

# **REQUEST FOR PROPOSALS**

FOR

COATING THE INTERIOR AND EXTERIOR OF TWO 500,000 GALLON STEEL TANKS, EXTERIOR COATING OF ONE 1,000,000 GALLON STEEL TANK, AND RELATED MISCELLANEOUS ITEMS FOR THE APACHE JUNCTION WATER DISTRICT

RFP PROJECT NO. WD 2017-01

#### APACHE JUNCTION WATER DISTRICT 300 EAST SUPERSTITION BOULEVARD APACHE JUNCTION, ARIZONA 85119

RFP Submittal Deadline: September 27, 2017 at 2:00 P.M. Arizona Standard Time Anticipated Board Award: October 17, 2017 Contract Work Period October 23, 2017 through January 31, 2018

#### NOTICE INVITING BID PROPOSALS FOR COATING THE INTERIOR AND EXTERIOR OF TWO 500,000 GALLON STEEL TANKS, EXTERIOR COATING OF ONE 1,000,000 GALLON STEEL TANK, AND RELATED MISCELLANEOUS ITEMS FOR THE APACHE JUNCTION WATER DISTRICT

#### RFP PROJECT NO. WD 2017-01

Notice is hereby given that sealed proposals are sought for coating the interior and exterior of two 500,000 gallon steel tanks, exterior coating of one 1,000,000 million gallon steel tank, and related miscellaneous items for Apache Junction Water District (the "District"). Based on the submittals, the District may enter into a contract with the successful bidder. Bid forms, specifications, and project requirements are available online at: www.ajcity.net/purchasing.net.

Each bidder shall provide such information as may be required by the District as evidence of qualifications to provide the labor, materials, transportation, storage, equipment or other services as required.

Sealed bids containing one signed original and four duplicate copies of the bid will be accepted in the District Clerk's office located at 300 East Superstition Blvd., Building C, Apache Junction, AZ, 85119, until September 27, 2017 at 2:00 PM, Arizona Standard Time, at which time and place all bids will be opened and read as a matter of public information. Any bids received after bid closing time will be rejected and returned unopened.

The submittal shall be conspicuously marked on the front and outside of the submitted bid package: "PROJECT NO. WD 2017-01".

Additional information may be obtained from District Engineer Mike Loggins at: mloggins@ajcity.net.

District staff will conduct a mandatory pre-bid meeting at the District's Tank and Booster Site No. 1 at 660 West 16<sup>th</sup> Avenue, Apache Junction, AZ 85119 at 7:00 AM on Wednesday, September 20, 2017.

The District reserves the right to reject any and all bids and to waive informalities and technicalities, and to suspend the procurement deadlines applicable to this process.

Kathleen Connelly District Clerk

# GENERAL CONDITIONS & INSTRUCTIONS TO BIDDERS

#### COATING THE INTERIOR AND EXTERIOR OF TWO 500,000 GALLON STEEL TANKS, EXTERIOR COATING OF ONE 1,000,000 GALLON STEEL TANK, AND RELATED MISCELLANEOUS ITEMS FOR THE APACHE JUNCTION WATER DISTRICT

#### RFP PROJECT NO. WD 2017-01

#### 1. PURPOSE

The Apache Junction Water District (the "District") seeks proposals from qualified contractors to coat the interior and exterior of two 500,000 gallon steel tanks, exterior coating of 1,000,000 gallon steel tank, and related miscellaneous items. The purpose of this Request for Proposals ("RFP") process is to ultimately enter into a contract with a company subject to terms of the contractual agreement. Service is anticipated to begin on October 23, 2017. This RFP process is authorized under Article 3-7 of Apache Junction City Code ("A.J.C.C."), Volume I.

#### 2. **DEFINITIONS**

- A. "Bid" is the awarded services or work to be performed by the Successful Bidder.
- B. "Bidder" shall mean any person, corporation or other entity who submits an RFP response to the District pursuant to these documents.
- C. "District" shall mean the Apache Junction Water District.
- D. "District Representative" shall mean the District Manager or his/her designee.
- E. "Contractor" shall mean the person or entity to which the contract is awarded.
- F. "Successful Bidder" shall mean the person or entity who submits an RFP packet which the District determines is the most responsive and responsible bidder.

#### 3. PROJECT

All work under this contract shall be done in accordance with these Bid Documents including: General Conditions & Instructions to Bidders, Special Provisions & Specifications, all of which are hereinafter referred to as the "Contract Documents".

#### 4. EXAMINATION OF BID DOCUMENTS

The Bidder shall carefully examine and study the Bid Documents and specifications applicable to the award of a contract. The submission of a Bid shall be prima facie evidence that the Bidder has made such an examination and unless an exception is noted in writing in Exhibit C, they intend to supply the materials, labor and/or equipment as submitted in accordance with the Contract Documents.

# 5. QUALIFICATION OF BIDDERS

Each Bidder shall be appropriately licensed with the Arizona Registrar of Contractors as required for this type of work. The Bidder must be in possession of the required license at the time of the bidding and provide a copy of the license with the bid submittal. The Successful Bidder must also be licensed to transact business in the City of Apache Junction. Each Bidder shall also have sufficient personnel and equipment to provide the service required by the District, and shall have a history of providing satisfactory service to their clients

# 6. DISQUALIFICATION OF BIDDERS

The District Representative may disqualify any Bidder from consideration of award of Bid for materials, supplies, or services for up to five (5) years on grounds outlined more fully under A.J.C.C., Vol. I, Art. 3-7, <u>Procurement Procedure</u>. Set forth below are the disqualifying factors:

- A. Evidence of intentional submission of more than one Bid for the same materials or equipment from an individual, firm, partnership or corporation under the same or different names, or from those which have over 50% controlling shareholder interest.
- B. Evidence of collusion among Bidders.
- C. Failure to fully complete all parts of this Bid or failure to submit the Bid in accordance with the requirements herein.
- D. Failure to meet the qualifications for bidding or provide evidence of such qualifications when requested.
- E. Failure to execute Agreement with District, with terms consistent in proposed agreement reflected in Exhibit F.
- F. Past negative history with the District and/or failure to pay transaction privilege and construction taxes.

The District Representative shall send written notice of the proposed disqualification, including the grounds and period of proposed disqualification to the disqualified party by first class U.S. mail from the address on the Bid and by email delivery. The party shall have a right to an appeal hearing before the District Representative. Such request for an appeal hearing shall be filed with the District Clerk at 300 E. Superstition Blvd., Apache Junction, AZ, 85119, by first class U.S. mail and by email delivery (if available) within five (5) calendar days after receipt of disqualification by the District Representative. The District Representative shall provide notice of the hearing date and time to the disqualified party within five (5) calendar days after receipt of the request for a hearing. The party shall have the opportunity to present evidence rebutting the reasons for disqualification. The District

Representative shall decide the matter within five (5) calendar days after the hearing and shall notify the disqualified party within such time by first class U.S. mail to the address on the Bid and by email delivery (if available). Such decision shall be final and binding, subject only to a judicial appeal in Pinal County Superior Court pursuant to A.R.S. § 12-901, *et seq.* Disqualification does not in and of itself toll the deadlines referenced in this RFP, but rather, the District Manager can suspend the deadlines anytime he or she believes it would be in the best interest of the District.

# 7. PREPARATION OF PROPOSAL

All information requested on this RFP must be completed by the Bidder. The Bidder shall submit all information on the required forms and documents. The information must be typed or printed in ink and all numbers shall be in legible numerals. The Bidder must sign the proposal in ink in the space provided.

#### 8. PRE-BID MEETING

District staff will conduct a mandatory pre-bid meeting at the District's Tank and Booster Site No. 1 at 660 West 16<sup>th</sup> Avenue, Apache Junction, AZ, at 7:00 AM on Wednesday, September 20, 2017.

# 9. SUBMISSION OF PROPOSAL

The Bidder shall submit to the District a Bid proposal together with the list of exhibits as identified below. The Bid proposal and the completed exhibits referenced below shall be placed in an envelope, sealed and delivered to the Apache Junction District Clerk's office, located at 300 East Superstition Blvd., Building C, Apache Junction, Arizona, 85119, and must be received no later than September 27, 2017 at 2:00 p.m., Arizona Standard Time. The submittal shall be conspicuously marked on the front and outside of the envelope in black lettering with the name of the RFP project as noted on the Notice Inviting Bid Proposals, with the name and address of the Bidder. When submitted by mail, the sealed Bid shall be enclosed in a separate sealed envelope. Responses submitted by mail shall be considered unless received on or before the time and the place designated in the Notice Inviting Bid Proposals. Exhibits D, F, and G as identified below should only be completed and returned to the District if the District awards the project to the Bidder.

Exhibits		Complete <u>With Bid</u>
1. Bid Tab	(Exhibit A)	Yes
2. Similar Service History	(Exhibit B)	Yes
3. Exceptions/Additions/Corrections	(Exhibit C)	Yes
4. Certificate of Insurance	(Exhibit D)	Yes
5. Understanding & Agreement	(Exhibit E)	Yes
<ol><li>Proposed Agreement</li></ol>	(Exhibit F)	No
7. Bid Inquiry Form	(Exhibit G)	No

8. Subcontractors List	(Exhibit H)	Yes
9. Progress Schedule	(Exhibit I)	Yes
10. Surety Bid Bond Form	(Exhibit J)	Yes
11. Statutory Payment Bond	(Exhibit K)	No
12. Statutory Performance Bond	(Exhibit L)	No

One (1) Bid proposal per company or entity will be permitted. If multiple Bids are received from companies or entities with common ownership interests or their collective assets, or is managed by the same individuals or other legal entities, such additional submittals will be deemed duplicitous and shall be disqualified from the process.

#### 10. CONSIDERATION OF PROPOSAL

Bid responses will be reviewed by staff, which will present its recommendation for award to the Water Board. It is anticipated the board will publicly review the recommendations and will publicly award the Bid at a board meeting within a reasonable time after Bid opening, with a contract effective date beginning shortly thereafter. The contract award shall be based on the most responsive, responsible, and most qualified Bid as required within the specifications. All substantive requirements set forth in this RFP must be complied with by the submittal date set forth in Section 9 above, otherwise the response will be considered unresponsive. The District reserves the right to waive technicalities and informalities, to reject any or all proposals, to accept bid proposals deemed to be in the best interest of the District, and to suspend any deadlines for any reason.

#### 11. BID SOLICITATION PROTESTS

Other than a disqualification determination, any aggrieved party may protest the bid solicitation. Bid protests by an aggrieved party shall be submitted in writing to: District Clerk, Apache Junction Water District, 300 E. Superstition Blvd., Building C, Apache Junction, Arizona, 85119, no later than September 28, 2017 by 5:00 p.m. Protests must contain at a minimum: the name, address and telephone number of the protester, the signature of the protester or designated representative and evidence of authority to sign; a detailed statement of the legal and factual grounds of the protest, and the form of relevant data, evidence, exhibits, or documents substantiating the protest, and the form of relief requested.

Within five (5) calendar days of receipt of the bid protest filed with the District Clerk, the District Manager or his designee shall respond by setting a time and place for a hearing and by giving a Notice of Hearing to protestor. The District Manager or his designee shall conduct the hearing within five (5) calendar days after sending the notice of the hearing to the protestor, absent any stipulated continuances. The District Manager or his designee, shall within five (5) calendar days after the hearing has been completed, issue a written opinion and send it by first class U.S. mail to the protestor and by email (if available). The District Manager's decision shall be final and binding, subject only to a further appeal in the Pinal County Superior Court pursuant to A.R.S. § 12-901, *et seq*.

