

**CITY OF NORTH LAS VEGAS  
INVITATION TO BID**

**BID NO. 1351**

**The City of North Las Vegas (City) is requesting bid proposals for the following Project:**

**EAST RESERVOIRS RECOATING**

**SCOPE OF WORK:**

The "Project" of which the "Work" of this contract is to be completed is titled "EAST RESERVOIRS RECOATING and is located in the City of North Las Vegas at 7220 East Carey Avenue. The work consists of furnishing all material, equipment, labor, incidentals and services required for sandblasting, surface preparation, disposal of blast material, application of surface coating, curing of coating, painting, disinfection and other work as necessary to successfully repaint the exterior of steel water reservoirs, one (3) million gallon, or one (7.5) seven and one half million gallon or both and the above ground yard piping and pumps. The dimensions of the 7.5 million gallon tank is 201.5 in diameter, 32 feet in height and the 3.0 million gallon tank is 128 feet in diameter and 32 feet in height. The 7.5 million gallon tank will require lead abatement. Based on this, the City will require a lead abatement plan prior to any blasting work commencing on this tank. The smaller 3 million gallon tank does not have lead concentrations that will warrant lead abatement. Contractor is to sandblast and recoat the P2B Pump Station which has 4 pumps, a bypass, relief valves, & etc. Coating requirement and color are the same as in specifications for the tanks, but the MCC cabinet will only be brush blasted (SSPC-SP7). The pump station piping will be blasted to a near white surface (SSPC-SP10) and coated the same as required for the tanks. The pump and the motors will be protected during the blasting of the pipes to prevent the abrasive material from entering them. The pump and the motors will have the paint removed with hand tools (SSPC-SP2) and painted per specification. The work shall also include the addition of 24 lineal feet of fabricated steel handrails and 32 lineal feet of steel ladder, including steel cage and climb prevention as noted in the detail, the fabrication and install of 36" roof vents Exhibit C, fabrication and install of a 30" Manhole Exhibit D and supply and install Water Level indicators.

The interior specifications have been included in the bid document for touching up purposes only. Specifically with regard to the interior areas opposite welded spots for the ladders and handrails.

QP1 and QP2 Certifications are required and the contract to have a NACE Certified Inspector on Staff is desirable.

Water and 120Volt Power are available at the site. The Contractor will be allowed to store materials and equipment onsite. The facility shall be kept secure during non-working house, but the City will not be held responsible for any instances of theft or vandalism. Subcontractors are required to have License. Any contractor or subcontractor will be required to have a City of North Las Vegas business license prior to the award of the job. This project is not subject to the prevailing wage requirements established by the Nevada Labor Commission.

The contract bid amount for the bid items shall include full compensation for furnishing all materials, protection and restoration., if damage, of all existing facilities and improvements required to remain in place; related items of work not otherwise provided for; and all labor, tools, equipment, incidentals, and transportation necessary to complete the work as specified herein, and as directed by the City's designated representative.

**A PREBID CONFERENCE** will be held on September 8, 2009 at 10:00 a.m. in the Utilities Conference room at 2829 Fort Sumter Drive. The purpose of this conference is to discuss the Project, prospective bidders concerns, and key issues. Attendance to the Pre-Bid Conference is mandatory.

**BID OPENING:** All Bids must be submitted in a sealed envelope, plainly marked, as detailed in Paragraph E, of the Instructions to Bidders, Section IB.1. All bids must be received in the office of the City Clerk, City Hall Complex, 2200 Civic Center Drive, North Las Vegas, NV 89030, prior to 2:00 p.m. local time, on September 21, 2009. The official time will be per the City Clerk's office without exception. Bids received and stamped after

## INSTRUCTIONS TO BIDDERS

### IB.1 BIDDING PROCEDURES

#### A. Prebid Conference

A Prebid Conference will be held at the time and place indicated on the Invitation to Bid. The purpose of this conference is to discuss the Project, prospective Bidders concerns, and key issues of the Project. Attendance is mandatory.

