been thoroughly removed. Unacceptable soil materials may include, but not be limited to, loose soils, pervious zones, and other similar soils as determined by the Engineer. Additional localized deeper zones of unacceptable soil materials will be quantified by the Engineer and removed by the Contractor in accordance with Subsection 206.6 of this Special Provision. It will be important for the Engineer to closely observe this construction activity, and for the Contractor to cooperate with the Engineer in completing the foundation preparation and treatment.

SUBSECTION 206.8 INSPECTION:

All excavations shall be inspected and approved by the Engineer and a representative of ADWR as stated in Subsection 206.5 prior to placing any filter material. Any loose or disturbed zones shall be cleaned with a flat plate bucket. Any removed soils shall be replaced with filter material. Inspection of the excavation limits is required to verify lines and grades.

SUBSECTION 206.9 MEASUREMENT:

Measurement for payment of embankment crest excavation shall be on an in-place cubic-yard basis as determined by surveys and shall include station marker removal and replacement.

Measurement for payment of the existing centerline and lateral finger drain trench excavations shall be cubic yard, based on the neat lines shown of the Plans (3-foot wide) and the measured depth to the bottom of the existing trench excavation.

Measurement for payment of foundation excavation shall be cubic yard, based on the neat lines shown of the Plans (3-foot wide) and the measured depth to the bottom excavation.

Measurement for payment of foundation excavation over-excavation shall be cubic yard, based on the neat lines shown of the Plans (3-foot wide) and the measured depth to the bottom excavation.

No measurement for payment shall be made for bottom surface preparation; the cost thereof shall be included in the price bid for construction of the excavations. No measurement for payment shall be made for placement within the area designated on the Plans. No measurement for payment shall be made for incidental fill, compaction, or placement. The cost of incidental fill shall be included in the unit prices for construction of the excavations.

SUBSECTION 206.10 PAYMENT:

Payment for embankment crest excavation as noted on the Plans will be made on the basis of the price bid per cubic yard. The cost shall include all labor, materials, and equipment necessary to remove the unsuitable material from the embankment crest as shown on the Plans and placement within the area designated on the Plans.

BID ITEM 206-1 EMBANKMENT CREST EXCAVATION

Payment for the centerline trench excavation as noted on the Plans will be made on the basis of the price bid per cubic yard. The cost shall include all labor, materials, and equipment necessary to remove the filter material as shown on the Plans and placement within the area designated on the Plans.

BID ITEM 206-2 CENTERLINE TRENCH EXCAVATION

Payment for the lateral finger drain trench excavation as noted on the Plans will be made on the basis of the price bid per cubic yard. The cost shall include all labor, materials, and equipment necessary to remove the filter material as shown on the Plans and placement on downstream slope of the embankment as noted above.

BID ITEM 206-3 LATERAL FINGER DRAIN TRENCH EXCAVATION

Payment for foundation excavation will be made on the basis of the price bid per cubic yard not to exceed the amount shown in the bid schedule for this item. The cost shall include all labor, materials, and equipment necessary to remove the unsuitable material from the foundations as directed by the Engineer and placement within the area designated on the Plans and placement on downstream slope of the embankment as noted above.

BID ITEM 206-4 FOUNDATION EXCAVATION

Payment for foundation excavation over-excavation less than twenty-five (25) feet deep as directed by the Engineer will be made on the basis of the price bid per cubic yard not to exceed the amount shown in the bid schedule for this item. The cost shall include all labor, materials, and equipment necessary to remove the unsuitable material from the foundations as directed by the Engineer and placement within the area designated on the Plans. Use of the allowance shall be approved by the Engineer.

BID ITEM 206-5 FOUNDATION EXCAVATION ALLOWANCE LESS THAN 25 FEET

Payment for foundation excavation over-excavation greater than twenty-five (25) feet deep as directed by the Engineer will be made on the basis of the price bid per cubic yard not to exceed the amount shown in the bid schedule for this item. The cost shall include all labor, materials, and equipment necessary to remove the unsuitable material from the foundations as directed by the Engineer and placement within the area designated on the Plans. Use of the allowance shall be approved by the Engineer.

BID ITEM 206-6 FOUNDATION EXCAVATION ALLOWANCE GREATER THAN 25 FEET

End of Section

SECTION 210 BORROW EXCAVATION

(Replace this section of the MAG Uniform Standard Specifications with the following.)

SUBSECTION 210.1 LOCAL BORROW:

Local borrow shall consist of material excavated and used in the construction of fills. Local borrow shall be obtained by excavating from the designated borrow sources within the flood pool area shown on the Plans, foundation zone, or as directed by the Engineer. Local borrow shall be excavated to the lines and grades established by the Engineer.

Investigative soil data showing the borrow material is "generally" consistent with project requirements can be made available for the Contractor's understanding and use; however, it remains the Contractor's responsibility to satisfy the gradation, plasticity, and compaction requirements for fill. Copies of the Field Exploration Data Report and Design Reports that contain soils data (including sieve analyses) from onsite investigations will be made available for review upon request in accordance with Subsection 102.4 of the Supplementary General Conditions.

The Contractor is required to excavate borrow material and stockpile the material that will be used for embankment fill at pre-approved locations. Stockpiling is necessary to mix and blend the materials.

The Contractor shall submit to the Engineer a procedures and methods of borrow excavation and backfill within the Work Plan mentioned in Subsection 206.1.1 for review and approval four (4) weeks prior to commencing the work. Details of this work shall include descriptions of borrow excavation, stockpile construction, blending methods, hauling methods, moisture conditioning approach, and backfill methods.

Borrow material shall be free of wood, vegetation, or other deleterious matter.

The Contractor shall notify the Engineer two (2) weeks in advance of opening any borrow sites.

SUBSECTION 210.2 IMPORTED BORROW:

Imported borrow shall consist of filter and material aggregate base. The filter material and aggregate base shall meet the requirements in Section 211 of these Special Provisions.

SUBSECTION 210.3 PLACING AND COMPACTING:

Borrow material shall be placed as specified in Section 211 of these Special Provisions.

SUBSECTION 210.4 MEASUREMENT:

Measurement for payment of the excavation of borrow shall be made according to the quantity of material in cubic yards excavated from natural ground to finished grade as shown in the plans and completed using the average end areas method as follows:

- A. Contractor shall obtain cross sections of the original existing ground after clearing and grubbing and prior to any excavation.

- B. Cross sections shall be taken at a minimum of fifty (50) foot stations, and at angle points and the beginning and ending of curves.
- C. After excavation and establishment of the final grades, the Contractor shall obtain new cross sections at the same locations as the existing ground cross sections were taken.
- D. The Contractor shall plot the cross sections taken as described above showing both the original existing ground and final grades, and shall provide volumetric calculations.
- E. The Contractor shall submit the cross sections in electronic format, in either .dgn or .dxf format, and in hard copy form sealed by a Registered Land Surveyor.

The Engineer will compute the excavation quantities using a method which is best suited to obtain an accurate determination.

Imported borrow used for filter material construction shall be measured for payment in accordance with Section 211 of the Special Provisions.

SUBSECTION 210.5 PAYMENT:

Payment of excavation of borrow shall be made on the basis of the price bid per cubic yard not to exceed the amount shown in the bid schedule for this item. Payment shall include all excavation within the designated borrow source shown on the plans, incidental backfill, finished grading, hauling, dust control, survey as required, and all miscellaneous items necessary to accomplish the work in conformance to the Plans and these specifications. Use of the allowance shall be approved by the Engineer.

BID ITEM 210-1 LOCAL BORROW EXCAVATION - FLOOD POOL AREA ALLOWANCE

End of Section

SECTION 211 FILL CONSTRUCTION

(Replace this section of the MAG Uniform Standard Specifications with the following.)

SUBSECTION 211.1 DESCRIPTION:

Fill construction shall consist of constructing embankment fill, filter material and aggregate base. It shall also include the placing and compacting of approved fill material to the lines and grades in accordance with the Plans.

The Contractor shall provide fill construction procedures in the Work Plan that outlines all processes, equipment, and proposed construction approach for each of the materials outlined in this section of the Special Provisions. The Contractor's approach will require methodical planning and sequencing and may include, but is not required to, constructing access ramps on one or both sides of the embankment.

SUBSECTION 211.1.1 Filter:

The work under this subsection shall consist of filter construction to the lines and grades shown on the Plans. The minimum limits of filter are delineated on the Plans. The earthwork described in this section shall be coordinated with the requirements specific to fill construction and associated subsections.

The backfill material for the filter shall be a sub-rounded or rounded, non-crushed material. The filter shall be imported, commercially manufactured material, shall be uniformly washed and conform to the following requirements:

- A) Certificates of compliance or recent test results signed and stamped by a representative of the commercial supplier that ensures the filter material delivered to the site meets the filter requirements listed in these Special Provisions.
- B) Filter certified by the supplier shall be subject to further laboratory testing in accordance with these Special Provisions and as specified in Table D-1 (see Appendix D of the Contract Documents) to ensure uniformity in material delivered to the site in accordance with these Special Provisions.
- C) A lime additive, or any additive, to control the percent passing the No. 200 sieve and/or the plasticity index shall not be allowed. The addition of lime and other additives will prevent the filter from performing as designed.
- D) Filter shall not be produced by crushing materials.
- E) Filter materials shall not contain or be processed with known calcium carbonate origin or content.
- F) The filter materials shall be non-plastic when tested in accordance with ASTM D 4318.
- G) The filter shall be manufactured by a commercial material supplier. Both the coarse and fine fractions of the material for the filter, shall have the gradation requirements shown in Table 211-1 when tested in accordance with ASTM C 136 and C 117.