# 12. PROGRESS SCHEDULE

A construction schedule indicating a sequence of work from start to finish shall be submitted.

# 13. NOTICE TO PROCEED

A contract will be awarded to the lowest and most responsive bidder upon approval of the Water District Board. The decision of the Water District Board shall be final. Notice of Award to the Successful Bidder shall be confirmed to all Bidders by the Water District. Nothing herein shall be construed to require the District to award a contract. All bids may be rejected.

The Successful Bidder agrees to each and every term, condition and obligation set forth in Exhibit F. Such terms, conditions and obligations thereunder are non-negotiable.

# 14. AWARD OF CONTRACT

Contract(s) will be awarded to the most responsive, responsible and most qualified bidder(s). The award shall be made upon a majority vote of the Apache Junction Water District Board at a regularly scheduled board meeting. The decision of the Board shall be final and cannot be protested as an administrative appeal under A.R.S. § 12-901, *et seq.* Notice of Award to the successful and unsuccessful bidders shall be communicated to all Bidders by the Water District. Nothing herein shall be construed to require the District to award contracts and the District reserves the right to reject all bids.

The Successful Bidder shall agree to each and every term, condition and obligation set forth in Exhibit F.

#### 15. PERMITS, FEES & LICENSES

The Contractor shall secure and pay for all applicable federal, state, county or local permits and licenses, including a city transaction privilege tax license and business license and shall comply with all applicable federal, state, county or local laws, ordinances, regulations and safety standards.

#### 16. INTERPRETATION OF DOCUMENTS

Where a specification or document appears ambiguous, or where any portion is not fully understood, the Bidder shall submit such question in writing to the Water District by using the "Bid Inquiry" form, under Exhibit G no later than September 25, 2017 by 5:00 p.m.. Verbal explanations shall not be binding. If the Bidder is not satisfied with the explanation, they must protest the provision prior to bid opening pursuant to Section 9 above and abide by all timelines and procedures therein. If the Bidder fails to protest at the pre-bid opening stage, their concerns are deemed waived and such failure shall be a bar to further

argument on the issue.

# 17. COMPLETION DATE AND LIQUIDATED DAMAGES

Based on the Notice to Proceed date the Successful Bidder agrees that this Project shall be substantially completed within ninety (90) calendar days. Failure to complete the work within the designated time will cause a loss to the District. Bidder hereby acknowledges such potential loss to the District to be in the amount of four hundred dollars (\$400.00) per day. This amount is not a penalty but is the actual cost of damages for failure to comply with the terms of the contract based on the cost for replacement services and materials and any associated procurement efforts. Upon failure to complete work within the time specified, Successful Bidder shall pay liquidated damages for the loss of use of the benefit of this project the sum of four hundred dollars (\$400.00) per day for each day the work remains unfinished. This provision does not limit the liability of Successful Bidder for actual damages sustained by District as a result of any breach of contract or warranty by Successful Bidder.

# 18. SUBCONTRACTORS

The Successful Bidder shall list the names, addresses, telephone numbers and name of the Principal of each subcontracting entity or person retained for the Project on the form provided as set forth in Exhibit H in the Bid Proposal package. All subcontractors shall be licensed to do business in the State of Arizona and the City of Apache Junction, and the District reserves the right to reject the choice of subcontractors.

#### **19. PRE-CONSTRUCTION MEETING**

When the execution of the Agreement and before commencement of the work, the Successful Bidder shall attend a pre-construction meeting at Apache Junction Water District located at 300 East Superstition Blvd., Building D Apache Junction, AZ, and with all others involved or concerned persons or subcontractors.

# 20. WARRANTIES & GUARANTEES

The Successful Bidder shall warrant that all maintenance and replacement parts and materials furnished will be new unless otherwise specified and approved in writing by the District and that all work will be of good quality free from defaults and defects and shall guarantee all work and materials for a period of one (1) year from the date of acceptance of the Project. Should any portion of the work need replacement or repair due to construction methods or materials failure, the Successful Bidder shall replace such work at no cost to the District. If the Successful Bidder fails within a reasonable time to replace or repair any portion of the work deemed to be needed, the District may cause said work to be done and the Successful Bidder agrees to pay all costs incurred therefore.

# 21. ACCEPTANCE OF PROJECT

Upon receipt of notice from the Successful Bidder that the project has been completed and is ready for final inspection and acceptance, the District Representative shall make such inspections, and when found acceptable according to the plans and specifications, shall issue a final inspection report. The Project shall not be acceptable nor shall final payment be made or become due until all lien waivers and other appropriate releases have been received and approved by the District, and all inspection report test results, and certifications have been received by the District.

#### 22. CERTIFICATION

All subcontractors retained by the Successful Bidder and testing firms retained by the District shall each provide letters of certification confirming that all construction was done or performed in accordance with the project plans and specifications.

#### 23. INDEMNIFICATION

Successful Bidder shall defend, indemnify and hold harmless the District, its elected officials, officers, appointees, employees and agents, from and against tortious claims, damages, losses and expenses (including but not limited to attorney fees, court costs and the cost of appellate proceedings), relating to, arising out of, or alleged to have resulted from the acts, errors, mistakes, omissions, work or services of Successful Bidder, its agents, or employees. 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.

#### 24. COMPLIANCE

All work and services shall comply with all applicable city, county, state and federal laws.

#### 25. CITY SALES TAX

The current City sales tax rate is 2.4%.

#### 26. ACCESS TO INFORMATION

It is agreed that all information, data reports, and records are existing, available and necessary for carrying out of the work outlined above have been furnished to Successful Bidder by the District and its agencies. Successful Bidder hereby acknowledges receipt of same. No charge will be made to Successful Bidder for such information and the District and its agencies will cooperate with the Successful Bidder in every way possible to facilitate the

performance of the Work described in the Proposed Agreement as set forth in Exhibit F.

# 27. CONTRACT CANCELLATION

Non-performance of contract, or substantial violation of state or federal law, will give sufficient cause for the District to cancel the contract. Non-performance shall be construed to mean failure of Successful Bidder to deliver in the time specified, and/or failure to provide the quality of product or service specified.

# 28. ASSIGNMENT/TRANSFER

Successful Bidder shall not assign, transfer, convey, sublet or otherwise dispose of the contract or the right, title, or interest therein, or the power to execute such contract, to any other person, company, corporation without prior written consent of the District.

# 29. PAYMENT

The final contract sum shall be the total amount due to the Successful Bidder as determined by the Successful Bidder prices plus authorized adjustments, less any damages incurred due to the Successful Bidder's failure to duly conform to the requirements herein. Once each month, the Successful Bidder shall submit in duplicate the District Representative for approval and transmittal an Application and Certificate for Payment (AIA Document Form G 702/703) based on the estimated value of the work completed and materials on the site as of that date. Such estimate shall be based on the schedule of values submitted by the Successful Bidder. The Successful Bidder warrants and guarantees that title to all work, materials and equipment covered by an Application for Payment, whether incorporated in the project or not, will pass to the District upon the receipt of such payment by the Successful Bidder, free and clear of all liens, claims, security interests, or encumbrances and that no work, materials, or equipment covered by an Application for Payment will have been acquired by the Successful Bidder or by any other person performing the work at the site or furnishing materials and equipment for the Project, subject to an agreement under which an interest therein or an encumbrance thereon is retained by the Successful Bidder or otherwise imposed by the Successful Bidder or such other person.

Payment will be made under the following conditions:

- 1. On proper certification by District Representative, based on Successful Bidder's monthly application for payment, District will within thirty (30) calendar days after receipt of said certification pay to the Successful Bidder by placing in the United States Mail a sum equal to 90% of amount requested, less previous payment thereon.
- 2. The 10% retention of funds withheld during construction will be paid to the Successful Bidder upon final acceptance of all work by the District.

- 3. Upon payment of each monthly estimate by District, Successful Bidder shall pay to each subcontractor amount allowed to Successful Bidder on account of subcontractor's work to extent of subcontractor's interest therein.
- 4. Full and final payment of the Contract sum shall be made within thirty (30) calendar days of the completion of all of the following requirements
  - a. The District Representative's written declaration to the District that the work is complete.
  - b. Payment of all labor and material bills, and receipt of all final lien waivers and /or releases of lien from all subcontractors, materialmen, mechanics, and suppliers, and/or an affidavit, if required.
  - c. The District's acceptance of the Project in writing.
- 5. No payment made under the Contract either wholly or in part shall be construed to be an acceptance of defective or improper materials or workmanship.

#### **30. CHANGES IN THE WORK**

If any Change Order under the Contract causes an increase or decrease in the Successful Bidder's cost of or the time required for the performance of any part of the work under this Contract, an equitable adjustment shall be made and the Contract modified in writing accordingly.

- 1. No change in the work shall be made without a written Contract Modification in the form of a Change Order (AIA Document Form G 701).
- 2. If the District determines it is necessary to proceed with changed work to avoid delay before prices or time have been negotiated, District may order the Successful Bidder to proceed on a time and materials basis or on a mutually agreed not-to-exceed price and /or time. This notice to proceed will be in writing or confirmed in writing by the District Representative. Upon receipt of such order, the Successful Bidder shall immediately perform the changed work with due diligence. Thereafter, the District and the Successful Bidder shall negotiate the Change Order price and/or time as soon as practicable, and a Contract Modification will be made.
- 3. The Successful Bidder, in connection with any proposal made for a Contract Modification, shall furnish a price breakdown itemized as required by the District. Unless otherwise directed, the breakdown shall be in sufficient detail to permit an analysis of all material, labor, equipment, subcontract and overhead costs as well as profit, and shall cover all work involved in the Modification, whether such work was deleted, added or changed. Any

amount claimed for subcontractors shall be supported by a similar price breakdown. In addition, if the proposal includes a time extension, a justification therefore shall also be furnished. The proposal, together with the price breakdown and time extension justification, shall be furnished within five calendar days of the date first requested by the District Manager or assigned representative.

- a. In such proposals, profit and overhead shall be computed as follows-
  - 1. Subcontractor's profit and overhead shall not exceed 15% of total direct costs.
  - 2. The Successful Bidder's profit and overhead on work performed by Contractor's own crews shall not exceed 15% of direct costs.
  - 3. The Successful Bidder's profit and overhead on work performed by Successful Bidder's subcontractors shall not exceed 5% of total direct costs.

# 31. IMPROVEMENTS

Improvements shall be those shown on the plans or modified by change orders.

#### 32. CONSTRUCTION INSPECTIONS

The Successful Bidder shall be responsible for scheduling inspections with all the District Representative. Neither observations by the District Manager or appointed representative nor inspections, tests, or approvals by persons other than the Successful Bidder shall relieve the Successful Bidder from the obligations to perform the work in accordance with the requirements of the Contract Documents.

----- END OF GENERAL CONDITIONS & INSTRUCTIONS TO BIDDERS ----

# **PROJECT SPECIFICATIONS**

## PROJECT NO. WD 2017-01

# Part 1 GENERAL

#### 1.01 Scope of Work

This project shall generally include but not limited to the surface preparation, priming and painting of the interior and exterior of two existing 500,000 gallon steel water storage tanks, exterior piping, and overflow piping, and exterior coating of a 1 million gallon tank located at 660 West 16<sup>th</sup> Avenue, Apache Junction, Arizona. The existing 500,000 gallon tanks are approximately 60 foot diameter and an overflow height of approximately 24 feet. The existing 1 million gallon tank is approximately 84 foot diameter and an overflow height of approximately 24 feet. Replace existing 8 inch overflow piping with 16 inch piping and air vent on roof of tank on both 500,000 gallon tanks. The project shall also include the installation of a cathodic protection system on both 500,000 gallon tanks.