#### B. Designated Contacts

The designated contact for questions pertaining to the Contract Documents, Specifications and/or Drawings is Tony Esguerra, Assistant Purchasing Manager, Telephone (702) 633-1460 Ext. 3646 or, Curt Kroeker, telephone number (702) 633-2676, fax number (702) 649-9784. All questions shall be submitted in writing, with a written response forwarded by the contact.

#### C. Contract Drawings

The Contract Drawings used for Bidding shall have the following title and shall be dated as noted:

Reservoir Ladder, Roof Manway and Railing Detail Sheet M6 dated 04-08-04  
City of North Las Vegas Sunrise Reservoir Repaint Project dated 04-04-08 Hand rail – 1 set per tank  
City of North Las Vegas East Reservoir 7220 East Carey Avenue dated 04-12-09  
Exhibit C Vent Detail  
Exhibit D Manhole Detail

The Contract Drawings do not purport to show all the details of the Work. **Bidders shall bid with the above contract drawings only those items related to the project.** They are intended to illustrate the character and extent of the performance desired under the Contract; therefore, they may be supplemented or revised from time to time, as the Work progresses, by the Project manager. All such supplementary and revised Drawings which do not change the Contract amount shall automatically become part of the Contract.

#### D. Interpretations and Addenda

Bidders shall take no advantage of any apparent error or omission in the Bidding Documents. In the event the Bidders discover such an error or omission, they shall immediately notify the City in writing. The City will then make such corrections and interpretations as may be deemed necessary for fulfilling the intent of the Bidding Documents through the issuance of an Addendum.

If it becomes necessary to revise any part of these Contract Documents, a written addendum will be provided to all plan holders. The City is not bound by any oral representations, clarifications, or changes made by City's employees, or representatives, unless such clarification or change is provided to Bidders in written addendum form.

Addenda shall be sent by either regular mail or certified mail, faxed, picked up, or delivered to all who are known by the City to have received a complete set of Bidding Documents (plan holders).

Prior to submission of the Bid, each Bidder shall ascertain that it has received all Addenda issued. The Bidder shall acknowledge receipt of all Addenda by completing the acknowledgment space provided on the Bid Form.

**E. Bid Preparation and Submission**

1. Bid proposals are to be submitted on the Bid forms provided and manually signed by pen by an officer or the principal of the Bidder. All figures must be written in ink or typewritten. Figures written in pencil or erasures are not acceptable. Bid amounts shall be determined by multiplying the unit price bid by the quantity shown on the Bid Schedule. Any interlineation or alteration must be initialed in ink by a person authorized to bind the Bidder to a Contract. If the person making said interlineation or alteration is not the same person who signs the Bid Proposal, such person must write his/her signature and print his/her name and title on each page of the Bid Proposal where initials appear. Written delegation of signature authority to an agent acting in behalf of the principal must accompany the sealed Bid and cannot contain any language which states the principal retains final approval of acceptance of any of the terms conditions, specifications and/or finalized Contract.
2. Each Bid shall be submitted in a sealed envelope prominently marked on the lower left side as follows:

**SEALED BID**

**BID NO: 1351**

**OPENING: September 21 , 2009 at 2:00 p.m.**

**COMPANY NAME:**

Failure to do so may result in a failure to open that Bid. Bids must be delivered prior to the time and date specified in the Invitation to Bid to the following address:

Office of The City Clerk  
North Las Vegas City Hall Complex  
2200 Civic Center Drive  
North Las Vegas, Nevada 89030

3. If forwarded by mail, the sealed envelope containing the Bid must be enclosed in another envelope addressed as specified. Mailed Bids must be received by the City Clerk prior to the closing time for receipt of Bids to receive consideration. Facsimile Bids will not be accepted nor considered. Emailed Bids will not be accepted nor considered in lieu of Formal Bid

**F. Documents Necessary For Submittal**

The Bid Proposal Form properly filled out including acknowledgement of all addendums Bid Schedule or Lead time of project. References as Required, Non-Collusive Affidavit and Americans with Disabilities Statement comprise the Bid Proposal and all shall be included in the sealed envelope. **Do not return the entire set of specifications with the Bid.** Omission of or failure to complete any portion of the required documents prior to the time of Bid Opening may be cause to reject the entire Bid.