TABLE 211-1

FILTER	
Sieve	Percent Passing
1-1/2 inch	100
1 inch	100
3/4 inch	100
1/2 inch	100
3/8 inch	100
No. 4	95-100
No. 8	80-100
No. 16	50-85
No. 30	25-60
No. 50	5-30
No. 100	0-10
No. 200	0-3

The Contractor shall identify the methods, approach, and equipment to be incorporated for the construction of the filter in the Work Plan discussed in Subsection 206.1.1. Due to the potential for segregation of the filter material, extreme care shall be used in transport and delivery of filter material to the site. The Contractor's transport and delivery method shall be detailed in the Work Plan. This plan shall be submitted to the Engineer and approved prior to trenching for filter construction.

The Contractor will be required to stockpile all filter material on-site at pre-approved locations prior to placement. Stockpiling of filter material is necessary to sample and perform laboratory testing before it is **placed to verify that segregation of the material has not occurred**. Samples shall be taken by the Contractor and tested for gradation and moisture content in accordance with the methods and frequencies identified in Table D-1 (see Appendix D of the Contract Documents).

It may be necessary to blend and/or screen the filter material to meet the gradation requirements of the filter. Blending is not required if a single component filter material is used. The filter material shall not be gap graded. The additional handling and processing of the filter material to meet the gradation specification shall be the responsibility of the Contractor. To prevent contamination or degradation, filter material shall not be stockpiled onsite longer than seven (7) days unless approved by the Engineer nor shall the height of the stockpile exceed seven (7) feet.

During placement, the filter material shall be in-place tested for gradation and moisture content using down trench "bucket" testing or other methods approved by the Engineer.

SUBSECTION 211.1.2 Aggregate Base:

The work under this subsection shall consist of aggregate base (AB) placement to the lines and grades shown on the Plans for the White Tanks FRS No. 4. The minimum limits of AB are delineated on the Plans. Placement of the AB shall be in accordance to the drawing lines, grades, and elevations without deviation unless specific express written approval from the Engineer is provided. The Contractor is responsible for quality control to achieve completed dimensions and elevations as designed. The

Contractor also has an obligation to notify the Engineer upon discovery of discrepancies within the dimensions or elevations prior to work for clarification or approved field design changes.

AB material shall conform to MAG Section 702.

SUBSECTION 211.1.3 Embankment Fill:

The work under this subsection shall consist of embankment fill construction to the lines and grades shown on the Plans for the White Tanks FRS No. 4. The minimum limits of fill are delineated on the Plans.

Construction of the embankment fill shall be in accordance to the drawing lines, grades, and elevations without deviation unless specific express written approval from the Engineer is provided. The Contractor is responsible for quality control to achieve completed dimensions and elevations as designed. The Contractor also has an obligation to notify the Engineer upon discovery of discrepancies within the dimensions or elevations prior to work for clarification or approved field design changes.

Embankment fill shall consist of embankment soils excavated from the existing crest and/or foundation and on-site native soils from select borrow areas, free of vegetation, debris, organic contaminants, obtained from the borrow source(s) delineated on the Plans and these Special Provisions. Embankment fill shall be free of rocks and other solid material in excess of three (3) inches in size. The Embankment fill shall have a Plasticity Index (PI) ranging from at least three (3) to no greater than eighteen (18) when tested in accordance with ASTM D 4318 and have the gradation requirements shown in Table 211-2 when tested in accordance with ASTM D 422.

TABLE 211-2	
EMBANKMENT FILL	
Sieve	Percent Passing
3 inch	100
No. 4	60-100
No. 8	55-100
No. 40	40-95
No. 200	20-60

The Contractor is required to stockpile the material that will be used for embankment fill at pre-approved locations. Stockpiling is necessary to mix and blend the materials. It will be necessary to blend and may be necessary to screen the material to meet the gradation and plasticity requirements of the embankment fill.

The Contractor may be required to perform additional excavation, stockpiling, mixing, and blending of materials for embankment fill.

The stockpiled materials shall then be re-excavated in a manner that mixes and blends the materials and placed into a new stockpile. The re-stockpiled material shall be sampled and re-tested to determine if the material meets the requirements of these Special Provisions. The material from the new stockpile shall be excavated in a manner that mixes and blends the materials and used for embankment fill, structural fill,

common fill or landscape fill depending on the results of the soil testing. The Contractor is responsible for the materials meeting the gradation and plasticity requirements set forth in these Special Provisions.

Each completed stockpile shall not exceed twenty thousand (20,000) cubic yards of material. Samples shall be taken by the Contractor and tested in accordance with the methods and frequencies identified in Table D-1 (see Appendix D of the Contract Documents) each time material is stockpiled and again during placement. The additional handling and processing of the material to meet the gradation and plasticity requirements shall be the responsibility of the Contractor. The Contractor may choose to sample and test material from the borrow areas prior to stockpiling.

As stated in Section 210 of these Special Provisions, the Contractor shall submit to the Engineer a borrow excavation and backfill Work Plan for review and approval four (4) weeks prior to commencing the clearing and grubbing for the work. The plan shall include details of the borrow excavation, stockpile construction, blending methods, hauling methods, moisture conditioning approach, and backfill methods.

SUBSECTION 211.2 PLACING:

SUBSECTION 211.2.1 Filter:

Specific approval of the filter upon review of laboratory conformance testing results shall be obtained from the Engineer prior to placement. The Contractor's Work Plan identifying the methods, approach, and equipment to be incorporated for the construction of the filter shall be reviewed and approved prior to beginning work by the District, NRCS and ADWR within 5 working days from the date of receiving it. The results of such review shall be communicated to the Contractor by the District or its designated agent.

Placement shall be conducted using the appropriate combination of heavy equipment, small equipment, and labor. Placement of filter material to accurate lines, grades, and thickness, without contamination, is essential. Deviations from dimensions shall not be permitted without the Engineer's approval. Placement of the filter requires a well-planned method and approach from the Contractor which shall be outlined in the Work Plan prepared by the Contractor and approved by the Engineer. These placement methods shall utilize equipment that will prevent segregation of the filter material.

Filter shall be placed in a moist condition to minimize segregation and bulking. The required moisture content of the filter material during placement must be at a moisture content that achieves a filter material saturation between zero percent (0%) and five percent (5%) or ninety-five percent (95%) to one hundred percent (100%). The Contractor shall perform laboratory testing on the stockpiled filter material to verify that these filter material saturation ranges are appropriate. The contractor shall perform this verification tests by conducting laboratory testing at various moisture ranges in accordance with the testing procedure outline in Appendix E of the Contract Documents to determine the bulking moisture content and subsequent saturation percentage. The moisture content of the filter material at placement must allow for placement of the filter material in accordance with these Special Provisions. The minimum lift thickness shall be five (5) vertical feet, and the maximum allowable placement slope shall be forty-five (45) degrees. It is anticipated the placement of the filter will be in conjunction with excavation operations. A minimum separation distance of thirty (30) feet, measured from the filter leading edge toe to the excavation leading edge toe, will be required to ensure the filter is not contaminated by excavation spoils. In addition, the Contractor shall make sure the new filter material is not contaminated due to raveling and spalling of the existing filter material

Filter shall be placed by tremie method or other methods as approved by the Engineer. The maximum drop height for the placement of the filter into the excavated trench shall not exceed three (3) feet to minimize segregation. The Contractor is responsible for preventing contamination of the filter from sediments during rain events. In addition, the Contractor shall make sure the new filter material is not contaminated by spoils from the vertical excavation. The Contractor shall remove and replace any contaminated filter. Removal and replacement of commingled and contaminated filter material shall be at the Contractor's expense.

SUBSECTION 211.2.2 Aggregate Base:

Approval of AB by the Engineer will be based upon review of laboratory tests and field tests performed on the material placed on-grade. Placement shall be conducted using the appropriate combination of heavy equipment, small equipment, and labor. The Plans indicate measurements that define the limits of the AB. Deviations from dimensions shall not be permitted without the Engineer's approval.

AB material shall be placed in accordance with the lines, grades, and elevations shown on the Plans to within an allowable tolerance of +0.1 feet above design elevation.

SUBSECTION 211.2.3 Embankment Fill:

Approval of embankment fill by the Engineer will be based upon review of laboratory tests and field tests performed on the material placed on-grade.

Placement of embankment fill requires a well-planned method and approach from the Contractor. The Contractor will be required to submit a Work Plan for fill placement for approval prior to beginning the clearing and grubbing for the work (see Work Plan in Section 210 of these Special Provisions). Placement shall be conducted using the appropriate combination of heavy equipment, small equipment, and labor. The Plans indicate measurements that define the limits of the fill. Deviations from dimensions shall not be permitted without the Engineer's approval.

Embankment fill shall be moisture conditioned prior to transporting to its final destination and placed in uniform lifts and compacted to the minimum requirements as stated in Subsection 211.3.3.

The maximum particle size is three (3) inches in its greatest dimension. Material containing oversize rock will be rejected by the Engineer. However, should occasional random oversize material be encountered and the material otherwise meets the gradation requirements, the Contractor may employ hand labor and equipment to hand pick the oversize rock out of the loose lifts, only upon specific approval of the Engineer. Clods or hard lumps of earth greater than three (3) inches in greatest dimension shall be broken up and moisture conditioned before compacting the material in the embankment fill.

The loose thickness of each layer of embankment fill material before compacting shall not exceed eight (8) inches for conventional mechanized compaction equipment and shall not exceed four (4) inches when non-conventional, hand operated, compaction equipment is employed. Nesting of coarse particles will not be permitted.

Where embankment fill is constructed on top of underlying geotextile fabrics the Contractor shall be responsible for ensuring that the geotextile fabric is protected during embankment fill placement. In the event of damage to the geotextile fabric occurs, the Contractor shall immediately notify the Engineer and remove and replace the damaged fabric as recommended by Engineer at no cost to the Owner.

Embankment fill materials shall be placed in accordance with the lines, grades, and elevations shown on the Plans to within an allowable tolerance of +0.1 feet above design elevation.