#### 1.02 References

- A. Publications listed herein are part of this specifications to the extent referenced.
- B. American Society of Testing and Materials:
  - 1. ASTM D16 Terminology Relating to Paint, Varnish, Lacquer and Related Products
  - 2. ASTM D3359 Test Method for Measuring Adhesion by Tape Test
  - 3. ASTM D 4541 Test Method for Pull Off Strength of Coatings Using Portable Adhesion-Testers
  - 4. ASTM D 1005 Tests for determining dry mill film thickness
  - 5. ASTM D 4417 Tests for determining surface profile
  - 6. ASTM D 5160 Holiday Testing
- C. The Society of Protective Coatings
  - 1. SSPC SP1 Solvent Cleaning
  - 2. SSPC SP2 Hand Tool Cleaning
  - 3. SSPC SP3 Power Tool Cleaning
  - 4. SSPC SP5 White Metal Blast Cleaning
  - 5. SSPC SP6 Commercial Blast Cleaning
  - 6. SSPC SP7 Brush-off Blast Cleaning
  - 7. SSPC SP10 Near White Metal Blast Cleaning
  - 8. SSPC SP11 Power Tool Cleaning to Bare Metal
  - 9. SSPC SP12 Hydro-blasting
  - 10. SSPC PA1 Painting Application Specification
  - 11. SSPC PA2 Measurement of Dry Paint Thickness with Magnetic Gages
  - 12. SSPC Guide 7 Guide for the disposal of Lead-Contaminated Surface Debris

#### 1.03 Definitions

- A. Terms "Paint" shall in the general sense have reference to zinc, primers, latex, polyurethane, and epoxy type coatings and application of these materials.
- B.Dry Film Thickness (DFT: Thickness, measured in mils (1/1000 inch), of a coat of paint in a cured state.

#### 1.04 Submittals

A. Product Data:

- 1. Submit manufacture's literature describing products to be provided, giving manufacture's name, product name, and product line number of each material.
- 2. Submit technical data sheets for each coating, giving description data, curing times, mixing, pot life, thinning, and application requirements.
- 3. Submit color charts showing manufacture's full range of standard colors.
- B. Quality Assurance Submittals
  - 1. Provide manufacture's certification that products to be used comply with specified requirements and are suitable for the intended use.
  - 2. Submit a list of not less than five of applicator's most recent applications representing similar scope and complexity to this project. The list shall include project name and address, name of the owner, name of the engineer and date of completion.
  - 3. Submit manufacture's installation procedures, if not on product data sheets, which will be the basis for accepting or rejecting actual installation procedures.

#### 1.05 Quality Assurance

- A. Qualifications
  - 1. Provide products for a company specializing in manufacture of coatings with a minimum of 10 years of experience.
  - 2. Applicator shall be trained in application techniques and procedures of coating materials and shall demonstrate minimum of 5 years successful experienced in such applications. Maintain throughout the duration of the application, a crew of painters who are fully qualified.
  - 3. Single Source Responsibility: Materials shall be products of a single manufacturer and provide secondary materials, which are produced or are specifically recommended by coating system manufacturer to ensure compatibility of system.
- B. Pre Construction Meeting:
  - 1. Schedule a meeting to be held on-site before field application of coating systems begins.
  - 2. Meeting shall be attended by Contractor, Owner's representative; Owner's coating inspector, Coating applicator (if different from Contractor), Manufacture's representative and a representative from the cathodic protection installer.
  - 3. Topics of discussion shall include a review of the contract documents, review items such as environmental conditions, surface conditions, surface preparation,

application procedures and protection following application, and the establishment of areas on-site that will be available for use as storage areas and work areas.

## 1.06 Delivery and Storage

- A. Packing and Shipping
  - 1. Deliver products in manufacturer's original unopened containers. Each container shall have manufacturer's label, intact and legible.
  - 2. Each label shall contain the manufacturer's name, type of paint, manufacturer's stock number, color name and number and instructions for thinning, where applicable.
- B. Storage and Protection
  - 1. Store materials in a designated protected area, per manufacturer's printed data sheet instructions.
  - 2. Project conditions
- C. Environmental Requirements
  - 1. Apply coating materials per manufacturer's printed data sheet instructions
  - Refer to specific product data sheets for minimum surface temperature requirements. Surface temperatures and ambient air temperatures shall be at least 5 degrees F above dew point and in a rising mode.
  - 3. Provide for proper ventilation using explosion proof equipment. Allow to run 72 hours after interior coating application. The existing tank has 2 existing 24" dia. man ways.
  - 4. Adequate illumination shall be provided using explosion proof lights and equipment
  - 5. Atmosphere shall be free of airborne dust.

# PART 2 PRODUCTS

# 2.01 Paint

A. The protective coatings identified in these specifications are set up as standards of quality.

- 1. No substitution shall be considered unless the Owner's representative has received a written request for approval at least ten (10) days prior to the date for receipt of bids.
- 2. Each such request must include:
  - a. the name of the specified material for which a substitution is being requested
  - b. the name and number of the proposed substitution material
  - c. a complete description of the proposed substitute, including performance and test data
  - d. any other information necessary for an evaluation.
- 3. The burden of proof of the merit of the proposed substitute is upon the Contractor. Approval or disapproval of the proposed substitution rests solely with the Owner's representative and his decision shall be final.

4. Protective coatings for interior wet applications must be listed by NSF International as approved for potable water contact according to ANSI/NSF Std. 61, Section 5,

"Protective (Barrier) Materials.

- 5. The Contractor shall be responsible for assuring that all materials are delivered to the job site in the original sealed and labeled containers of the protective coating manufacturer. All material on the job shall be subject to inspection by the Owner's representative.
- D. SPECIAL PROVISIONS
  - 1. The Contractor shall be responsible for completing the removal of all remaining water, sediment, rust, etc. that is required prior to surface preparation. All preliminary preparation work will be at the Contractor's expense.

The Contractor shall:

- a. Protect aluminum gauge boards and nametags during sandblasting and painting procedures.
- b. Protect copper lines, light fixtures, valve threads, and electrical boxes.
- c. Replace all manhole bolts with cadmium-plated or galvanized bolts if the Contractor opens a manhole.
- d. Replace all gaskets.
- 1. The Contractor shall **NOT**:
  - a. Paint concrete unless otherwise specified.
  - b. Allow the use of silica sand for surface preparation.
- 2. The Contractor shall only mix FULL kits of approved coating. No partial kits will be saved or mixed at a later time.

# 2.02 Interior Coating System

- A. MATERIALS TO BE PROVIDED AND PROCEDURES TO BE FOLLOWED BY THE CONTRACTOR
  - 1. Unless otherwise specified in the contract, the Contractor shall supply all of the necessary materials to complete the work. The Contractor shall provide the following materials and services:

**Surface Preparation:** The surface preparation shall be performed in accordance with an SSPC-SP 10 Near White Metal Blast Cleaning. Please be reminded as part of this standard requires all weld spatter and weld defects will need to be remediated as it relates to preparation for coatings. The abrasive shall be garnet manufactured by GMA or Barton (30 X 40 for example). The surface cleanliness and profile will be measured and recorded.

#### Interior Roof and Structure

Prime Coat: Devoe 233H or Tnemec N140 applied at 6.0-8.0 mils dry film thickness.

Stripe Coat: 233H or N140 on all edges bolts, imperfections, between plates

Finish Coat: Devoe 233H or Tnemec N140 applied at 6.0-8.0 mils dry film thickness.

#### Interior Shell and Floor

**Prime and Finish Coat:** Polibrid 705 or Tnemec Series FC22 applied at 20.0-30.0 mils dry film thickness. This can be applied in a single or multiple coats.

**Finished System:** 12.0-16.0 mils dry film thickness for the roof, the structure above the top capacity limit, and the ladder. The minimum coating thickness for the shell and floor is 20.0 dry film mils.

The finished coating system will be dry film thickness tested in accordance with SSPC-PA 2 and holiday detected below the top capacity limit.

# 2.03 Exterior Coating System

- A. MATERIALS TO BE PROVIDED AND PROCEDURES TO BE FOLLOWED BY THE CONTRACTOR
  - 1. Unless otherwise specified in the contract, the Contractor shall supply all of the necessary materials to complete the work. The Contractor shall provide the following materials and services:

**Surface Preparation:** The tank exterior shall be power washed to a degree to remove all chalk, dirt, debris, and contaminants. Please also note that any existing runs, drips, sags, imbedded foreign material, and will also be the responsibility of the contractors surface preparation prior to any spot priming or finish coating.

**Spot Prime:** Spot prime with Devoe Bar-Rust 233H or Tnemec Pota-Pox II N140 epoxy by brush or roller to any deficiencies or damaged areas. It will be expected for the contractor to feather flush with the existing coating. Mil thickness is irrelevant.

**Finish Coat:** Apply a full finish coat of Devoe 378 Devthane or Tnemec 1075 Endurashield II Semi-Gloss at 3.0-5.0 mils dry film thickness.

The final coating shall be free of all runs, drips, sags, imbedded foreign material, roller nap, and anything else that will affect the performance or overall finished appearance. Proper thinners and application temperatures are crucial to minimize orange peeling, overlap marks, and flashing. The finish coating will be inspected for aesthetics, as well as, performance.

# 2.04 TESTING, VENTILLATION, AND TANK COMPLETION PROCEDURES

The interior testing will consist of surface cleanliness, surface profile, dry film thickness compliance, holiday detection, and other surface defects such as overspray, imbedded material, runs, drips, etc.

The exterior inspection will include the surface preparation, spot priming, and finished appearance.

Please note that new bolts (non-carbon) and manyway gasket(s) are required.

Caulk between stitch welds on the upper chime where the shell meets the roof with Sika 1A NSF Caulking.

All AJWD Specification Requirements Shall Be Followed

#### 2.05 Tank Repairs

- A. TANK REPAIRS PRIOR TO TANK COATING/PAINTING
  - 1. The Contractor is required to notify the Owner's representative on a timely basis when tank repairs are necessary, and to identify the nature and extent of repairs that are required.
  - If repairs to the tank are necessary, the Contractor shall be responsible for coordinating all such repairs, and shall request a change order from the Owner's representative before initiating such repairs as required in the General Conditions of Contract.
  - 3. All repairs are to be made according to ANSI/AWWA D101-53 (R86), "Standard for Inspection and Repairing Steel Water Tanks, Standpipes, Reservoirs, and Elevated Tanks, for Water Storage."
  - 4. The Company will not allow the Contractor to alter the structure of the tank.