**G. Bid Security**

THIS SECTION NOT USED

**H. Quantities**

The quantities given in the Contract Documents or indicated by the unit Bid items are approximate quantities and are intended to illustrate Scope of Work. The Contractor shall be responsible for verifying the exact quantities involved monthly through the measurement and payment provisions of the Contract Documents.

**I. Compensation**

The Total Bid Price excluding any amount shown for conflicts and contingencies shall cover all Work required by the Contract Documents. All costs in connection with the proper and successful completion of the Work, including furnishing all materials, equipment, supplies, and appurtenances; providing all construction equipment, tools and temporary utilities; and performing all necessary labor and supervision to fully complete the Work, shall be included in the unit and lump sum prices Bid. All work not specifically set forth as a pay item in the Bid Form shall be considered a subsidiary obligation of the Contractor, and all costs in connection therewith shall be included in the prices Bid.

**J. Schedule of Values**

The purpose of the Schedule of Values shall serve the City in two (2) distinct areas:

1. PRIOR TO AWARD OF BIDS - The City may request a Schedule of Values for any or all item(s) reflected on the Bid schedule for the purpose of determining an unbalanced Bid. The analysis shall be conducted by the City.
2. AFTER AWARD OF BID - The City will request a Schedule of Values for any or all item(s) reflected on the Bid schedule for the purpose of making partial payments to the Contractor.

Under no circumstances may any Bid item reflected as LUMP SUM or otherwise be increased or decreased as a result of the Lump Sum Bid breakdown analysis.

All prospective Bidders may be required to prepare a Schedule of Values, and it shall be the Bidder's responsibility to verify the quantities as shown on the Drawings before preparing his Bid. The schedule as shown on the Contract Drawings does not constitute a complete outline of the Work to be performed by the Contractor in accordance with the Contract Drawings and Specifications. This list is intended to include all major items, and the Bid computed there from will be the maximum compensation for all work and materials furnished by the Contractor in order to comply with the Contract Drawings and Specifications, whether or not indicated in the approximate quantities or pertaining to the items of Work listed therein.

**K. Bidders Preference**

THIS SECTION NOT USED

**L. Bidders Representation**

Each Bidder by submitting its Bid represents that:

1. The Bidder has read and understands the Contract Documents, and that his Bid is made in accordance therewith.
2. The submission of a Bid shall constitute an acknowledgment upon which the City may rely that the Bidder has thoroughly examined and is familiar with the Contract Documents. The Bidder shall in no way be relieved from any obligation with respect to its proposal or to the Contract. No claim for additional compensation will be allowed which is based upon a lack of knowledge of the Contract Documents.
3. The Bidder has inspected the site(s) of the Work and is satisfied, by personal examination or by other means, of the locations of the proposed Work, of the actual conditions, including subsurface conditions, of and at the site of Work. If, during the course of its examinations, a Bidder finds facts or conditions which appear to be in conflict with the letter or spirit of the Bidding documents before submitting its bid, the Bidder shall request the City, in writing, to provide additional information and explanation.
4. Submission of a Bid by the Bidder shall constitute conclusive evidence that the Bidder has relied on its own examination of (1) the site of the Work, (2) access to the site, (3) all other data and matters requisite to the fulfillment of the Work and on its own knowledge of existing facilities on and in the vicinity of the site of the Work to be constructed under the Contract, (4) the conditions to be encountered, (5) the character, quality and scope of the proposed Work, (6) the quality and quantity of the materials to be furnished, and (7) the requirements of the Bid, the Drawings and Specifications.
5. The information provided by the City is not intended to be a substitute for, or a supplement to, the independent verification by the Bidder to the extent such independent investigation of site conditions is deemed necessary or desirable by the Bidder.

Bidders for this Work must be qualified and licensed for this particular Work by the Nevada State Contractor's Board, and be licensed to do business in the City of North Las Vegas prior to the Bid Opening. Failure to comply may result in rejection of the Bid. Nevada Contractor's License type, number, expiration date and dollar limit must be indicated on the Bid Proposal. Questions concerning license requirements shall be directed to the Nevada State Contractor's Board.

The Bidders and the successful Contractors and their subcontractors shall comply with all provisions of NRS Chapter 624 and Nevada Administrative Code, Chapter 624.