SUBSECTION 211.3 COMPACTING:

SUBSECTION 211.3.1 Filter:

Mechanical compaction of the center filter material shall not be required, therefore it is anticipated that some post-construction settlement of the center filter material will occur. To reduce this settlement, the center filter material shall be placed with a mound at the top of the filter trench to account for future settlement. The Contractor is responsible for selecting a placement procedure. Water settling or jetting shall not be permitted.

SUBSECTION 211.3.2 Aggregate Base:

AB shall be placed and compacted in accordance with the requirements herein specified. AB placement shall consist of material compacted to a uniform density of not less than ninety-five percent (95%) of the maximum dry density and within a moisture range of two percent (2%) below optimum to two percent (2%) above optimum. Samples shall be taken by the Contractor and tested in accordance with the methods and frequencies identified in Table D-1 (see Appendix D of the Construction Documents).

SUBSECTION 211.3.3 Embankment Fill:

Embankment fill shall be constructed in compacted layers of uniform thickness and each layer shall be compacted in accordance with the requirements herein specified. Embankment fill construction shall consist of material compacted to a uniform density of not less than 95 percent of the maximum dry density and within a moisture range of two percent (2%) below optimum to two percent (2%) above optimum. Samples shall be taken by the Contractor and tested in accordance with the methods and frequencies identified in Table D-1 (see Appendix D of the Contract Documents).

If, in the opinion of the Engineer, the fill surface has dried excessively due to temperature and/or wind effects, been exposed to inclement weather (rain or flooding), or deformed due to other activities by the Contractor, the areas over which fills are to be placed shall be scarified to a depth of three (3) inches and re-conditioned to the appropriate moisture content to provide a bond between the existing ground and the material to be deposited thereon.

Where the embankment fill is constructed on top of underlying geotextile fabrics the Contractor shall be responsible for ensuring that the geotextile fabric is protected during embankment fill compaction. In the event of damage to the geotextile fabric occurs, the Contractor shall immediately notify the Engineer and remove and replace the damaged fabric as recommended by Engineer at no cost to Owner.

Compaction operations shall be accomplished by mechanical and vibratory methods, including padded foot rollers. Water settling or jetting shall not be permitted. The Contractor may be required to use separate compaction equipment for the filter and embankment fill to ensure that no cross-contamination occurs.

SUBSECTION 211.4 TESTS:

Pre-qualification testing and conformance testing prior to and during placement shall be conducted on the filter material, embankment fill, and AB. Quality Control testing shall be conducted by the Contractor on the fill materials in accordance with the test methods and minimum testing frequencies listed in Table D-1 (see Appendix D of the Construction Documents) and with the Construction Quality Control (CQC) Plan developed by the Contractor and approved by the Engineer prior to any fill construction.

The embankment fill and AB materials shall be thoroughly compacted to not less than the stated densities when tested and determined by ASTM D 6938 (nuclear gauge) and D1556 (sand cone), with the density and moisture content adjusted in accordance with the rock correction procedure for maximum density determination ASTM D 4718. The sampling method and size for oversize correction of the nuclear gauge result shall be as specified in Section 10.6.3 of ASTM D 6938.

The Contractor shall determine the maximum dry density and optimum moisture content of the embankment fill and AB in accordance with ASTM D 698 (Standard Proctor).

Failing QA or QC test results are the responsibility of the Contractor. Any re-working, fill removal, fill replacement, and re-testing shall be at the Contractor's expense.

SUBSECTION 211.5 MEASUREMENT:

Measurement of fill construction used to construct the filter, embankment fill, and AB surface shall be per cubic yard volumes, within the limits of dimensions shown on the Plans. The Engineer will compute the quantities of fill by a method, which is best suited to obtain an accurate determination.

SUBSECTION 211.6 PAYMENT:

Payment for embankment fill shall include: excavation, stockpiling, mixing and blending of materials, excavation from the stockpile, moisture conditioning, placing, compaction, grading, hauling, removal, dust control, disposal of excess material, survey as required, and all other miscellaneous items necessary to accomplish the work in conformance with the Plans and these specifications.

BID ITEM 211-1 EMBANKMENT FILL

Payment for filter material shall include: material cost and hauling to the site, moisture conditioning, placing, compaction, grading, on-site hauling, removal, dust control, disposal of excess material, survey as required, and all other miscellaneous items necessary to accomplish the work in conformance with the Plans and these specifications.

BID ITEM 211-2 FILTER

Payment for aggregate base material shall include: material cost and hauling to the site, moisture conditioning, placing, compaction, grading, on-site hauling, removal, dust control, disposal of excess material, survey as required, and all other miscellaneous items necessary to accomplish the work in conformance with the Plans and these specifications.

BID ITEM 211-3 AGGREGATE BASE

Payment for filter placed in over-excavated areas as directed by the Engineer will be made on the basis of the price bid per cubic yard not to exceed the amount shown in the bid schedule for this item. The cost shall include all labor, materials, and equipment necessary to place, moisture condition, and compact filter material as directed by the Engineer. Use of the allowance shall be approved by the Engineer.

BID ITEM 211-4 FILTER MATERIAL ALLOWANCE

End of Section

SECTION 225 WATERING

(Replace this section of the MAG Uniform Standard Specifications with the following.)

SUBSECTION 225.1 DESCRIPTION:

Water for compacting fill materials, constructing subgrade, placement of screened and crushed materials, and for laying dust caused from grading operations, shall be applied in the amounts and places as detailed in the Special Provisions or as directed by the Engineer.

The moisture content of soil shall be kept at a level sufficient to insure that dust will be kept at a minimum for the excavation, hauling, and disposal or placement of soil.

All fill materials shall be moisture conditioned with uniform water application prior to loading for transportation, spreading, or placing at the desired location. Blend soil with water to ensure uniform moisture content. Moisture content shall be adjusted to within the required range as specified in the applicable sections of these Special Provisions.

SUBSECTION 225.2 WATER SUPPLY:

Water shall consist of providing a water supply sufficient for the needs of the project for construction purposes such as moisture conditioning, excavation, dust control and the Contractor's means of hauling and applying the water required.

The Contractor shall make arrangements for and provide all necessary water for his construction operation and domestic use at his own expense.

If the Contractor purchases water from a water utility at a fire hydrant on or near the project, all arrangements shall be made by the Contractor at his own expense and payment made direct to the water utility as agreed upon. The Contractor shall use only those hydrants designated by the water utility in charge of water distribution and in strict accordance with its requirements for hydrant use. The Contractor is responsible for the conveyance of water from nearby sources and shall furnish all connections, wrenches, valves and small tools that may be necessary to meet the requirements of the water utility pertaining to hydrant use. Coordination and use of a local fire hydrant is the responsibility of the Contractor. There are no fire hydrants on District property.

If the Contractor acquires water from sources other than the water utility described above, any such water intended for filter material moisture conditioning shall be tested for mineral content prior to use. Test results shall be submitted to the Engineer for approval.

The Contractor is responsible for providing adequate water storage facilities (i.e., tanks, impoundments, etc.) as necessary to maintain a sufficient amount of construction water on-site at all times.

SUBSECTION 225.3 CONSTRUCTION EQUIPMENT:

The tank truck and/or trailer shall meet all safety and licensing regulations and the water shall be applied by sprinkling with tank trucks equipped with spray bars and suitable apparatus.

The location of any temporary water impoundments or tanks shall be approved by the Engineer.

SUBSECTION 225.4 MEASUREMENT:

No measurement will be made for watering. The Contractor is responsible for measurement and recording of progress and total water used as agreement is made with the utility or water district.

SUBSECTION 225.5 PAYMENT:

No payment will be made for watering as such; the cost thereof shall be included in the Contractor's price bid for the construction operation to which such watering is incidental or appurtenant.

End of Section

SECTION 231 GEOTEXTILE

(Add this section to the MAG Uniform Standard Specifications.)

SUBSECTION 231.1 DESCRIPTION:

The work under this section consists of furnishing and installing geotextile fabric in accordance with the Plans and these specifications. Geotextile fabric shall be placed to the limits and dimensions on the downstream side of the filter material within the earthen embankment, as shown on the Plans.

SUBSECTION 231.2 SUBMITTALS:

All brands of geotextile and all seams to be used shall be accepted on the basis of mill certificates or affidavits. The Contractor shall furnish the Engineer, in duplicate, a mill certificate or affidavit signed by a legally authorized official from the company manufacturing the geotextile. The mill certificate or affidavit shall attest that the geotextile meets the project requirements and the physical and manufacturing requirements stated in this specification.

The Contractor shall submit a Work Plan for placement of Geotextile. The Work Plan shall be reviewed and approved by ADWR and the Engineer prior to delivery of geotextile to the project site. The results of such review shall be communicated to the Contractor by the District or its designated agent. The Contractor shall communicate with the Engineer on the review and approval process.

The Contractor shall provide samples for testing to determine compliance with any or all of the requirements in this specification. Samples shall be submitted a minimum of thirty (30) days prior to the beginning of installation of the product. A written certificate of compliance signed by a legally authorized official from the company shall be submitted, in duplicate, upon delivery of the product. The certificate shall state that the product shipped to the site meets the project requirements and exceeds the minimum average roll values listed in Table 231-1. The contractor shall supply manufacture quality control tests for the product. All samples of fabric provided shall be from the same production lot as will be supplied for the contract, and shall be the full manufactured width of the geotextile by at least ten (10) feet long, except that samples for seam strength may be a full width sample folded over and the edges stitched for a length of at least five (5) feet. Samples submitted for testing shall be identified by manufacturer's lot designation. The manufacturer shall certify that the needle-punched geotextile has been inspected using permanent on-line metal detectors and does not contain any needles.