#### 2.06 Surface Preparation

A. SURFACE PREPARATION – DEBRIS CONTAINMENT AND DISPOSAL When required by Federal, State, or local regulation, the Contractor shall enclose the entire tank and structure and contain surface preparation debris. Refer to SSPC Guide 6, "Guide for Containing Debris Generated During Paint Removal Operations." The Contractor shall dispose of all surface preparation debris according to applicable Federal, State, and local regulations. Refer to SSPC-Guide 7, "Guide for the Disposal of Lead-Contaminated Surface Debris." Worker protection and environmental protection shall be followed in accordance with the following Federal Regulatory Standards and other applicable Federal, State, or local regulations:

29 CFR 1910 – OSHA General Industry Standards 29 CFR 1910.134 – Respiratory Protection

- 29 CFR 1910.1000 Air Contaminants Permissible Exposure Limits
- 29 CFR 1910.1020 Employee Access to Exposure and Medical Records
- 29 CFR 1926 OSHA Construction Industry Standards
- 29 CFR 1926.59 Hazard Communications
- 29 CFR 1926.62 Lead Exposure in Construction; Interim Final Rule
- 40 CFR 261 Identification and Listing of Hazardous Waste
- 40 CFR 262 Standards Applicable to Generators of Hazardous Waste 40 CFR263 – Standards Applicable to Transporters of Hazardous Waste 40 CFR 264 – Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
- B. Surfaces that have been in contact with chemicals can be assumed to be contaminated. depending on the type of chemical, it may be necessary to clean the surface before dry blasting and again after blasting in order to remove contaminants that can otherwise cause blistering of the coating system.
- C. Most common methods are:

Steam Cleaning Hot Water/Detergent Washing (Pressure) Solvent Washing Hydroblasting or Wet Sandblasting Prebaking at Very High Temperatures

- The first two methods can efficiently remove most soluble and emulsified contaminants. Solvent cleaning is only feasible for small tanks or small areas. Solvent cleaning will not remove water-soluble materials. When detergents are used, a fresh water rinse is necessary to remove traces of the detergent left on the surface.
- 2. Hydroblasting will seldom be used for the cleaning of tanks due to the very high pressure involved. Wet sandblasting is possible. It can remove old coatings, water soluble contaminants, and corrosion products simultaneously. It cannot remove oil or grease products.
- Before cleaning takes place, the surface must be free from oil, grease, salt deposits, and other foreign material that cannot be removed by abrasive blasting. These contaminants, which differ from mill scale and rust, would otherwise be forced into the profile and interfere with the adhesion and the chemical resistance.
- D. Blasting: Steel surfaces must be blasted to near white metal (SSPC-SP5/SA3) or as near as possible to white metal, but never less than near-white-metal (SSPC-SP10/SA2 ½). Mill scale, when present on a ferrous surface, is cathodic to the surface, meaning the steel will sacrifice itself to save the mill scale. All mill scale MUST be removed prior to coating application. Although the surface may in fact already have a coating visible, the CONTRACTOR SHALL NOT assume that the previous contractor has removed the mill scale prior to applying the existing coating. All bids will be submitted with the understanding that mill scale MAY be present beneath the existing coating, and that an SP-10 (near-white) blast will be required prior to any new coating application unless otherwise specified. NO additional costs, above the bid price, will be submitted for removal of any mill scale that is found on the surface.
- E. Profile:

The blast anchor profile must average 2 to 3 mils, but preferably 2.5 mils.

F. Abrasives:

The abrasive media shall be **garnet** and shall be of sufficient grit size to attain a specified blast anchor profile between 2 to 3 mils.

- Pre-Preparation and Operational Testing of Abrasives for Soluble Salts Contamination: Test abrasive media for chloride contamination using test kit as described below, entitled "Test Kit for Measuring Chlorides in Abrasives." The maximum allowable chloride concentration is 3 Parts per cm squared. Test media immediately prior to use, and in no case more than 24 hours prior to use.
- 2. Pre-Application Testing for Soluble Salts Contamination: Test blasted surfaces for chloride contamination using the Test Kit described below, entitled "Test Kit for Measuring Chlorides on Steel Surfaces." Test all surfaces at the rate of three tests for the first 1000 square feet plus one test for each additional 3000 square feet or part thereof. Concentrate testing of bare steel at areas of coating failure to bare steel and areas of corrosion pitting. Perform 30% of tests on bare metal at welds, divided equally between horizontal and vertical welds. One or more readings greater than 3 micrograms per square centimeter of chlorides shall be cause for rejection of surface. Wash all surfaces with Chlor\*Rid according to the manufacturer's recommendations, allow to dry and retest until all required test show allowable results. Re-blast tested and cleaned areas to required specifications. Label all test tubes and retain for test verification.

#### G. ALLOWABLE SOLUBLE SALTS TEST KITS

- 1. Test kit for measuring Chlorides on Steel Surfaces (Test Kits called Chlor\*Test, as manufactured by CHLOR\*RID International. Inc. of Chandler, Arizona (www.chlor-rid.com)).
- Test kit for measuring Chlorides in Abrasives (Test Kits called Chlor\*Test "A", as manufactured by CHLOR\*RID International, Inc. of Chandler, Arizona (www.chlor-rid.com)).
- H. Welds and Edges:

These areas need special attention because they are often the first place where corrosion starts. Weld splatters must be removed by power tool grinding. Welds must be ground to a smooth radius and sharp edges must be rounded to prevent the coating from pulling away.

I. Dehumidification:

Depending on the ambient conditions, it may be necessary to use dehumidifiers to prevent rust blooming of the blasted steel surface. In all instances the dew point must remain at least 5°F or 3°C below the steel temperature.

Although not very often the case with new steel, black spot rusting may occur shortly after blasting. This is a sign that the steel has been infected with sulfates or chlorides, etc., which cannot completely be removed by dry abrasive blasting. In such a case, refer to section B, Old Corroded and/or Previously Coated Steel Surfaces.

J. Dust Removal:

After the blasted steel surface is approved, abrasive dust must be removed with a vacuum cleaner. A broom is insufficient. Most effective is the combination of

blowing and vacuum cleaning in that order. Dust particles left on the surface will interfere with coating adhesion.

#### 2.07 Preparation of Coating Material

- A. Storage: At least 24 hours before coating material will be used, the material must be placed in an area where the temperature is kept between 50°F and 86°F (10°C 30°C).
  - 1. Premixing: The coating system is a two-component thermosetting material that requires thorough mechanical mixing.

After opening the can of base component, it is necessary to premix the base until no sediment is left on the bottom of the can. A squirrel-cage-type mixer such as the Jiffy mixer is efficient. Care must be taken not to introduce air (foam). After sufficient premixing, the hardener component may be added to the base and mixed immediately.

- 2. Mixing Ratio: Unless otherwise indicated, base and hardener are supplied in the correct ratio: one can of hardener to one can of base. The use of the exact ratio is of prime importance for the chemical resistance of the cured coating film. Therefore, the hardener container must be emptied completely into the base. A very small amount of thinner may be used for cleaning the hardener can. The amount used must be deducted from the overall amount of thinner used for correction of spray viscosity.
- 3. Spray Equipment: Conventional air spray or airless spray may be used to apply coatings. Because airless spray is almost exclusively used, the following information will deal only with this method.

The airless pump must have a pressure ratio of at least 30 to 1, but preferably 45 to 1. A tip size between 0.018" and 0.021" is strongly recommended. A reversible tip is recommended.

All equipment and lines must be absolutely clean to prevent blocking of the tip and to prevent coating contamination.

#### 2.08 Application of Protective Coatings

The Contractor shall apply each coating according to the specifications and the protective coating manufacturer's recommendations.

The Contractor shall apply the coating at the specified thickness. If the specified thickness is not obtained, the Contractor shall apply an additional coating. The Contractor shall apply all protective coatings in strict accordance with the applicable manufacturer's current printed product data sheet and container label. The Contractor shall not apply protective coatings above or below the minimum/maximum surface temperatures as stated on the product data sheet. The Contractor shall not apply protective coatings to wet or damp surfaces and shall not apply protective coatings in rain, snow, fog, or mist. Surface temperatures must be at least 5° F above the dew point and the Contractor shall delay painting until such condition exists. The Contractor shall complete the painting well in advance of the probable time of day when condensation may occur and/or the surface temperature may be expected to drop below the minimum listed on the applicable product data sheet. The Contractor shall measure DFT according to current SSPC PA2, "Dry Paint Thickness with Magnetic Gauges."

It is essential that the first coat wet the steel surface perfectly. An addition of up to 10% thinner may be added, but confirm that if thinning, it is within the manufacturers printed data sheet and complies with all local, state and federal VOC laws. When wet film thickness gauges are used, it must be kept in mind that the steel profile will have an effect on the readings. Thinner ratios can vary from project to project due to application equipment, weather conditions, substrate conditions, etc.

Before starting the actual spray application, it is a good practice to observe the spray pattern on a separate piece of steel or cardboard. Good atomization without fingering, heavy spots, or insufficient flow, etc. must be obtained. If imperfections occur, corrections must be made quickly. Use a somewhat higher pressure or use the next size smaller tip. If this does not correct the problem, add a small amount of thinner.

Dry spray or coarse paint globules at extremes of the spay pattern are unacceptable. Dry spray or overspray is often caused by spraying at improper angles to the surface. Move the gun parallel with the surface, releasing the trigger of the gun before reversing direction for the next stroke.

Measure the wet film thickness regularly.

The second coat is applied in the same way, and using the same thinning ratio, after sufficient drying time of the previous coat.

- Stripe Coating: As an extra measure for corrosion protection, it is standard practice to apply a stripe coat of the primer with a brush in the welds, edges, and areas that are hard to reach with the spray gun. For that purpose, enough of the mixed primer must be thinned with approximately 25% thinner. The lower viscosity of this mixture will help to penetrate crevices and will prevent an undesirable film buildup. This stripe coating can best be done with a short roundtip bristle brush. Another stripe coat may be applied when the full primer coat has dried sufficiently.
- 2. Potlife and Thinning: No mixed material may be used beyond the potlife. No thinner may be used to increase the potlife. Methyl Ethyl Ketone shall not be used for thinning purposes. Thinners must be that as manufactured by the coating supplier utilized for each specific project.
- 3. Drying/Curing Interval: The ideal temperature of air and steel for the application and drying between coats is between 68°F and 77°F (20°C and 25°C). Best results are obtained by drying for 16 to 24 hours at 68°F (20°C) between coats. Lower temperatures require longer drying intervals. When hot air blowers are used to bring the steel temperatures higher than 68°F (20°C), it is strongly recommended to let the coating dry for one (1) hour at ambient temperature with sufficient fresh air ventilation before application of heat. It is further recommended that only indirect fire heaters be used for forced air curing in order to prevent intercoat contamination.
- 4. Final Curing: At 68°F (20°C) the tank lining will cure enough for most services in 7 days minimum. Ventilation is required for the first 24 hours. When not enough time is available to cure at 68°F (20°C), hot air blowers should be used to continuously circulate heated fresh air to maintain a surface temperature of 140°F (60°C).

#### 2.09 Inspection

- A. The inspection during and after the tank lining job can be divided into two different functions:
  - 1. Inspection on a pass/fail basis.
  - 2. The above-mentioned function together with preventive actions during the application.
  - 3. The following list gives the essential checkpoints for an inspection:

TEST	INSTRUMENTS
Blast Profile	Replica Tape of Comparator
Temperatures	Surface Thermometer
Humidity/Dew Point	Sling Psychrometer or Digital
Thickness of Each Coat	Magnetic Film Thickness Gauge
Pinhole/Sags/Runs/Dryspray/Flow	Holiday Detector and Magnifying Glass
Cure	MEK Rubs (50 rubs)

- B. Preventive Inspection: Inspection service can be very helpful when attention is paid to all parts of the operation. Although not claimed to be complete, the following list may contribute:
  - 1. Type of abrasive and cleanliness of the abrasive
  - 2. Cleaning method used before blasting
  - 3. Check for salt contamination on the steel surface after blasting
  - 4. Dehumidification
  - 5. Mixing procedure
  - 6. Paint storage and consumption
  - 7. Spray pattern
  - 8. Wet film thickness
  - 9. Ventilation
  - 10. Pinhole and holiday detection
  - 11. Drying/curing procedures
  - 12. Safety procedures
- C. Dry Film Thickness: One of the most controversial subjects of application and inspection is the measurement and judgment of DFT.