**M. Preferential Employment**

THIS SECTION NOT USED

**N. Non-Discrimination**

In connection with the performance of work under this Contract, the Contractor agrees not to discriminate against any employee or applicant for employment because of race, creed, color,

national origin, sex, sexual orientation or age, including, without limitation, with regard to employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including, without limitation, apprenticeship.

The Contractor further agrees to insert this provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.

**O. Subcontracting**

THIS SECTION NOT USED

**P. Supplier and Service Provider Information**

1. Bidders are urged to utilize Minority and Women-Owned Business Enterprises as supplier(s) and service provider(s). Do not duplicate a firm's name if previously identified as a subcontractor.
2. Bidders shall provide the Supplier Listing with the submission of their Bid Proposal. This form will have the spaces filled in for each category, but no more than one firm will be identified for each category. If the successful Bidder plans to provide the Work or material, then the space may have the word "SELF" or be left blank.
3. Bidder agrees that he will assume responsibility for acts or omissions of his supplier(s), service provider(s) and of persons either directly or indirectly employed by them, as they are for the acts or omissions of persons directly employed by the Bidder. Nothing contained in the Contract Documents shall create any contractual relation between any supplier(s) or service provider(s) and the City.
4. City reserves the right to request copies of any or all documents that the successful Bidder may have with any supplier(s) or service provider(s).
5. The Contractor shall be a Nevada State-licensed Painting and Decorating Contractor. The Contractor shall have a minimum of five (5) years practical experience and successful history in the application of specified products to surfaces of steel structures and tanks. The Contractor shall substantiate this requirement by furnishing, within the bid documents, a written list of a minimum of five (5) references with accompanying photos of the work.

**IB.2. OPENING OF BIDS**

All Bids received on time will be opened and publicly read aloud at the time and place set forth in the Invitation to Bid. Bidders, their representatives, and all other interested persons may be present at the opening and reading of Bids.

Any Bids received after the time for receiving and opening Bids as set forth in the Invitation to Bid or as postponed by addenda will be considered nonresponsive and will not be opened. Any such Bids will be returned unopened to the Bidder.

**A. Mistake In Bid**

A request for withdrawal of a Bid due to a purported error shall not be considered unless the same is filed in writing to the City's designated representative by the Bidder within forty-eight (48) hours after opening of this bid. Any such request shall contain a full explanation of any purported error and shall be supported by the original calculations on which the Bid was computed, together with a certification and notarization thereon that such calculation is the original as prepared by the Bidder or his agent.

**B. Withdrawal of Bid**

1. Before Bid Opening - A Bidder may request withdrawal of its posted, sealed Bid prior to the scheduled Bid opening time provided the request is submitted to the City Clerk's Office in writing or an authorized representative presents himself with proper identification to the City Clerk's office and verbally requests that the Bid be withdrawn.
2. After Bid Opening - No Bids may be withdrawn for a period of ninety (90) calendar days after the date of Bid opening, except as set forth in A above. All responsive and responsible Bids received are considered firm offers for the time period specified above and may be considered for award. The Bidder's offer will expire at the time specified above or upon acceptance by City, when the successful Bidder provides the bonds, insurance, submittals and submits the signed Contract to the City for execution and the City executes the Contract.

**C. Rejection of Bids**

The City reserves the right to waive any informality or irregularity in any Bid received, and to reject any and or all Bids. In the case of rejection of all Bids, the City reserves the right to advertise for new Bids or to proceed to do the Work otherwise if, in the judgment of the City Council, it is in the best interest of the City.

**D. Bid Protests**

Any individual or company who bids on the contract may file a notice of protest regarding the award of the contract. The protest must be submitted in writing to the City Clerk within five (5) business days after the date on which bids were opened. The written protest must include a statement setting forth, with specificity, the reasons the person filing the protest believes that applicable provisions of the contract documents or law were violated. At the time a notice of protest is filed, the person filing such notice of protest shall post a bond with a good and solvent surety authorized to do business in the State of Nevada, and supply it to the City Clerk. The bond posted must be in an amount equal to the lesser of: twenty-five (25) percent of the total value of the bid submitted by the person filing the notice of protest; or two hundred fifty thousand dollars (\$250,000).