SUBSECTION 231.3 SHIPMENT, HANDLING, AND STORAGE:

Only approved geotextile rolls shall be delivered to the project site. All products shall be labeled, shipped, stored, and handled in accordance with ASTM D 4873. No hooks, tongs, or other sharp instruments shall be used for handling geotextile.

SUBSECTION 231.4 MATERIALS:

The geotextile shall equal or exceed the minimum average roll values listed in Table 231-1. Strength values listed are for the machine direction.

The geotextile shall be a needle-punched, non-woven geosynthetic fabric suitable for reinforcement applications. Acceptable geotextile materials to be used with the filter shall equal or exceed the minimum average roll values listed in Table 231-1. Strength values listed are for the machine direction.

TABLE 231-1

MINIMUM PHYSICAL REQUIREMENTS FOR GEOTEXTILE FOR FILTER		
Property	Requirement	Test Method
Grab Tensile Strength, lb	380	ASTM D 4632
Grab Elongation at Break, percent	50	ASTM D 4632
CBR Puncture Resistance, lb	1025	ASTM D 6241
Trapezoidal Tear, lb	150	ASTM D 4533
Mass per Unit Area, oz/yd ²	16	ASTM D 5261

Fibers used in the manufacturing of the geotextile shall consist of a long-chain synthetic polymer composed of at least 85 percent by weight of polyolefins, polyesters, or polyamides. Stabilizers and/or inhibitors shall be added to the base polymer if necessary to make the filaments resistant to deterioration caused by ultraviolet light and heat exposure. Reclaimed or recycled fibers or polymer shall not be added to the formulation. Geotextile shall be formed into a network such that the filaments or yarns retain dimensional stability relative to each other, including the edges. The edges of the geotextile shall be finished to prevent the outer fiber from pulling away from the geotextile.

Manufactured roll length and width shall be standard for the industry. Used or scrap pieces will not be accepted.

SUBSECTION 231.4.1 Seams:

Horizontal seaming of the geotextile shall not be allowed. Geotextile shall be overlapped at all vertical joints (perpendicular to the dam centerline) by a minimum of eighteen (18) inches.

SUBSECTION 231.5 INSPECTIONS, VERIFICATIONS, AND TESTING:

SUBSECTION 231.5.1 Manufacturing and Sampling:

Geotextile and factory seams shall meet the requirements specified in Table 231-1.

SUBSECTION 231.5.2 Site Verification and Testing:

Quality assurance testing shall be performed on the geotextile. The Contractor shall assist the quality assurance personnel with access to the geotextile rolls for sampling. Samples will be collected at the manufacturer prior to delivery to the site or on site. Samples shall be tested to verify that the geotextile meets the requirements specified in Table 231-1 of the Special Provisions. Samples shall be identified by manufacturer's name, type of geotextile, lot number, roll number, and machine direction. Testing shall be

performed at an approved laboratory. Test results from the lot under review shall be submitted and approved prior to deployment of that lot of geotextile. Rolls that are sampled shall be immediately rewrapped in their protective covering.

SUBSECTION 231.6 INSTALLATION OF THE GEOTEXTILE:

SUBSECTION 231.6.1 General:

The geotextile shall be placed in the manner listed in the Special Provisions and at the locations shown on the Plans. At the time of installation, the geotextile shall be rejected if it has defects, rips, holes, flaws, deterioration or damage incurred during manufacture, transportation or storage at no cost to the Owner.

SUBSECTION 231.6.2 Placement:

The geotextile shall be placed vertically within the excavated centerline filter trench on the downstream face. The Contractor shall weight the end of the geotextile strip to preclude twisting during placement to the required depths and widths. Strip weight shall not exceed 2 lbs per foot of lineal strip width and shall not cause damage to the geotextile.

Pinning of the geotextile to help hold it in place while the filter material is placed shall be allowed. The pins shall be removed as needed to relieve high tensile stress, which may occur during placement of filter material. Trimming shall be performed in such a manner that the geotextile shall not be damaged in any way.

Horizontal seaming of the geotextile shall not be allowed. Overlapping shall be in accordance with Subsection 231.6.4 in these Special Provisions. At the overlapping locations, the upstream facing panel shall be located closest to the leading edge of the filter placement, that is, the filter material shall cover the upstream facing panel first and the downstream facing panel second.

The geotextile shall not span the existing finger drains. The geotextile shall be terminated of either side of each finger drain as indicated on the Plans. No geotextile is needed within the lateral finger drain trenches.

SUBSECTION 231.6.3 Protection:

The geotextile shall be protected at all times during construction from contamination by surface runoff and any geotextile so contaminated shall be removed and replaced with uncontaminated geotextile. Any damage to the geotextile during its installation or during placement of filter shall be removed and replaced by the Contractor at no cost to the Owner.

The work shall be scheduled so that the covering of the geotextile with a layer of the specified material is accomplished within 1 calendar day after placement of the geotextile. Failure to comply shall require replacement of geotextile. The geotextile shall be placed such that no more than one roll width of the geotextile is exposed prior to filling the trench with filter material.

The geotextile shall be protected from damage prior to and during the placement of filter. Before placement of filter material, the Contractor shall demonstrate that the placement technique will not cause

damage to the geotextile. In no case shall any type of heavy equipment or motorized vehicle be allowed on the unprotected geotextile. Cushioning materials shall not be used with the geotextile for filter.

Any repairs, rips or damages to the geotextile should be reported immediately to the Engineer. Repairs, rips or damages that are approved by the Engineer should be noted on the as-built documents.

SUBSECTION 231.6.4 Overlapping:

The overlap of geotextile rolls shall be a minimum 18 inches. Appropriate measures shall be taken to insure minimum overlap. Only vertical overlaps in the direction of the filter backfilling process shall be allowed.

SUBSECTION 231.7 MEASUREMENT:

Measurement for installed geotextile for filter completed-in-place shall be per square yard to the nearest 1 square yard of protected area to the neat lines and dimensions shown on the drawings or to the limits authorized by the Engineer in the field. In any case, measurement will include only geotextile lining the downstream face of the center filter trench. No additional measurement of overlapped material will be made.

SUBSECTION 231.9 PAYMENT:

The following items are included in the contract unit prices for geotextile and shall not be counted a second time in the process of determining the extent of geotextile placed: Material and associated equipment and operation used in laps, patches, scrap, seams, or extra length; securing pins and associated material, equipment, and operations. No payment will be made for geotextiles replaced because of waste, contamination, damage, repair, or due to contractor fault or negligence.

Payment for geotextile for filter material shall be made on the basis of the price bid per square yard and shall constitute full compensation to the contractor for providing all plant, labor, material, and equipment and performing all operations necessary for the complete and satisfactory installation of the geotextile.

BID ITEM 231-1 GEOTEXTILE

Payment for additional geotextile placed in over-excavated areas as directed by the Engineer will be made on the basis of the price bid per square yard not to exceed the amount shown in the bid schedule for this item. The cost shall include all labor, materials, and equipment necessary to install and seam geotextile as directed by the Engineer. Use of the allowance shall be approved by the Engineer.

BID ITEM 231-2 GEOTEXTILE ALLOWANCE

End of Section

SECTION 350 REMOVAL OF EXISTING STRUCTURES

(Replace this section of the MAG Uniform Standard Specifications with the following.)

SUBSECTION 350.1 DESCRIPTION:

The work includes the demolition, removal, disposal and closure activities associated with the existing crest monuments, station markers and gates as necessary for the accomplishment of all construction activities. The crest monuments and gates that are planned to be removed for this project are noted of the Plans. The disposal of all construction debris waste material removed under this item shall be the responsibility of the Contractor and shall be disposed off site.

No fencing is planned to be removed for this project. If the Contractor deems that fencing needs to be removed for construction activities, the limits, demolition, removal, disposal and closure activities should be included in the Work Plan for Engineer review and approval.

SUBSECTION 350.2 METHODS:

The removal of existing structures shall be conducted in such a manner as not to injure utilities or any portion of the structure that is to remain in place.

All construction debris and waste materials shall be disposed of at an approved landfill. If a Maricopa County landfill is selected for disposition of waste materials and/or debris, a Maricopa County Landfill Use Permit will be required. Application for permit can be made at the Maricopa County Landfill Office, located at 2801 West Durango Street, Phoenix, Arizona 85009 (telephone (602) 269-2661).

The project construction limits shall be cleared of all trash and construction debris. Such material as collected shall be disposed of at an approved landfill site and shall be subject to landfill fees so assessed, which shall be included in the unit price bid for Bid Item 420-2 of these Special Provisions.

Weigh tickets from all landfill disposal must be furnished to the Engineer.

SUBSECTION 350.3 MISCELLANEOUS REMOVAL:

The work shall include, but not be limited to, the following, where called for on the Plans.

- A) Demolition of survey monuments and station markers on the embankment crest, within the limits of excavation for White Tanks FRS No. 4.
- B) Demolition of the existing gates (as shown on Plans) along the upstream and downstream side of the existing White Tanks FRS No. 4 and where necessary within the property boundary and any TCEs to accommodate construction activities. Gates shall be replaced prior to completion of the project and in accordance with Section 420 in these Special Provisions. Existing gates that are anticipated to be removed as part of the project have been identified on the Plans.

There is existing barbed wire fence along the property line. The Contractor may have to temporarily remove part of an existing barbed wire fence along the property line to maintain access to the work zone. It is the Contractor's responsibility to minimize the amount of impacted fence and to restore the fence to

at least its original condition. If the contractor deems that fencing needs to be removed for construction activities, the limits, demolition, removal, disposal and closure activities should be include in the Work Plan for Engineer review and approval. No additional compensation will be made for materials or labor.

SUBSECTION 350.4 MEASUREMENT:

No measurement will be made for survey monument and station markers removal.

No measurement will be made for fencing removal, if needed.

Measurement for gate demolition shall be incorporated into Bid Item 420-2 of these Special Provisions.