Highly skilled application techniques are required to keep the DFT within specified limits. It must be understood that most tank linings are exposed to severe conditions. In such a case, the idea "the thicker the better" is definitely false.

Five spot measurements must be taken over an area of 100 square feet. Each spot measurement consists of three gauge readings next to one another. The average of three readings is used to calculate the average of the spot readings.

The average of the spot readings has to be in the specified mil thickness range. According to SSPC-PA2, no spot reading lower than 80% of the specified mileage is acceptable.

In addition, the maximum film thickness also is limited. No spot reading (average of a cluster of three gauge readings) higher than 120% of the specified film thickness is acceptable.

Where the film thickness is too low, an extra coat must be applied In accordance with procedures established in this guide.

In case of high film thickness, the thick area must be sanded (after sufficient curing) and a very light extra finish coat applied to "renew" the film.

The magnetic film thickness gauges must be calibrated frequently enough to ensure correct readings. The original calibration must take place with shims placed on the blasted surface as described in SSPC-PA2. This method prevents higher thickness readings found than are actually applied, especially with deeper profiles.

#### 2.10 Literature

Additional literature to be used in conjunction with these guidelines: Steel Structures Painting Manual, Volume 1 In particular, chapters: 2.0 Surface Preparation 2.2 Metallic Abrasives 2.4 Abrasive Air Blast Cleaning 2.6 Hand and Power Tool Cleaning 2.9 Chemical Cleaning a. Solvent Wipe b. Steam Cleaning c. High Pressure – Hot Detergent 5.3 Safety in Paint Application 6.0 Inspection 14.2 The Lining of Tanks B. Steel Structures Painting Manual, Volume 2 Surface Preparation Standards Chapter 5, Paint Application Specifications SSPC-PA2 A Guide to Safety in Paint Application SSPC-PA Guide 311

#### 2.11 Curing, Ventilation, and Disinfection

The Contractor shall provide adequate ventilation to effectively remove solvent vapors for proper drying of paint on interior surfaces. The Contractor shall be required, upon request from the Owner's representative or the Independent Coating Inspector, during the pre-construction meeting to provide specific details on its plan to provide adequate curing and ventilation.

A combination of forced and natural ventilation shall be continued after coating application is completed to ensure complete curing and solvent removal. Coating life may be shortened if there is inadequate ventilation during the curing period and residual coating solvent may contribute to taste and odor problems in stored water. Lower temperatures or higher humidity may extend the time that ventilation is necessary. The Contractor shall use forced air ventilation with heating units when applying coatings at low temperatures and higher humidity. The ventilation must be designed in such a way that no solvent vapors remain in corners, etc. The air used must be clean and dry enough to prevent any condensation of moisture on the coated surface. Good ventilation will prevent solvent entrapment in the film. Following final coat application and final inspection, the Contractor shall not disinfect the tank until the coating system is fully cured and approved by the Independent Coating Inspector. Refer to the applicable product data sheet for dry time/temperature requirements. The Contractor shall disinfect the tank according to the current American Water Works Association Standard AWWA C652 - Method 2, or as instructed by the Owner's representative. The Contractor, at its expense, shall be responsible for disinfecting the tank immediately before placing the tank in service. All cathodic protection systems shall be disabled and locked out before

initiating tank draining and shall remain disabled until completion of the interior warranty inspection. Once the tank is placed back into service, the lock shall be removed and the cathodic protection system energized.

#### 2.12 Clean Up

The Contractor shall remove from the site property and from all public and private property, at its own expense, all temporary structures, rubbish, and waste materials from its operations. In the event the Contractor fails to do so, the Owner may remove same at the expense of the Contractor.

#### 2.13 Containment/Disposal Costs

The Contractor shall be responsible for all costs associated with containment and waste disposal, and for all waste removal as specified in the General Conditions of Contract.

The Contractor shall guarantee all labor, workmanship, and materials it applies for the minimum guarantee period, as specified in the General Conditions of Contract. Approximately eleven (11) months after the Contractor's completion of the work and the Owner's acceptance of the completed work, the Owner's representative shall schedule with an Independent Coating Inspector a date for an inspection for all interior coating work completed, and shall notify the Contractor of such date at least thirty (30) days in advance.

If repairs are necessary, the Contractor shall be responsible for properly disinfecting the water storage tank prior to it being placed back into service. All such repair work will be subject to the conditions of the original Contract.

# PART 3 EXECUTION

#### 3.01 Examination

- A. Site Verification of Condition:
  - 1. Examine areas and conditions under which application of coating systems shall be performed for conditions that will adversely affect execution, permanence, or quality of coating system application.
  - 2. Correct conditions detrimental to timely and proper execution of Work
  - 3. Do not proceed until unsatisfactory conditions have been corrected.
  - 4. Commencement of installation constitutes acceptance of conditions and responsibility for satisfactory performance.

#### 3.02 Preparation

- A. Protection
  - 1. Take precautionary measures to prevent fire hazards a spontaneous combustion. Remove empty containers from the site at the completion of each day's work
  - 2. Provide drop cloths, shields, and other protective equipment
  - 3. Protect elements surrounding work from damage or disfiguration
  - 4. As Work proceeds, promptly remove spilled, splashed or splattered materials from surfaces. Leave storage area neat and clean at all times.

# 3.03 Application

- A. Disinfection and Filling of Tank
  - 1. Provide adequate ventilation for proper drying of paint on interior surfaces and which will remove solvent vapors.
  - 2. Following final application, tank shall not be disinfected or filled until coating system is fully cured.
  - 3. Refer to applicable product data sheet for dry time / temperature requirements. Disinfection shall be in accordance with AWWA C652 and ADEQ bulletin 8.
- B. Interface with other Work
  - 1. Allow a minimum of seven days curing time after application of final coat to tank interior before flushing, disinfection or filling with water.

# 3.04 Repair / Restoration

- A. At the completion of Work, touch up and restore finishes that were damaged.
- B. Defects in Finished Surfaces: When stain, dirt, or undercoats show through final coat, correct defects and cover with additional coats until coating is of uniform finish, color, appearance and coverage.
- C. Touch up of minor damage shall be acceptable where result is not visibly different from surrounding surfaces. Where result is visibly different, either in color, sheen or texture, recoat entire surface.

#### 3.05 Protection

A. Protect painted areas against damage until paint system is fully cured.

#### 3.06 Waste Management

- A. General Requirements
  - 1. Place materials defined as hazardous or toxic waste in designated containers
  - 2. Return solvent an oil soaked rags for contaminant recovery an laundering or for proper disposal
  - 3. Do not dispose of paints or solvents by pouring on the ground. Place in designated containers for proper disposal.
- B. Containment / Disposal Requirements
  - 1. Refer to SSPC 61 guide for containing debris generated during paint removal operations.
  - 2. Disposal of Surface Preparation Debris: Surface preparation debris shall be disposed of in compliance with federal, state and local regulations.
  - 3. Contaminant Disposal Costs shall be the responsibility

# 3.07 One Year Anniversary Inspection

- A. Owner shall set a date for a one year inspection.
- B. Inspection will be attended by an owner's representative and the painting contractor
- C. Any deficiencies in the coating systems shall be repaired at the contractor's expense.

# PART 4 CATHODIC PROTECTION SYSTEM

# 4.01 Scope

A. The cathodic protection design / installation contractor shall provide all necessary design services, materials, equipment, labor and supervision for the installation of an automatically controlled impressed current cathodic protection system to provide corrosion control for the interior submerged surface of specified tank. All work furnished shall be in accordance with AWWA Standard D104, ANSI/NSF 61 and features included in the following specification.

#### 4.02 Design

- A. All design services shall be provided by the Corrosion Specialist who is accredited by NACE as a senior corrosion technologist, corrosion specialist of cathodic protection specialist that has experience in corrosion protection in water storage tanks. The system shall provide effective corrosion control in accordance with the following criteria: tank to water potential, IR drop free, within a range of -0.850 volts to -1.050 volts relative to a copper to copper sulfate reference electrode. This potential shall be measured free of the effect of voltage gradients (IR drop). The system capacity shall be based upon:
  - 1. Total submerged surface area of the tank.
  - 2. Type of coating
  - 3. Total bare surface area to be protected with a minimum of 25% of the total surface area
  - 4. Minimum current density of 0.5 MA/ sq ft bare surface area
  - 5. Chemical analysis of water including resistivity expressed in ohm-cm. It shall be the responsibility of the contractor to conduct his own water quality analysis.
  - 6. Minimum anode design life of twenty years

#### 4.03 System Components

- A. Rectifier: The rectifier unit shall perform in accordance with ANSI / AWWA Standard D 104 and shall include:
  - 1. Transformer
  - 2. Silicon rectifying elements
  - 3. Circuit breakers
  - 4. Lightning, surge and overload protection
  - 5. Provision for air-cooling operation
  - 6. Digital voltmeter(s), ammeter (s), and potential meter (s)
  - 7. Weather proof cabinet in accordance with NEMA 4 requirements
  - 8. Provision to vary current output from 0% to 100% of rated capacity
  - 9. Provision for 110 120 volt, 60 Hz, single phase AC power
  - 10. Provision for mounting, grounding, and locking
  - 11. DC output capacity in volts an amperes in accordance with section 4.02
  - 12. Number of circuits in accordance with Section 4.02

- 13. Automatic controller that adjusts output to compensate for changes in water level, temperature of water, water chemistry, and cathodic polarization, and shall include the following provisions:
  - a. Utilize long-life reference electrode (s) installed within the tank
  - b. Monitor the tank to water potential, free of IR drop
  - c. Automatically adjust the tank to water potential, free of IR drop, to a present value
  - d. Operate within 25 mv of present value
  - e. Limit current to a preset value
  - f. Utilize digital potential meter (s) to display tank to water potential, free of IR drop
- B. Long Life Reference Electrodes:
  - The permanent reference electrode shall consist of a copper copper sulfate electrode which is manufactured to remain stable (plus or minus 10 mv) for a minimum of 20 years. The reference electrode to lead wire connection shall be encapsulated to prevent water migration. The reference electrode shall be positioned within the tank to provide the most representative measurements for the submerged surface area.
- C. Anode Suspension System
  - The anode suspension system shall be in accordance with ANSI/AWWA Standard D-104, Section 4.2.4.2.2 Type C, Vertical System or Section 4.2.4.1.1 Type A, Horizontal System. The anode lead wire for vertical suspension shall be attached to a porcelain insulator bracket bolted to the interior of the tank roof. Hand hole assemblies used for the installation of vertical anode suspension systems from the roof of the tank shall consist of a 6"diameter cover, rubber gasket, and a clamping bar with a stainless steel bolt assembly for each 5" diameter access opening.
- D. Anode Materials
  - 1. The anode material shall be selected in accordance with section 4.02 and shall consist of either a minimum of 0.062" diameter titanium with a mixed metal oxide coating or a minimum of 0.062" diameter platinized niobium with 25 micro-inches of platinum. All anodes to header cable connections shall be sealed to prevent water migration.
- E. Pressure Entrance Fitting
  - 1. The fitting shall be manufactured to prevent leakage through the fitting and to prevent water migration through the wire insulation. The entrance fitting shall be sized for a minimum of 1.0 inch NPT, 3000 psi coupling.