SUBSECTION 350.5 PAYMENT:

Payment for survey monument removal shall be considered incidental to the excavation of the existing dam crest listed in the plans and these specifications, and therefore no separate payment shall be made.

Payment for fencing removal shall be considered incidental to the construction and therefore no separate payment shall be made.

Payment for gate demolition shall be incorporated into Bid Item 420-2, which price shall be full compensation for the item complete as herein and on the Plans and these specifications.

End of Section

SECTION 401 TRAFFIC CONTROL

(Replace this section of the MAG Uniform Standard Specifications with the following.)

SECTION 401.1 – DESCRIPTION:

Traffic control shall conform to Section 401 of the MAG Uniform Standard Specifications, and Section 401 of the Maricopa County Department of Transportation Supplement to the MAG Uniform Standard Specifications, except as modified herein.

SUBSECTION 401.2 – FLAGMEN OR PILOT CARS:

Flagmen shall consist of providing sufficient flagmen or uniformed off-duty law enforcement officers to expedite the safe passage of traffic at locations where earth-hauling construction traffic enters or exits the project site.

SUBSECTION 401.3 – GENERAL TRAFFIC REGULATIONS:

Any road closure and/or restriction shall be coordinated with the appropriate jurisdiction as listed below:

Maricopa County Department of Transportation (MCDOT)	602-506-8600
Town of Buckeye	623-349-6000

The Contractor will develop routes for haul trucks on public streets, which will be submitted in writing through the Town of Buckeye and MCDOT for review and approval. The submittal shall include, but not be limited to, the proposed travel direction, turn movements, hours of use, street sweeping, watering, and clean up. Presently established truck routes must be used. The Town of Buckeye and MCDOT Traffic Engineering Department shall determine approach speed limits and speed limits within the construction areas.

The Contractor shall maintain access on Jackrabbit Trail at all times.

In addition to the traffic control required for the Contractor's daily operations, the following is also included as part of this item:

1. **Traffic Control General Requirements** – Construction shall be staged and scheduled to minimize disruption to the neighborhoods, schools and businesses. The Contractor shall provide and maintain at least two (2) variable message signs for project traffic control purposes for the duration of the project.
2. **Other Project Coordination** – The Contractor shall be responsible to coordinate and schedule work to minimize disruption or conflicts with other projects in the project area.
3. **Sanitation Pick-up** – The Contractor shall provide sanitation pick-up for affected residents by relocating trash containers, or by providing alternative measures.
4. **Special Events** – The Contractor shall coordinate special events scheduled to take place during construction into the construction schedule.

5. **Special Sign Requirements** – The Contractor shall provide, erect, and maintain advance notification, information, and directional access signs (for businesses, churches, hospitals, etc.) that may be required by the Engineer. The cost shall be included in the bid item for Traffic Control.
6. **Bus Stops** – The Contractor shall maintain all existing bus stop locations on this project in a safe manner, or provide alternate bus stop locations as required by the Engineer.
7. **Flagging of Traffic** – No flagging of traffic will be permitted during the peak traffic hours of 6:00 a.m. to 8:30 a.m. and 4:00 p.m. to 7:00 p.m. weekdays. If construction requires, intermittent flagging will be allowed from 8:30 a.m. to 4:00 p.m. to facilitate access for heavy construction equipment.
8. **Traffic Control Plan** – The Contractor shall submit a traffic control plan for approval by the appropriate jurisdiction including Maricopa County Department of Transportation Traffic Engineering Department, Town of Buckeye Traffic Engineering Department and the Engineer. The traffic control plan shall include the placement of all traffic control devices, including all conflicting signs to be covered/removed or relocated, or other features that may conflict with the placement of temporary signage. This plan shall be professionally drawn on a 24" x 36" reproducible medium and shall be submitted to the Engineer at the Pre-Construction meeting.
9. **Local Access Requirements** – The Contractor shall maintain local access to all side streets, access roads, driveways, alleys, and parking lots at all times and shall notify residents in writing seventy-two (72) hours in advance of any restrictions which will affect their access as described in these Special Provisions. The Contractor shall restore the access as soon as possible. If the primary access cannot be restored in a timely manner, the Contractor shall provide an alternative that shall be predetermined with the residents prior to imposing any restrictions. Any local street restrictions imposed shall be such that local area traffic circulation is maintained.
10. **Residential and Business Area Requirements**
 1. The Contractor shall communicate in writing by use of door hangers, and in person as necessary, with all residences, businesses, schools, and other entities impacted by the proposed traffic control during construction. Written communication shall be completed prior to construction and during construction as refinements are made. The Contractor shall provide information on the planned traffic restrictions including timing, start dates, and finish dates by the areas restricted. This information shall be refined and made more specific, such as maps identifying temporary parking areas by date, excavation limits by date, truck routes, and other impacts to the neighborhood.
 2. Parking areas for residences whose driveways are blocked shall be identified by the Contractor and communicated to the neighborhood by use of door hangers.
 3. The Contractor shall provide assistance to residents whose driveways are blocked by construction. This assistance will include carrying groceries, moving heavy objects from vehicle to home and home to vehicle, clearing paths, and other worked deemed necessary by the Engineer to compensate for the temporary inconvenience of construction within the neighborhood.
 4. In the event the trash cannot be collected from various residents due to construction activities, the Contractor will make arrangements to empty the trash containers for these residents.

The Contractor shall provide and maintain all necessary traffic controls to protect and guide traffic for all work in and around the construction area. This is especially important for Contractor operations that involve hauling material into and away from the project site. No changes in traffic speeds for local streets are anticipated to be required for construction of this project. All traffic controls must be installed prior to the start of any work in accordance with a Traffic Control Plan reviewed by the Engineer and approved by the local jurisdiction over the roadways affected.

The Contractor shall maintain all existing stop, yield, and street name signs erect, clean, and in full view of the intended traffic at all times. All traffic control signs and devices must be ballasted with sand bags sufficient to maintain the sign or device to warn and protect the public. Signs shall be mounted on wind-resistant spring-type bases when conditions warrant or when requested by the Engineer.

Any warning signs or devices that must remain in place overnight shall be protected with lighting to warn the public.

The Engineer reserves the right to require of the Contractor any devices or services deemed necessary to protect the traveling public and users of the local streets around the project area.

SUBSECTION 401.4 MEASUREMENT:

No measurement for a lump sum payment will be made for traffic control implemented by the Contractor for construction or delivery of equipment or materials.

No measurement will be made for traffic control devices.

No measurement will be made for flagmen or uniformed off-duty law enforcement officers.

SUBSECTION 401.5 PAYMENT:

Payment for traffic control shall be made on the basis of the lump sum price bid and shall be full compensation for all work, including mobilization, placing, storing, removal and maintenance of all traffic control devices, signing and striping, flag persons, and other activities incidental to the implementation of the approved traffic control plan.

BID ITEM 401-1 TRAFFIC CONTROL

End of Section

SECTION 405 MONUMENTS

(Replace this section of the MAG Uniform Standard Specifications with the following.)

SUBSECTION 405.1 DESCRIPTION:

The primary scope of work is the utilization and protection of existing survey monuments. Construction of new survey monuments is required in the event an existing monument was inadvertently damaged or altered. No new monuments are planned for this phase of the project. The dam stationing associated with the existing monuments is shown on the Plans.

The Contractor is required to utilize at least two of the benchmarks shown on the Plans to tie-in construction layout for work and as-built survey data. In addition, construction activity involving heavy earthmoving equipment shall be conducted using delineated work zones and planned haul routes that avoid existing subsidence monuments (including project survey control stakes). The Contractor has the responsibility of protecting the selected survey monuments from damage and inadvertent altering from its own earthmoving equipment and construction activity, including its subcontractors.

SUBSECTION 405.2 MATERIALS:

No new monuments are planned for this phase of the project. However, if an existing monument is inadvertently damaged or altered and needs to be replaced, the monument materials shall conform to the latest revision of the MAG Standard Detail 120-1, Type B. Construction materials for new monuments shall be reviewed and approved by the Engineer.

Station markers shall be replaced after crest construction is finished. Construction materials for station markers shall consist of galvanized steel posts, black plate, and high intensity silver reflector material. Construction materials for new station markers shall be reviewed and approved by the Engineer.

Materials required for the protection of existing monuments shall include, but is not limited to, painted lath or staking, flagging, barricades, orange safety fence, etc.

SUBSECTION 405.3 CONSTRUCTION:

If needed, monument construction shall conform to the latest revision of the MAG Standard Detail 120-1, Type B.

Cast-in-place monuments shall be cast in drilled holes without the use of forms. All loose material shall be removed from the drilled holes prior to concrete placement. The exposed surface of the finished monuments shall be uniform, of even texture, and shall be free from holes, cracks and chipped edges.

Brass caps provided by the District shall be placed in survey monuments before the concrete foundation has reached initial set and shall be firmly bedded in the concrete. The concrete foundation shall be so located that the reference point will fall within a one (1) inch circle in the center of the brass cap.

Stationing markers shall be constructed in accordance with these specifications.

SUBSECTION 405.4 INSTALLATION:

If needed, survey monuments shall be reset in position to equal the recorded location of the altered or damaged monument with tolerances allowed in the industry and agreed upon by the District.

Stationing markers shall be installed on the upstream edge of the dam crest as directed by the Engineer.

SUBSECTION 405.5 MEASUREMENT:

No new monuments are planned for this phase of the project; therefore, no measurement will be made for survey monuments.

Measurement for station maker removal and replacement shall be incorporated into Bid Item 206-1 of these Special Provisions.

SUBSECTION 405.6 PAYMENT:

No payment shall be made for protection or possible replacement of a new survey monument. Should the replacement of a survey monument be necessary, the Contractor shall bear the associated costs for construction and independent detailed survey and seal by a registered land surveyor.

No payment will be made separately for materials or installation of the stationing markers. The cost thereof shall be included in the payments for monuments.

Payment for station maker removal and replacement shall be incorporated into Bid Item 206-1, which price shall be full compensation for the item complete as herein and on the Plans and these specifications.

End of Section

SECTION 420 NEW FENCING

(Replace this section of the MAG Uniform Standard Specifications with the following.)

SUBSECTION 420.1 DESCRIPTION:

This work shall consist of furnishing all materials and constructing permanent smooth wire fence gates at the locations and in accordance with the details shown on the Plans. Gates shall be of the types and sizes shown on the Plans and shall be constructed in accordance with the requirements of these specifications.

The Contractor may construct a separate, temporary security fence within the limits of work at his option. No payment will be made for temporary fencing.

SUBSECTION 420.2 MATERIALS:

Smooth fencing wire shall be composed of 4 strands of 12-gage galvanized steel wire and shall conform to ASTM A 854.

Posts, rails, braces and caps shall conform to the requirements of the details shown on the Plans. Cement concrete shall conform to the requirements of the details shown on the Plans.

SUBSECTION 420.3 CONSTRUCTION METHODS:

SUBSECTION 420.3.1 Fence Construction (as needed):

As stated in Section 350 of these Special Provisions, no fencing is planned to be removed for this project. If the contractor deems that fencing needs to be removed for construction activities, the details related to removal and installation activities should be included in the Work Plan for Engineer review and approval and shall follow the details on the Plans. In addition, before any fence is installed, the Contractor shall submit to the Engineer for approval, shop drawings showing the details of all fittings proposed to be furnished. Posts shall be spaced at not more than twenty-five (25) foot intervals, measured from center to center of posts, and shall be placed in a vertical position. Changes in line or grade where the angle of deflection is thirty (30) degrees or more shall be considered as corner and slope points, respectively, and corner or slope posts shall be installed at these points. Excavation in excess of one (1) foot to remove high points will not be allowed.

SUBSECTION 420.3.2 Gate Construction:

The width of the gate to be installed shall be as indicated on the Plans. Gates in which the width of the leaf is greater than 6 feet shall be constructed with an internal horizontal or vertical stiffener of the same diameter as the frame as indicated in the construction details shown on the Plans.

All gate piping and hardware shall be galvanized steel

The corners of gate frames shall be fastened together and reinforced with a fitting designed for the purpose or by welding. All welds and any ground surfaces shall be ground smooth and coated with Galvinox or approved equal.

Semi-cantilever gates shall be provided with combination steel or malleable iron catch and locking attachment of approved design, and shall be subject to approval of the Contracting Agency. Stops to hold gates open and a center rest with catch shall be provided on all double drive gates and on all other gates where required.

SUBSECTION 420.4 MEASUREMENT:

Measurement for smooth wire fence gates shall be per each gate completed.

SUBSECTION 420.5 PAYMENT:

Payment for removal and installation of permanent smooth wire gates shall be made on the basis of the price bid for each gate required by the Plans, which price shall include full compensation for removal (as stated in Section 350 of these Special Provisions), furnishing the gates, together with all necessary gate posts, fittings and hardware, and doing all the work involved in installing the gates complete in conformance to the Plans and these specifications. Double gates will be paid for at the price bid for each and shall include furnishing and installing both leaves.

BID ITEM 420-2 FENCE GATE

End of Section

APPENDIX "A"

Contract FCD 2010C034

White Tanks FRS No. 4 Rehabilitation Project – Phase 1

PCN 201.02.31

FEDERAL REQUIREMENTS

**SPECIAL PROVISIONS - APPENDIX A
FEDERAL REQUIREMENTS**

The cooperator/signatories agrees to comply with the following special provisions which are hereby attached to this agreement, to the extent they are applicable.

I. Drug-Free Workplace.

By signing this agreement, the cooperator is providing the certification set out below. If it is later determined that the cooperator knowingly rendered a false certification, or otherwise violates the requirements of the Drug-Free Workplace Act, the NRCS, in addition to any other remedies available to the Federal Government, may take action authorized under the Drug-Free Workplace Act.

Controlled substance means a controlled substance in Schedules I through V of the Controlled Substances Act (21 U.S.C. 812) and as further defined by regulation (21 CFS 1308.11 through 1308.15);

Conviction means a finding of (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes;

Criminal drug statute means a Federal or non-Federal criminal statute involving the manufacturing, distribution, dispensing, use, or possession of any controlled substance;

Employee means the employee of a grantee directly engaged in the performance of work under a grant, including: (1) AU direct charge employees; (ii) AD indirect charge employees unless their impact or involvement is insignificant to the performance of the grant; and, (iii) Temporary personnel and consultants who are directly engaged in the performance of work under the grant and who are on the grantee's payroll. This definition does not include workers not on the payroll of the grantee (e.g., volunteers, even if used to meet a matching requirements; consultants or independent contractors not on the grantees' payroll; or employees of sub-recipients or subcontractors in covered workplaces).

Certification:

- A. The grantee certifies that it will or will continue to provide a drug-free workplace by:
- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;

- (b) Establishing an ongoing drug-free awareness program to inform employees about
 - (1) The danger of drug abuse in the workplace;
 - (2) The grantee's policy of maintaining a drug-free workplace;
 - (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
 - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
 - (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
 - (d) Notifying the employee in the statement required by paragraph 9a) that, as a condition of employment under the grant, the employee will -
 - (1) Abide by the terms of the statement; and
 - (2) Notifying the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such a conviction;
 - (e) Notifying NRCS in writing, within ten calendar days after receiving notice under paragraph 9(d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer or other designee on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;
 - (f) Taking one of the following actions, within 30 calendar days of receiving notice under paragraph (d)(2), with respect to any employee who is so convicted -
 - (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State or local health, law enforcement, or other appropriate agency;
 - (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e), and (f).
 - (h) Agencies shall keep the original of all disclosure reports in the official files of the agency.
- B. The cooperator may provide a list of the site(s) for the performance of work done in connection with a specific project or other agreement.

II. Certification Regarding Lobbying (7 CFR 3018) (Applicable if this agreement exceeds \$100,000)

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the cooperator, to any person for influencing or attempting to influence an officer or employee of an agency, Member of Congress, and officer or employer of Congress, or a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency,, a Member of Congress, an officer or employee of Congress,, or an employee of a Member of Congress, in connection with this Federal contract, grant, loan., or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The cooperator shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants., and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, Title 31, U. S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

III. Certification Regarding Debarment, Suspension, and Other Responsibility matters Primary Covered Transactions. (7 CFR 3017)

- (1) The cooperator certifies to the best of its knowledge and belief, that it and its principals:
 - (a) Are not presently debarred,, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

- (c) Are not presently indicted for or otherwise criminally or civil charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal has one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the primary cooperator is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this agreement.

I. Clean Air and Water Certification

(Applicable if this agreement exceeds \$100,000, or a facility to be used has been the subject of a conviction under the Clean Air Act (42 U.S.C. 1857c-g(c)(1) or the Federal Water Pollution Control Act (33 U.S.C. 1319(c)) and is listed by EPA, or is not otherwise exempt.)

The cooperator signatory to this agreement certifies as follows:

- (a) Any facility to be utilized in the performance of this proposed agreement is _____, is not X, listed on the Environmental Protection Agency List of Violating Facilities.
- (b) To promptly notify the State or Regional Conservationist prior to the signing of this agreement by NRCS, of the receipt of any communication from the Director, Office of Federal Activities, U. S. Environmental Protection Agency, indicating that any facility which he/she proposes to use for the performance of the agreement is under consideration to be listed on the Environmental Protection Agency List of Violating Facilities.
- (c) To include substantially this certification, including this subparagraph (c), in every nonexempt sub-agreement.

Clean Air and Water Clause

(Applicable only if the agreement exceeds \$100,000, or a facility to be used has been the subject of a conviction under the Clean Air Act (42 U.S.C. 1857c-g(c)(1) or the Federal Water Pollution Control Act (33 U.S.C. 1319(c)) and is listed by EPA or the agreement is not otherwise exempt.)

A. The cooperator agrees as follows:

- (1) To comply with all the requirements of section 114 of the Clean Air Act as amended (42 U.S.C. 1857, et seq., as amended by Public Law 91-604) and section 308 of the Federal Water Pollution Control Act (33 U.S.C. 1251 et. sq., as amended by Public Law 92-500), respectively, relating to inspection, monitoring, entry, reports, and information, as well as other requirements specified in section 114 and section 308 of the Air Act and the Water Act, respectively, and all regulations and guidelines issued thereunder before the signing of this agreement by NRCS.
- (2) That no portion of the work required by this agreement will be performed in a facility listed on the Environmental Protection Agency List of Violating Facilities on the date when this agreement was signed by NRCS unless and until the EPA eliminates the name of such facility or facilities from such listing.
- (3) To use their best efforts to comply with clean air standards and clean water standards at the facilities in which the agreement is being performed.
- (4) To insert the substance of the provisions of this clause in any nonexempt sub-agreement, including this subparagraph A. (4).

B. The terms used in this clause have the following meanings:

- (1) The term "Air Act" means the Clean Air Act, as amended (42 U.S.C. 1957 et seq., as amended by Public Law 91-604).
- (2) The term "Water Act" means Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Public Law 92-55).
- (3) The term "clean air standards" means any enforceable rules, regulations, guidelines, standards, limitations, orders, controls, prohibitions, or other requirements which are contained in, issued under, or otherwise adopted pursuant to the Air Act or Executive Order 11738, an applicable implementation plan as described in section 110(d) of the Clean Air Act (42 U.S.C. 1857c-5(d)), and approved implementation procedure or plan under section 111(c) or section 111(d), respectively, of the Air Act (42 U.S.C. 1857C-6(c) or (d)), or an approved implementation procedure under section 112(d) of the Air Act (42 U.S.C. 1857c-7(d)).