#### 4.04 Wiring

A. All wiring within the tank shall be insulated to prevent copper conductor to water contact. All wiring on the exterior of the tank shall be insulated and run in rigid conduit.

#### 4.05 Hardware

A. All hardware used in conjunction with the system shall be protected against corrosion. 4.06 ANSI / NSF 61 A. All materials in contact with the water or exposed to the interior of the tank shall be classified in accordance with ANSI/NSF 61 "Drinking Water System Components". This requirement shall be met under testing conducted by a product certification organization accredited for this purpose by the American National Standards Institute. Contractor shall submit a copy of the company registration and materials certificate to the owner to verify ANSI / NSF 61 system component classification.

# 4.07 Submittals

A. The contactor shall submit the following information to the owner for approval: Drawings showing system configuration, description of system components, copy of the ANSI / NSF 61 component certification and the design calculations for required voltage, amperage and life expectancy.

#### 4.08 Workmanship and Installation

- A. Qualifications: The cathodic protection constructor shall have a minimum of five (5) years of experience installing and servicing the types of systems described in this specification. The system shall be installed by personnel specifically trained by the constructor to provide all workmanship required for corrosion control performance.
- B. Performance: All work shall be in accordance with the following requirements:
  - 1. Components of the cathodic protection system shall be installed in the manner and at the locations as shown on the submittals.
  - 2. Pressure entrance fitting shall be installed in accordance with AWWA D100
  - 3. Welding of steel coupling and anchors for horizontal anode suspension and rectifier mounting bracket shall be performed by the contractor prior to coating the tank. The cutting of 5" diameter access openings for vertical anode suspension shall be performed by the contractor prior to coating the tank. The cathodic protection supplier shall provide all necessary drawings and materials to the installer prior to coating of the tank.
  - 4. Welding, cutting and coating shall be installed in accordance with AWWA D-100.
  - 5. Materials and equipment shall be inspected prior to installation. Any defective components shall be repaired or replaced.
  - 6. Electrical work shall be in accordance with National Electrical Code.
  - 7. Lead wires shall be installed to prevent damage from abrasion.
  - 8. Electrical connections within the tank shall be sealed to prevent water migration.
  - 9. The rectifier shall be mounted at a convenient height (eye level) above grade for monitoring and service purposes.
  - 10. A.C. power to the rectifier shall be furnished by the owner

#### 4.09 Energizing the System

A. After the system is installed and the tank is filled, the cathodic protection installer shall provide start up service which will included but not limited to energizing, testing, and adjusting the system for optimum performance of the cathodic protection system. This start up service shall be performed in accordance with ANSI/AWWA D104 Section 5.2

Testing. This start-up service shall be coordinated with the owner or his representative. All "tank to water" potential measurements shall be conducted with a calibrated portable copper –copper sulfate reference electrode and a portable high impedance voltmeter. A minimum of five locations shall be measured. All test data shall be reviewed and evaluated by the Corrosion Specialist. The start –up shall occur approximately 12 months after substantial completion has been issued and the final test and an adjustment shall be conducted approximately 12 months after start up service. In addition to start up service, "as-built" drawings and an owner maintenance manual shall be submitted to the owner prior to the issuance of the "substantial completion" for the tank.

# 4.10 Monitoring

- A. The cathodic protection installer shall furnish self- addressed report cards to be completed by the owner. Report cards received by the installer during the guarantee period and service period shall be evaluated for system performance.
  4.01 Guarantee
- B. All workmanship, equipment and materials furnished by the installer shall be guaranteed for one year from the system activation (start up).

# 4.11 Service Agreement

- A. At the conclusion of the warranty period, the cathodic protection installer shall furnish a service agreement to the owner for the system installed. The agreement shall include the annual service rate and complete description of the scope of work proposed. The agreement for the annual inspection and potential testing shall be in accordance with AWWA D-104, Appendix "C" and include as a minimum:
  - 1. One annual job site visit
  - 2. "Tank –to-water" potential measurements conducted at representative locations within the tank. A minimum of five locations shall be measured.
  - 3. Measurements shall be conducted with a portable high impedance voltmeter and a calibrated copper copper sulfate reference electrode.
  - 4. Adjustments for optimum corrosion control shall be in accordance with criteria for protection.
  - 5. Data recorded shall provide sufficient information to evaluate the performance for the system relating to criteria for protection.
  - 6. In the event additional work is required, the installer shall submit a report with recommendations for optimizing corrosion control.

## CHECKLIST OF REQUIRED DOCUMENTS TO BE SUBMITTED BY BIDDERS

Bidders shall indicate by initialing below that each of the following have been included in the response:

- \_\_\_\_\_ Exhibit A, Bid Tab
- \_\_\_\_\_ Exhibit B, Similar Service History
- \_\_\_\_\_ Exhibit C, Exceptions/Additions/Corrections (If applicable)
- \_\_\_\_\_ Exhibit D, Certificate of Insurance
- \_\_\_\_\_ Exhibit E, Understanding and Agreement
- \_\_\_\_\_ Exhibit H, Subcontractors List
- \_\_\_\_\_ Exhibit I, Progress Schedule
- \_\_\_\_\_ Exhibit J, Surety Bid Bond
- Copies of State Licenses, Local Licenses and permits necessary for operation of business
- \_\_\_\_\_ State Corporation Commission documents (must include information on all holdings)

Date:

Signature of Bidder

Printed Name of Bidder

## Exhibit A

#### **BID TAB**

FIRM: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE: \_\_\_\_\_ Fax

# BASE BID

	DESCRIPTION OF SERVICES	QUANTITY	TOTAL COST
1	Coat interior of 500,000 gallon storage tank (60ft diameter X 24 ft height) per section 2.02 A 1	2	
2	Coat exterior of 500,000 gallon storage tank (60ft diameter X 24 ft height) per section 2.03 A 1	2	
3	Coat exterior of 1 million gallon storage tank (84ft diameter X 24 ft height) per section 2.03 A 1	1	
4	Remove existing 8" overflow and replace with 16" diameter overflow, match existing height of 1 million gallon overflow	2	
5	Remove existing 24" air vent and replace bolts on beams around dollar plate and install new 36" air vent	2	
6	Coat all exterior tank piping	2	
7	Install new cathodic protection system per section 4	2	
8	Coat existing booster pump station and hydro-tank per section 2.03 A 1	1	
9			

TOTAL BASE LUMP SUM BID \$

Total Base Lump Sum Bid in Words:		
	Date	
Signature		
	Title	
Printed Name	· · · · · • <u></u>	

#### Exhibit B

#### SIMILAR SERVICE HISTORY

#### PROJECT NO. WD 2017-01

Each Bidder shall submit a list of at least three (3) customers including name, address, contact person and telephone number for whom he or she has similar work has been completed in the last twelve (12) months and shall include a short description and location of work using this form.

1. Customer:			
Nam	Name of Agency or Firm		
Address			
Telephone	Contact	Person	
Short Description	of Work:		
Location	Start & Complete Date	Cost	
2. Customer:	e of Agency or Firm		
Nam	e of Agency or Firm		
Address			
Telephone	Contact	Person	
Short Description	of Work:		
Location	Start & Complete Date	Cost	

3. Customer:

Name of Agency or Firm

Address

Telephone

Contact Person

Short Description of Work:

Location

Start & Complete Date

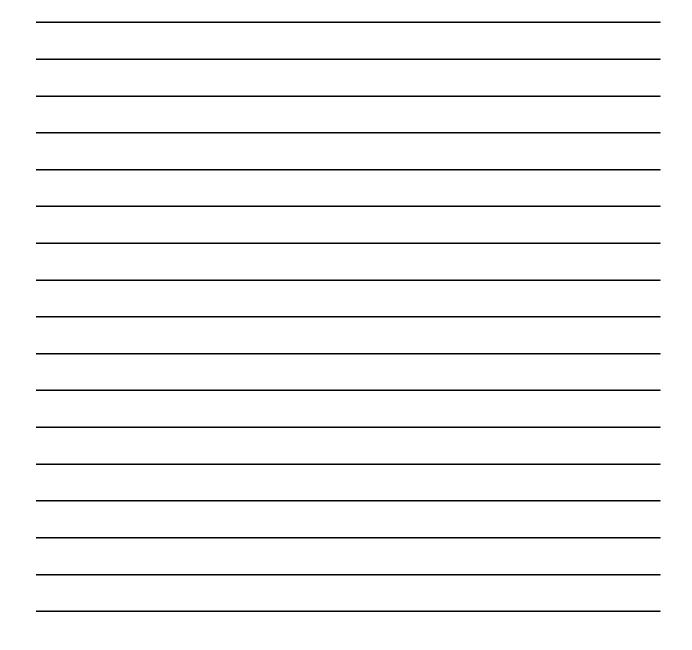
Cost

#### Exhibit C

#### **EXCEPTIONS/ADDITIONS/CORRECTIONS**

#### PROJECT NO. WD 2017-01

For uniformity and bid comparison purposes, all previous documents shall be completed as received from the Apache Junction Water District. Should the Bidder wish to propose or note any exceptions, additions, or corrections, they shall be included on this page and Bidder may attach additional pages. Please note that submittal of this Exhibit does not constitute a protest.



# Exhibit D

# **CERTIFICATE OF INSURANCE**

#### PROJECT NO. WD 2017-01

The \_\_\_\_\_\_ certifies that the following insurance policies have been issued on behalf of:

NAME OF INSURED:

ADDRESS OF INSURED:

	Type of	Policy	Effect.	Expire	Limits of
Insurance		Number	Date	Date	Liability
1.	Workman's Compensation				\$100,000 Each Accident; \$100,000 Each Disease, \$500,000 Disease Policy Limit
2.	Commercial General Liability				\$1,000,000 Each Occurrence; \$2,000,000 Products/Completed Operations Aggregate; \$2,000,000 General Aggregate Limit
3.	Contractual Bodily Injury & Property Damage				\$1,000,000 Each Occurrence
4.	Professional Liability				\$1,000,000 Each Claim
5.	Automobile Bodily Injury & Property Damage				\$1,000,000 Each Occurrence

It is further agreed that these policies shall not expire, be canceled or changed until all work has been completed and the project has been accepted by the Apache Junction Water District. If a policy does expire during the life of the contract, a renewal Certificate of the required coverage must be sent to the Apache Junction Water District Attorney not less than thirty (30) calendar days prior to expiration date. This Certificate is not valid unless countersigned by an authorized representative of the Insurance Company. The Certificate of Insurance must also provide that the District, its officers, employees and agents are additional insured parties.

Date: 0	Countersigned by:		
	Title:		
SUBSCRIBED AND SWORN TO befor Insurer.	re me this day of 20 by	as	
My Commission Expires:	Notary Public		

# Exhibit E

# UNDERSTANDING AND AGREEMENT

# PROJECT NO. WD 2017-01

# (Complete and return with bid packet with all other documents noted on checklist attached hereto)

PROPOSAL TO THE APACHE JUNCTION WATER DISTRICT, ARIZONA:

In compliance with the advertisement for bids, and having examined these documents, and being familiar with the conditions, I/we hereby submit our acknowledgment of the terms and conditions for furnishing services for the Apache Junction Water District. We further agree to execute the contract documents and furnish the required certificates of insurance if I am/we are selected to provide such services.