- (4) The term "clean water standards" means any enforceable limitation, control condition, prohibition, standards, or other requirement which is promulgated pursuant to the Water Act or contained a permit issued to a discharger by the Environmental Protection Agency or by a State under an approved program, as authorized by section 402 of the Water Act (33 U.S.C. 1342), or by a local government to ensure compliance with pretreatment regulations as required by Section 307 of the Water Act (3 U.S.C. 1317).
- (5) The term "compliance" means compliance with clean air or water standards. Compliance shall also mean compliance with the scheduled or plan ordered or approved by a court of competent jurisdiction, the Environmental Protection Agency or any air or water pollution control issued pursuant thereto.
- (6) The term "facility" means any building, plant, installation, structure, mine, vessel or other floating craft, location or site of operations, owned leased, or supervised by a Sponsor, to be utilized in the performance of an agreement or sub-agreement. Where a location or site of operations contains or includes more than one building, plant, installation, or structure, the entire location shall be deemed to be a facility except where the Director, Office of Federal Activities, Environmental Protection Agency, determines that independent facilities are located in one geographical area.

V. Assurances and Compliance

As a condition of the grant or cooperative agreement, the recipient assures and certifies that it is in compliance with and will comply in the course of the agreement with all applicable laws, regulations, Executive Orders and other generally applicable requirements, including those set out in 7 CFR 3015, 3016, 3017, 3018, 3019, and 3051 which hereby are incorporated in this agreement by reference, and such other statutory provisions as are specifically set forth herein.

VI. Examination of Records

Give the NRCS or the Comptroller General, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to this agreement. Retain all records related to this agreement for a period of three years after completion of the terms of this agreement in accordance with the applicable OMB Circular.

APPENDIX "B"

Contract FCD 2010C034

White Tanks FRS No. 4 Rehabilitation Project – Phase 1

PCN 201.02.31

FEDERAL REQUIREMENTS

SPECIAL PROVISIONS - APPENDIX B
FEDERAL REQUIREMENTS

- I. EQUAL OPPORTUNITY (NRCS-AS-83)
- II. EQUAL OPPORTUNITY (FEDERAL ASSISTED CONSTRUCTION) (NRCS-AS-83)
- III. NOTICE TO CONTRACTING LOCAL ORGANIZATION OF REQUIREMENTS FOR CERTIFICATIONS OF NONSEGREGATED FACILITIES
- IV. NOTICE TO PROSPECTIVE FEDERALLY ASSISTED CONSTRUCTION CONTRACTORS
- V. NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENTS FOR CERTIFICATIONS OF NONSEGREGATED FACILITIES
- VI. CERTIFICATION OF NONSEGREGATED FACILITIES (NRCS-AS-818)
- VII. STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)

EQUAL OPPORTUNITY

The Contracting Local Organization agrees to incorporate, or cause to be incorporated, into any contract for construction work, or modification thereof, as defined in the rules and regulations of the Secretary of Labor at 41 CFR, Chapter 60, which is paid for, in whole or in part, with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to grant, contract, loan, insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, the following Equal Opportunity (Federally Assisted Construction) clause:

EQUAL OPPORTUNITY (FEDERALLY ASSISTED CONSTRUCTION)

During the performance of this contract, the Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicant for employment, notices to be provided setting forth the provisions of this Equal Opportunity (Federally Assisted Construction) clause.
2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
3. The Contractor will send to each labor union or representative of workers, with which he/she has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicant for employment.
4. The Contractor will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
5. The Contractor will all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his/her books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

6. In the event of the Contractor's noncompliance with the Equal Opportunity (Federally Assisted Construction) clause of this contract or with any of the said rules, regulations or orders, this contract may be canceled, terminated, or suspended, in whole or in part, and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as provided by law.
7. The Contractor shall include this Equal Opportunity (Federally Assisted Construction) clause in every subcontract or purchase order unless exempted by the rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

The Contracting Local Organization further agrees that it will be bound by the above Equal Opportunity (Federally Assisted Construction) clause with respect to its own employment practices when it participates in federally assisted construction work: Provided, however, that if the Contracting Local Organization so participating is a State or local government, the above Equal Opportunity (Federally Assisted Construction) clause is not applicable to any agency, instrumentality, or subdivision of such government which does not participate in work on or under the contract.

The Contracting Local Organization agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of Contractors and subcontractors with the Equal Opportunity (Federally Assisted Construction) clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The Contracting Local Organization further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order No. 11246 of September 24, 1965, with a Contractor debarred from, or who has not demonstrated eligibility for, Government contracts and Federally assisted construction contracts pursuant to the Executive order and will carry out such sanctions and penalties for violation of the Equal Opportunity (Federally Assisted Construction) clause as may be imposed upon Contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D, of the Executive order. In addition,

The Contracting Local Organization agrees that if it fails or refuses to comply with these undertakings the administering agency may take any or all of the following actions: Cancel, terminate, or suspend, in whole or in part, this grant; refrain from extending any further assistance to the Contracting Local Organization under the program with respect to which its failure or refusal occurred until satisfactory assurance of future compliance has been received from such Contracting Local Organization; and refer the case to the Department of Justice for appropriate legal proceedings.

**NOTICE TO CONTRACTING LOCAL ORGANIZATION OR
REQUIREMENTS FOR
CERTIFICATIONS OF NONSEGREGATED FACILITIES**

- (a) A Certification of Nonsegregated Facilities must be submitted by the Contracting Local Organization prior to any agreement for Federal financial assistance where the Contracting Local Organization will itself perform a federally assisted construction contract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity clause.
- (b) The Contracting Local Organization shall notify prospective federally assisted construction contractors of the Certification of Nonsegregated Facilities required, as follows:

**NOTICE TO PROSPECTIVE FEDERALLY ASSISTED CONSTRUCTION
CONTRACTORS**

- (a) A Certification of Nonsegregated Facilities must be submitted prior to the award of a federally assisted construction contract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity clause.
- (b) Contractors receiving federally assisted construction contract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause will be required to provide for the forwarding of the following notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity clause.

**NOTICE TO PROSPECTIVE SUBCONTRACTORS OR REQUIREMENTS FOR
CERTIFICATIONS OF NONSEGREGATED FACILITIES**

- (a) A Certification of Nonsegregated Facilities must be submitted prior to the award of a subcontract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity clause.
- (b) Contractors receiving subcontract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause will be required to provide for the forwarding of this notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity clause.

NRCS-AS-818
Rev. 4-70
File Code AS-14

CERTIFICATION OF NONSEGREGATED FACILITIES

(Applicable to federally assisted construction contracts and related subcontracts exceeding \$10,000 which are not exempt from the Equal Opportunity Clause.)

The federally assisted construction contractor certifies that he/she does not maintain or provide for his/her employees any segregated facilities at any of his/her establishments, and that he/she does not permit his/her employees to perform their services at any location, under his/her control where segregated facilities are maintained. The federally assisted construction contractor certifies that he/she will not maintain or provide for his/her employees any segregated facilities at any of his/her establishments, and that he/she will not permit his/her employees to perform their services at any location, under his/her control where segregated facilities are ed. The federally assisted construction contractor agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated o the basis of race, color, religion, or national origin, because of habit, local custom, or otherwise. The federally assisted construction contractor agrees that (except where he/she has obtained identical certifications from proposed subcontractors for specific time periods) he/she will obtain identical certifications from proposed subcontractors prior to the award of subcontractors exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause, and that he/she will retain such certifications in his/her files.

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

COFFMAN SPECIALTIES, INC.

Contractor

Leellen Coffman

Signature

PRESIDENT

Title

08/10/2011

Date

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY
CONSTRUCTION CONTRACT SPECIFICATIONS

(EXECUTIVE ORDER 11246)

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Program, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. "Minority" includes:
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (iv) American Indian or Alaskan Native (all groups having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000, the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which the contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through as association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades

which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO Clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in Paragraphs 7-a. through 7.p. of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization that the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in geographical areas where they do not have a Federal or Federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the *Federal Register* in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs or from Federal procurement Contracting Officers. The Contractor is expected to make substantially uniform progress toward meeting its goals in each craft during the period specified.
5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and

carry out the Contractor's obligations to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

- b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organization's responses.
- c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority and female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.
- d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process had impeded the Contractor's efforts to meet its obligations.
- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under Paragraph 7.b. above.
- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or their employment decisions, including specific review of these items with on-site supervisory personnel such as Superintendents, General Foreman, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time

and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

- h. Disseminate the Contract's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipate doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students and to minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of the applications for apprenticeship or other training by any recruitment sources, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classification, work assignments, and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

- p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of the affirmative action obligations (Paragraphs 7.a. through 7.p.). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under Paragraphs 7.a. through 7.p. of these Specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
 9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
 10. The Contractor shall not use the goals and timetables of affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
 11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contacts pursuant to Executive Order 11246.
 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
 13. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay,

and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form, however, to the degree that existing records satisfy this requirement, Contractors shall not be required to maintain separate records.

14. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in Paragraph 7. of these specifications, so as to achieve maximum results from its effort to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 604.8.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

APPENDIX "C"

Contract FCD 2010C034

White Tanks FRS No. 4 Rehabilitation Project – Phase 1

PCN 201.02.31

FEDERAL REQUIREMENTS

ATTACHMENT C
CONTRACTING LOCAL ORGANIZATION (CLO) CERTIFICATION

STANDARDS OF CONDUCT

The CLO's officers, employees or agents, shall neither solicit nor accept gratuities, favors, or anything of monetary value from contractors or potential contractors. The contract or other procurement action shall not be awarded to a sponsor, the CLO, or firms in which any official of such organizations or any member of such official's immediate family has direct or indirect interest in the recurring profits or contracts of such firms. To the extent permissible by state or local law, rules or regulations, such standards shall provide for penalties, sanctions, or other disciplinary actions to be applied for violations of such standards by either the CLO officers, employees, or agents, or by contractors or their agents.