I/We shall perform the responsibilities set forth in the Contract Documents in compliance with all applicable State and Federal statutes and regulations, and city codes and other requirements.

I/WE HEREBY ACKNOWLEDGE receipt of and confirm the terms and conditions.

This proposal is submitte	d by	, a corporation organized		
		; a partnership consisting of		
		; or an indiv		
as	ar	nd is the holder of Arizo	na State License	
No		:	<u> </u>	
Respectfully submitted by	y:			
		Firm		
Mailing Address	City	State	Phone	
Offic	er/Title			
ATTEST:				
Officer and Title				
Witness (if bidder is an ir	odividual)			
	aiviaaaij			

# Exhibit F

# APACHE JUNCTION WATER DISTRICT AGREEMENT FOR COATING THE INTERIOR AND EXTERIOR TWO 500,000 GALLON STEEL TANKS, EXTERIOR COATING OF A 1,000,000 MILLION GALLON STEEL TANK, AND RELATED MISCELLANEOUS ITEMS

#### PROJECT NO. WD 2017-01

THIS AGREEMENT made and entered into by and between the APACHE JUNCTION WATER DISTRICT ("District"), an Arizona municipal corporation, and \_\_\_\_\_\_, an Arizona corporation ("Contractor"), both reference here in after collectively as the "Parties" and individually as a "Party.".

#### RECITALS

A. Contractor has responded to District's request for proposal via RFP No. WD 2017-01, in which Contractor asserts its willingness, ability and qualifications to provide this work and service (hereinafter referred to as the "Work").

B. District and Contractor desire to set forth herein their respective responsibilities and the manner and terms upon which Contractor shall render the Work.

C. District has complied with the public bidding requirements under Arizona Revised Statute Title 34 and Apache Junction City Code, Vol. I, Article 3-7.

#### AGREEMENT

NOW, THEREFORE, District retains Contractor to perform, and Contractor agrees to render the services in accordance with the terms and conditions set forth as follows:

1. <u>PROJECT DESCRIPTION</u>: Contractor shall do and perform or cause to be done and performed in a good workmanlike manner, the Work in accordance with the contract documents as fully described in the Notice Inviting Bid Proposals for Project No. RFP No. WD 2017-01which includes all required specifications.

2. <u>PRICES</u>: Prices shall be governed under Exhibit A for the performance of the Work under the contract documents.

3. <u>CONTRACT TERM</u>: The Term of this Contract shall be performed from October 23, 2017 through January 31, 2018. Extensions shall only be allowed as mutually agreed upon in writing by the Parties.

4. <u>LABOR AND MATERIALS</u>: Unless otherwise provided in the contract documents, Contractor shall provide, pay and insure under the requisite laws and regulations for all labor, materials, equipment, tools and machinery, utilities, transportation,

other facilities and services necessary for the proper execution and completion of the Work whether temporary or permanent, and whether or not incorporated or to be incorporated in the Work.

5. <u>TAXES</u>: Contractor shall pay all license, sales, consumer, use and other similar taxes for the work or portions thereof provided by Contractor which are legally enacted at the time bids are received whether or not yet effective or subsequently applicable due to acts of jurisdictions or bodies other than District.

PERMITS & FEES: Unless otherwise provided in the Contract Documents, 6. Contractor shall secure and pay for all permits, government fees, licenses and inspections necessary for the proper execution and completion of Work which are customarily secured after execution of the contract and which are legally required. Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the performance of the Work. City permits for this Work will be provided to Contractor at no cost. Contractor represents and warrants that any license necessary to perform the Work under this Agreement is current and valid. Contractor understands that the activity described herein constitutes "doing business in the City of Apache Junction" and Contractor agrees to obtain a business license pursuant to Article 8-2 of the Apache Junction City Code, Vol. I, and keep such license current during the term of this Agreement and after termination of this Agreement any time Work is performed pursuant to the warranty provisions set forth in Section 6. Contractor also acknowledges that the tax provision of the Apache Junction Tax Code, Chapter 8A, may also apply and if so, shall obtain a transaction privilege license and/or other licenses as may be required by the city code. Any activity by subcontractors within the corporate city limits will invoke the same licensing regulations on any subcontractors, and Contractor ensures its subcontractors will obtain any and all applicable licenses. Further, Contractor agrees to pay all applicable privilege and use taxes that are applicable to the activities, products and services provided under this Agreement.

7. <u>INDEPENDENT CONTRACTOR</u>: Contractor shall at all times during Contractor's performance of the services retain Contractor's status as an independent Contractor. Contractor's employees shall under no circumstances be considered or held to be employees or agents of District, and District shall have no obligation to pay or withhold state or federal taxes, or provide workers compensation or unemployment insurance for or on behalf of them or Contractor. Contractor shall supervise and direct the delivery of the materials using its best skill and attention. Except as provided in this Agreement, Contractor shall be solely responsible for all means, methods, techniques, sequences and procedures, and for coordinating all portions of the work required by the contract documents. Contractor shall be responsible to District for the acts and omissions of its employees.

8. <u>INDEMNIFICATION</u>: To the fullest extent permitted by law, Contractor shall defend, indemnify and hold harmless District, its elected and appointed officers, officials, agents, and employees from and against any and all liability including but not limited to demands, claims, actions, fees, costs and expenses, including attorney and expert witness

fees, arising from or connected with or alleged to have arisen from or connected with, relating to, arising out of, or alleged to have resulted from the acts, errors, mistakes, omissions, Work or services of Contractor, its agents, employees, or any tier of Contractor's subcontractors in the performance of this Agreement. Contractor's duty to defend, hold harmless and indemnify District, its special districts, elected and appointed officers, officials, agents, and employees shall arise in connection with any tortious 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 an Contractor's acts, errors, mistakes, omissions, Work or services in the performance of this Agreement including any employee of Contractor, any tier of Contractor's subcontractor or any other person for whose acts, errors, mistakes, omissions, work or services Contractor may be legally liable.

9. ENFORCED DELAYS (FORCE MAJEURE): Neither District nor Contractor, as the case may be, shall be considered not to have performed its obligations under this Agreement in the event of enforced delay (an "Enforced Delay") due to causes beyond its control and without its fault or negligence or failure to comply with applicable laws, including, but not restricted to, acts of God, fires, floods, epidemics, pandemics, quarantine, restrictions, embargoes, labor disputes, and unusually severe weather or the delays of subcontractors or materialmen due to such causes, acts of a public enemy, war, terrorism or act of terror (including but not limited to bio-terrorism or eco-terrorism), nuclear radiation, blockade, insurrection, riot, labor strike or interruption, extortion, sabotage, or similar occurrence or any exercise of the power of eminent domain of any governmental body on behalf of any public entity, or a declaration of moratorium or similar hiatus (whether permanent or temporary) by any public entity directly affecting the Project. In no event will Enforced Delay include any delay resulting from unavailability for any reason of labor shortages, or the unavailability for any reason of particular consultants, subcontractors, vendors or investors desired by Contractor in connection with the Project. Contractor agrees that Contractor alone will bear all risks of delay which are not Enforced Delay. In the event of the occurrence of any such Enforced Delay, the time or times for performance of the obligations of the Party claiming delay shall be extended for a period of the Enforced Delay; provided, however, that the Party seeking the benefit of the provisions of this Section shall, within thirty (30) calendar days after such Party knows or should know of any such Enforced Delay, first notify the other Party of the specific delay in writing and claim the right to an extension for the period of the Enforced Delay; and provided further that in no event shall a period of Enforced Delay exceed ninety (90) calendar days.

10. <u>GOVERNING LAW AND VENUE</u>: The terms and conditions of this Agreement shall be governed by and interpreted in accordance with the laws of the State of Arizona. Any action at law or in equity brought by either Party for the purpose of enforcing a right or rights provided for in this Agreement, shall be tried in a court of competent jurisdiction in Pinal County, State of Arizona. The Parties hereby waive all provisions of law providing for a change of venue in such proceeding to any other county. In the event either Party shall bring suit to enforce any term of this Agreement or to recover any damages for and on account of the breach of any term or condition in this Agreement, it is mutually agreed that the prevailing party in such action shall recover all costs including:

all litigation and appeal expenses, collection expenses, reasonable attorneys' fees, necessary witness fees and court costs to be determined by the court in such action.

11. <u>INSURANCE</u>: Contractor, at its own expense, shall purchase and maintain the minimum insurance and other additional requirements set forth herein.

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 Agreement is satisfactorily completed and formally accepted; failure to do so may, at the sole discretion of the District constitute a material breach of this Agreement.

Contractor's insurance shall be primary insurance as respect to District, and any insurance or self-insurance maintained by District 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 coverage afforded under the insurance policies to protect District.

The insurance policies, except Workers Compensation, shall contain waiver of transfer rights of recovery (subrogation) against District, its agents, officers, officials and employees for any claims arising out of Contractor's acts, errors, mistakes, omissions, work or services.

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

District 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. District shall not be obligated, however, to review same or to advise Contractor of any deficiencies in such policies and endorsements, and such receipt shall not relieve Contractor from, or be deemed a waiver of District's right to insist on strict fulfillment of Contractor's obligations under this Agreement.

The insurance policies, except Workers Compensation, required by this Agreement, shall name District, its agent, officers, officials and employees as additional insured parties.

# REQUIRED COVERAGE

Commercial General Liability

Contractor shall maintain Commercial General Liability insurance with a limit of not less than \$1,000,000 for each occurrence with a \$2,000,000 Products/Completed Operations Aggregate and a \$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 including, but not limited to, the liability assumed under the indemnification provisions of this Agreement which coverage will be at least as broad as Insurance Service Office, Inc. Policy Form CG 00011-93 or any replacement thereof. In addition, automobile liability coverage of at least \$1 million per occurrence or a combined single limit of at least \$1,000,000 is required. The auto liability policy should contain endorsements for hired autos, non-owned autos and scheduled vehicles, as applicable to the Contractor's business.

Such policy shall contain a severability of interest provision, and shall not contain a sunset provision or commutation clause, nor any provision which would serve to limit third party action over claims.

The Commercial General Liability additional insured endorsement shall be at least as broad as the Insurance Service Office Inc.'s Additional Insured, Form CG 20101185, and shall include coverage for Contractor's operations and products and completed operations.

If required by this Agreement, if Contractor sublets any part of the work, services or operations, Contractor shall purchase and maintain, at all times during prosecution of the work, services or operations under this Agreement, District and Contractor's Protective Liability insurance policy for bodily injury and property damage, including death, which may arise in the prosecution of the Contractor's work, service or operations under this Contract. Coverage shall be on an occurrence basis with a limit not less than \$1,000,000 per occurrence, and the policy shall be issued by the same insurance company that issues Contractor's General Liability insurance.

Workers Compensation (Not Applicable to Sole Proprietorships)

Contractor shall carry Workers Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of Contractor's employees engaged in the performance of the work or services; and Employer's Liability insurance of not less than \$100,000 for each accident, \$100,000 disease for each employee, and \$500,000 disease policy limit.

In case any work is subcontracted, Contractor will require subcontractor to provide Workers Compensation and Employer's Liability to at least the same extent as required of Contractor.

# CERTIFICATE OF INSURANCE

Prior to commencing work or services under this Agreement, Contractor shall furnish the District with Certificates of Insurance, or formal endorsements as required by Agreement, issued by Contractor's insurer(s), as evidence that policies providing the required coverages, conditions and limits required by this Agreement are in full force and effect.

In the event any insurance policies required by this Agreement 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, to be filed with the District Clerk of District.

If a policy does expire during the life of the Agreement, a renewal certificate must be sent to District thirty (30) calendar days prior to the expiration date. All Certificates of Insurance shall be identified with bid serial number and title.

Insurance required herein shall not expire, be canceled, or materially changed without thirty (30) days' prior written notice to District.

12. <u>SUCCESSORS & ASSIGNS</u>: District and Contractor each bind themselves, their partners, successors, assigns and legal representatives to the other party hereto and to the partners, successors, assigns and legal representatives of such other party in respect to all covenants, agreements and obligations contained in the contract documents. Neither party to the contract shall assign the contract or sublet it as a whole without the written consent of the other, nor shall the Contractor assign any monies due or to become due to it without the previous written consent of District.

13. <u>WRITTEN NOTICE</u>: Written notice shall be deemed to have been duly served if delivered in person to the individual or member of the firm or entity, or to an office of the corporation for whom it was intended or if delivered at or sent registered or certified mail, return receipt requested, and first class postage prepaid to the last business address known to them who gives the notice.

14. <u>SAFETY</u>: Contractor and/or its subcontractors shall be solely responsible for job safety at all times.

15. <u>RIGHTS & REMEDIES</u>: The duties and obligations imposed by the contract documents and the rights and remedies available hereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law. No action or failure to act by District or Contractor shall constitute a waiver of any right or duty afforded any of them under the contract, nor shall any action or failure to act constitute an approval of or an acquiescence to any breaches hereunder except as may be specifically agreed to in writing.

16. <u>TERMINATION OF CONTRACT</u>: If, for any reason, the Contractor shall fail to fulfill in a timely and proper manner his/her obligations under the contract, or if the Contractor shall violate any of the covenants, agreements, or stipulations of the contract, the District shall thereupon have the right to terminate the contract by giving written notice to the Contractor of such termination and specifying the effective date thereof.

Notwithstanding the above, the Contractor shall not be relieved of liability to the District for damages sustained by the District by virtue of any breach of the contract by the Contractor.

The District may terminate the contract at any time by giving at least twenty-four (24) hours notice in writing to the Contractor. If the contract is terminated by the District as provided herein, the Contractor will be paid for the time expended and expenses incurred up to the termination date.

17. <u>APPEALS</u>: All contractual grievances shall be submitted in writing to the District Manager within five (5) calendar days after the difference of opinion or grievance occurs relating to any of the provisions of the terms of this Agreement. Within five (5) calendar days of receiving a written grievance, the District Manager shall respond in writing to the company. The District Manager's decision shall be final and binding, subject only to a further appeal in the Pinal County Superior Court pursuant to A.R.S. § 12-901, *et seq.* 

18. <u>RECORDS</u>: Records of Contractor's labor, payroll and other costs pertaining to this Agreement shall be kept on a generally recognized accounting basis and made available to District for inspection on request. Contractor shall maintain records for a period of at least three (3) years after termination of this Agreement, and shall make such records available during that retention period for examination or audit by District personnel during regular business hours.

19. <u>AMENDMENT</u>: It is mutually understood and agreed that no alteration or variation of the terms and conditions of this Agreement shall be valid unless made in writing and signed by the parties hereto, and that oral understandings or agreements not incorporated herein shall not be binding on the parties.

20. <u>SEVERABILITY</u>: District and Contractor each believe that the execution, delivery and performance of this Agreement are in compliance with all applicable laws. However, in the unlikely event that any provision of this Agreement is declared void or unenforceable (or is construed as requiring District to do any act in violation of any applicable laws, including any constitutional provision, law, regulation, or city code), such provision shall be deemed severed from this Agreement and this Agreement shall otherwise remain in full force and effect; provided that this Agreement shall retroactively be deemed reformed to the extent reasonably possible in such a manner so that the reformed agreement (and any related agreements effective as of the same date) provide essentially the same rights and benefits (economic and otherwise) to the Parties as if such severance and reformation were not required. Unless prohibited by applicable laws, the Parties further shall perform all acts and execute, acknowledge and/or deliver all amendments, instruments and consents necessary to accomplish and to give effect to the purposes of this Agreement, as reformed.

21. <u>TIME IS OF THE ESSENCE</u>: Time is of the essence with respect to all provisions in this Agreement. Any delay in performance by either Party shall constitute a material breach of this Agreement. Additionally, liquidated damages may be imposed if contractor fails to meet the construction deadlines as set forth in § 17 of the general conditions.

22. <u>CONFLICT OF INTEREST</u>: This Agreement is subject to, and may be terminated by District in accordance with, the provisions of A.R.S. § 38-511.

23. <u>PROHIBITION TO CONTRACT WITH CONTRACTORS WHO ENGAGE IN</u> <u>BOYCOTT OF THE STATE OF ISRAEL</u>: The Parties acknowledge A.R.S. §§ 35-393 through 35-393.03, as amended, which forbids public entities from contracting with Contractors who engage in boycotts of the State of Israel. Should Contractor under this Agreement engage in any such boycott against the State of Israel, this Agreement is automatically terminated. Any such boycott is a material breach of contract and will subject Contractor to monetary damages, including but not limited to, consequential and liquidated damages.

24. <u>COMPLIANCE WITH FEDERAL AND STATE LAWS</u>: Contractor understands and acknowledges the applicability of the American with Disabilities Act, the Immigration Reform and Control Act of 1986 and the Drug Free Workplace Act of 1989 to the services performed under this Agreement.

As required by A.R.S. § 41-4401, Contractor hereby warrants its compliance with all federal immigration laws and regulations that relate to its employees and A.R.S. § 23-214(A). Contractor further warrants that after hiring an employee, Contractor will verify the employment eligibility of the employee through the E-Verify program. If Contractor uses any subcontractors in performance of services, subcontractors shall warrant their compliance with all federal immigration laws and regulations that relate to its employees and A.R.S. § 23-214(A), and subcontractors shall further warrant that after hiring an employee, such subcontractor verifies the employment eligibility of the employee through the E-Verify program. A breach of this warranty shall be deemed a material breach of the Agreement that is subject to penalties up to and including termination of this Agreement. Contractor is subject to a penalty of \$100 per day for the first violation, \$500 per day for the second violation, and \$1,000 per day for the third violation. District at its option may terminate this Agreement after the third violation. Contractor shall not be deemed in material breach of this Agreement if the Contractor and/or subcontractors establish compliance with the employment verification provisions of Sections 274A and 274B of the federal Immigration and Nationality Act and the E-Verify requirements contained in A.R.S. § 23-214(A). District retains the legal right to inspect the papers of any Contractor or subcontractor employee who works under this Agreement to ensure that the Contractor or subcontractor is complying with the warranty. Any inspection will be conducted after reasonable notice and at reasonable times. If state law is amended, the Parties may modify this paragraph consistent with state law.

25. <u>COOPERATIVE USE OF CONTRACT</u>: The District has entered into various cooperative purchasing agreements with other Arizona government agencies, including the Strategic Alliance for Volume Expenditures "SAVE" cooperative. This contract may be extended for use by other municipalities, school districts and government agencies in the State of Arizona with the approval of the Contractor. Any such usage by other entities must be in accordance with the statutes, codes, ordinances, charter and/or procurement rules and regulations of the respective government agency. Orders placed by other agencies and payment thereof will be the sole responsibility of that agency. The District shall not be responsible for any disputes arising out of transactions made by others.

IN WITNESS WHEREOF the parties hereto have caused this Agreement to be signed by their duly authorized representative as of this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

CONTRACTOR:

By:\_\_\_\_\_ Title:\_\_\_\_\_

APACHE JUNCTION WATER DISTRICT an Arizona municipal corporation:

By: <u>Jeff Serdy</u> Title: Chairperson

ATTEST:

Kathleen Connelly District Clerk

APPROVED AS TO FORM:

Richard J. Stern District Attorney

STATE OF \_\_\_\_\_) ) ss. County of \_\_\_\_\_ )

The foregoing was subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by \_\_\_\_\_ as \_\_\_\_\_ of [Company Name], an Arizona [corporation/limited liability company].

My Commission Expires:

Notary Public

STATE OF ARIZONA ) ) ss. County of \_\_\_\_\_)

The foregoing was subscribed and sworn before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by Jeff Serdy, as Chairperson of the Apache Junction Water District, Arizona, an Arizona municipal corporation.

My Commission Expires:

Notary Public

# Exhibit G

# **BID INQUIRY FORM**

(General Clarifications)

# RFP PROJECT NO. WD 2017-01

PROJECT NAME: COATING THE INTERIOR AND EXTERIOR TWO 500,000 GALLON STEEL TANKS, EXTERIOR COATING OF 1,000,000 GALLON TANK, AND RELATED MISCELLANEOUS ITEMS\_\_\_

PROPOSAL NUMBER: WD 2017-01				
INQUIRY DEADLINE: 5:00 P.M., - Arizona Standard Time, September 25, 2017				
QUESTIONS ON: ORIGINAL RFP or ADDENDUM NO				
SECTION NUMBER/NAME:				
NAME:				
FAX NO PHONE NO				
COMPANY:				
COMPANY E-MAIL ADDRESS:				
DATE:				
QUESTIONS:				

# EXHIBIT H

SUBCONTRACTORS LIST (Complete and return with Bid Proposal)

# RFP PROJECT NO. WD 2017-01

Sub-Contractor #1

Sub-Contractor #2

Trade:	Trade	_
Name of Firm:	Name of Firm:	
Address:	Address:	_
	Telephone:	
Principal:	Principal:	
Sub-Contractor #3	Sub-Contractor #4	
Trade:	Trade	_
Name of Firm:	Name of Firm:	_
Address:	Address:	_
	Telephone:	
Principal:	Principal:	
	****	

# EXHIBIT D

# PROGRESS SCHEDULE

# RFP PROJECT NO. WD 2017-01

	ACTIVITY		ANTICIPATED START & FINISH TIME
	MOBILIZATION		
BEGIN WORK			
COMPLETION			
FINAL	INSPECTION	AND	ACCEPTANCE
	E		

#### SURETY BID BOND

#### RFP PROJECT NO. WD 2017-01

KNOW ALL MEN BY THESE PRESENT:

That we, Apache Junction Water District, as Principal, (hereinafter called the Principal), and the \_\_\_\_\_\_\_\_\_\_, a company holding a certificate of authority to transact surety business in the State of Arizona as issued by the Director of the Department of Insurance pursuant to Title 20, Chapter 2, Article 1 as Surety, (hereafter called the Surety), are held and firmly bound unto the Apache Junction Water District as Obligee, in the sum of ten percent (10%) of the total amount of the bid of Principal, submitted by him to the Apache Junction Water District for the work described below, for the payment of which sum, will and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents, and in conformance with A.R.S. WHEREAS, the said Principal is herewith submitting its proposal for:

NOW, THEREFORE, if the obligee shall accept the proposal of the principal and the principal shall enter 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 materials 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 to 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 \_\_\_\_\_\_ day of \_\_\_\_\_\_ A.D., 20\_\_\_.

Witness:

Principal

Witness:

Title

Surety

Title