FINANCIAL MANAGEMENT SYSTEM

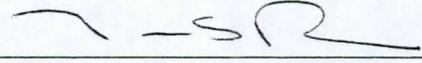
The CLO's financial management system meets the requirements specified in Section 510.50 of the National Contracts, Grants, and Cooperative Agreements Manual. Any reference in Section 510.50 to the acronym SCS refers to NRCS.

PROCUREMENT

All procurement by the CLO shall be in accordance with OMB Circular A-102.

Contracting Local Organization: Flood Control District of Maricopa County

Signed by: _____


Timothy S. Phillips, P.E.

Title: Chief Engineer & General Manager

Date: 6 DEC 10

APPENDIX "D"

Contract FCD 2010C034

White Tanks FRS No. 4 Rehabilitation Project – Phase 1

PCN 201.02.31

CONSTRUCTION QUALITY CONTROL (CQC) TESTING REQUIREMENTS

**TABLE D-1
MINIMUM CQC TESTING REQUIRED
(FOR EARTHWORK)**

Test Method		Frequency of Tests ⁽³⁾⁽⁵⁾				
Reference	Description	Foundation Preparation	Filter	Embankment Fill	Aggregate Base	Concrete
ASTM C 136 and C 117	Laboratory Sieve Analysis for Fine and Coarse Aggregates	N/A	1 / 1,000 cy and 1 per material change ⁽⁴⁾	N/A	1 / 500 sy on dam and 1/ 1,000 sy on roads	N/A
ASTM D 422	Laboratory Test for Particle Size ⁽⁷⁾	N/A	N/A	1 / 500 cy ⁽²⁾	N/A	N/A
ASTM D 698 or ASTM D 1557	Laboratory Test for Moisture-Density Relationships for Fill Materials	N/A	N/A	1 / 500 cy ⁽²⁾	1 / 500 sy on dam and 1/ 1,000 sy on roads	N/A
Appendix E of Contract Documents	A Procedure for Obtaining the Bulking Characteristics of a Sandy and/or Gravelly Soil	N/A	1 / 8,000 cy	N/A	N/A	N/A
Arizona Test Method 232	Moisture Density Relationship Using Typical Curves (one-point)	N/A	N/A	1 per material change ⁽⁴⁾	N/A	N/A
ASTM D 2216 or ASTM C 4643	Laboratory Test for Moisture Content (oven-dry method or microwave method)	N/A	1 / 500 cy ⁽¹⁾ and 1/10 nuclear tests	1/10 nuclear tests	N/A	N/A
ASTM D 4318	Atterberg Limits	N/A	1 / 1,000 cy and 1 per material change ⁽⁴⁾	1 / 500 cy ⁽²⁾	1 / 500 sy on dam and 1/ 1,000 sy on roads	N/A
ASTM C 131	Percentage of Wear	N/A	N/A	N/A	1 / 500 sy on dam and 1/ 1,000 sy on roads	N/A

**TABLE D-1
MINIMUM CQC TESTING REQUIRED
(FOR EARTHWORK)**

Test Method		Frequency of Tests ⁽³⁾⁽⁵⁾				
Reference	Description	Foundation Preparation	Filter	Embankment Fill	Aggregate Base	Concrete
ASTM D 1556	Field Test for In-Place Density (sand cone method)	N/A	N/A	1/10 nuclear tests	N/A	N/A
ASTM D 6938	Field Test for In-Place Density and Moisture (nuclear method)	N/A	N/A	1 / 500 cy or 2/lift/shift	1 / 500 sy on dam and 1/ 1,000 sy on roads	N/A
Appendix E of Contract Documents	Unconfined Compressive Strength	N/A	1/4,000 cy and 1 per material change ⁽⁴⁾	N/A	N/A	N/A

1) Filter moisture content at the two separate stages of: stockpiling and placement on grade.
2) Embankment fill is tested at this frequency during first stockpile, then during the second stockpile, and then during placement.
3) The frequency of testing presented in this table is based on the minimum testing required. Final frequency and quantity of tests per method per material will be a function of failing tests and required retests.
4) At any time when the material and/or source changes or when there may be concern with the quality of construction, additional laboratory testing may be required. Determination of material change will be based on gradation and plasticity and may also be evident due to inconsistent density test results or visual inspection.
5) Where different frequencies are indicated for the same test and material (e.g., 1/lift/shift or 1/2,000 cy), the number of tests performed shall be that which results in the greatest frequency.
6) Embankment Fill maximum dry density and optimum moisture content shall be determined in accordance with ASTM D 698.
7) The Particle Size Analysis does not need to include the hydrometer analysis.

APPENDIX "E"

Revised as per Addendum No.2

Contract FCD 2010C034

White Tanks FRS No. 4 Rehabilitation Project – Phase 1

PCN 201.02.31

NON-ASTM TESTING PROCEDURES AND REQUIREMENTS

SPECIAL PROVISIONS – APPENDIX E
NON-ASTM TESTING PROCEDURES AND REQUIREMENTS

**STANDARD TEST FOR MEASURING COMPRESSIVE STRENGTH OF MINUS #4
FRACTION MATERIAL**

1. Screen out all plus # 4 sieve particles using a standard size sieve.
2. Using about 2,000 grams of the minus # 4 sieve, moisten the soil to 10 percent water content by adding 200 grams of distilled water to the 2,000 grams of dry soil.
3. Thoroughly mix the water and sand in a plastic bag and allow the sand and water to equilibrate for at least 1 hour.
4. Use the moist sand to compact a test specimen into a compaction mold similar to that used to mold laboratory samples for the ASTM D698A test. Mold the sample in 3 lifts using Standard Proctor energy.
5. The test does not require a specific dry density to be obtained, and whatever the density resulting from the specified effort is satisfactory for the test.
6. A plastic liner may be used in the mold to ensure separation of the sand from the mold when disassembled.
7. Mold the sample so that the mold is filled completely where a porous disc or other suitable extrusion shim can be placed on the compacted sample. Carefully extrude the sample with the compacted sand resting on the extrusion shim.
8. Place the molded sample on the porous stone or shim in a hot room set at a temperature of no cooler than 95 degrees and no warmer than 120 degrees for a minimum of 48 hours.
9. Perform a compressive strength test of the cylindrical sample.
10. Perform 3 tests and determine if all values are within 30 percent of the average of the values. If they are not, perform additional tests until 3 values are obtained that satisfy this requirement.
11. Report the result as the average of the 3 tests.
12. The average compressive strength shall not exceed 15 pounds per square inch.

**A PROCEDURE FOR OBTAINING THE BULKING
CHARACTERISTICS OF A SANDY AND/OR GRAVELLY SOIL**

1. Scope: A method for determining the maximum bulking percentage and the range of moisture contents within which a sandy and/or gravelly soil will bulk.

2. Apparatus:

<u>Quantity</u>	<u>Description</u>
1	Balance, torsion, laboratory 4/5 kg capacity, sensitive to 0.5 gm with set of weights.
1	Clipboard for data sheet.
6	Containers, samples, metal cans – 6 x 12 inch cylindrical.
1	Graduate, 25 ml graduated to 0.2 ml.
1	Graduate, 2000 ml graduated to 1.0 ml.
1	Oven, drying, temperature control $110^{\circ}\text{C} \pm 3^{\circ}\text{C}$.
6	Pans, drying metal, approximately 8" x 8" x 2" deep.
1	Scoop, hand, small.
1	Spoon, large, curved.
6	Bags, soil sample, textile, 7 oz. to 8 oz. cotton, approximately 17" x 30".

3. Procedure:

- (a) Oven-dry approximately 8000 gms of soil.
- (b) Weigh out six 1000 ± 1 gm samples of the dry soil and place each in metal container.
- (c) Place one 1000 gm sample into the 2000 ml graduate per ASTM D 4254, Method C. Read and record the volume to the nearest ml. Pour the sample back into the container. Repeat this step a total of three times and record the average volume.
- (d) For the next 1000 gm sample, in its oven-dry condition, place the 1000 gm sample into the 2000 ml graduate per ASTM D 4254, Method C. Read and record the volume to the nearest ml. Pour the sample back into the container. Repeat this step a total of three time and record the average volume.

- (e) Add 2% water by weight (20 ml) to the soil in the first container while stirring briskly. Record the percent water.
- (f) Place the 1000 gm sample into the 2000 ml graduate per ASTM D 4254, Method C. Read and record the volume to the nearest ml. Repeat this step a total of three time and record the average volume.
- (g) Repeat steps (d) and (f) for the remaining samples except increase the water content by 2% increments for each succeeding sample; i.e., 4%, 6%, 8%, . . .
- (h) If maximum bulking volume is not exceeded, repeat steps (a) through (f) using 3% water increments; i.e., 3%, 6%, 9%,
- (i) Continue to add water in measured amounts to the last sample while in 2000 ml graduate until the water line reaches the volume read in step (c). Record the percentage of water = the saturation moisture content.
- (j) The moisture content at which the volume returns to zero bulking volume read in step (c) gives the moisture content range within which the soil will bulk. If the volume of the last sample in step (f) has not returned to the zero bulking volume read in step (c), plot on standard cross-section paper the moisture contents against the bulking percentages. Extend the back side of the curve to intersect the zero bulking line. Read the range of moisture contents within which the soil will bulk form the curve.
- (k) Compute the bulking percentage for each point as:

$$\text{Bulking Percentage} = [(\text{Average Volume, Wet} \div \text{Average Volume, Oven-dry}) - 1.0] \times 100$$

- (l) Record the maximum bulking percentage and the range of moisture content within which the soil will bulk.