A notice of protest filed in accordance with this section shall operate as a stay of action in relation to the award of the contract until a determination is made by the North Las Vegas City Council. A person who makes an unsuccessful bid may not seek any type of judicial intervention until after the North Las Vegas City Council has made a determination on the notice of protest and awarded the contract. Neither the City nor any authorized representative of the City is liable for any costs, expenses, attorney's fees, loss of income or other damages sustained by a person who submits a bid, whether or not the person files a notice of protest pursuant to this section.

If a protest is upheld, the bond posted and submitted with the notice of protest will be returned to the person who posted the bond. If the protest is rejected, a claim may be made against the bond by the City in an amount equal to the expenses incurred by the City because of the unsuccessful protest.

**E. Irregular Bid**

A Bid shall be considered irregular for the following reasons, any one or more of which may be cause for rejection:

1. If the Bid Form furnished by the City is not used or is altered.
2. If there are unauthorized additions, conditional or alternate Bids, or omissions or irregularities of any kind which may tend to make the Bid incomplete, indefinite or ambiguous as to its meaning, or give the Bidder submitting the same a competitive advantage over other Bidders.
3. If the individual Bid items and/or schedule of values of a prospective Bidder's Bid are unbalanced in the opinion of the Engineer.
4. If the Bid submitted contains any erasure, interlineations, or other corrections unless each such correction is prepared and authenticated in acceptance with the provisions of Paragraph IB.1.E (1).

**F. Disqualification of Bidders**

Any one or more of the following may be considered as sufficient for the disqualification of a prospective Bidder and the rejection of the Bid:

1. Evidence of collusion among prospective Bidders. Participants in such collusion will receive no recognition as Bidders for any future Work of the City until such participant has been reinstated as a qualified Bidder.
2. More than one Bid for the same Work from an individual, firm, or corporation under the same or different name.
3. Lack of competency, adequate machinery, plant and/or equipment as revealed by the financial statement and/or any requested experience information.
4. Unsatisfactory performance record as shown by past work for the City, judged from the standpoint of workmanship, progress, and quality of services/goods provided.
5. Uncompleted work which, in the judgment of the City, might hinder or prevent the prompt completion of additional work, if awarded.
6. Failure to pay or satisfactorily settle all bills due for labor and material on any Contract(s) still outstanding at the time of the Bid opening.
7. Failure to comply with any qualification requirements of the City.
8. Failure to list, as required, all subcontractors who will be employed by the Bidder.
9. Failure of the prospective Bidder to be properly licensed.

10. Any other reason to be determined in good faith to be in the best interest of the City.

**G. OSHA Standards**

Prospective Bidders, by signing the Bid form, signify prima facie evidence that all material and workmanship on this Project shall meet or exceed OSHA standards and NOSHA standards.

**H. ADA STANDARDS**

Prospective Bidders, by signing the Bid Form, signify prima facie evidence that all material and workmanship on this Project shall meet or exceed ADA requirements under Department of Justice Code of Federal Regulations, 28 CFR, Part 36, revised as of July 1, 1994.

**END OF INSTRUCTIONS TO BIDDERS**

the designated time, will not be considered and will be returned to the Bidder unopened. Bids will be publicly opened and read aloud in the City Council Chambers, City Hall Complex, immediately after the established closing time and date.

**BID DOCUMENTS** will be available on August 31, 2009 and may be obtained at the Utilities Department, Technical Services Division, 2829 Fort Sumter Drive, North Las Vegas, Nevada 89030, or the City of North Las Vegas website, [www.cityofnorthlasvegas.com](http://www.cityofnorthlasvegas.com), [www.BidSync.com](http://www.BidSync.com), or [www.demandstar.com](http://www.demandstar.com).

Any questions regarding this solicitation should be referred to Curt Kroeker, P.E., Engineering Associate, with City of North Las Vegas at (702) 633-2676 and fax (702) 649-9784, or Tony Esguerra, Assistant Purchasing Manager at telephone (702) 633-1460 Ext 3646 and fax (702) 633-5321.

Bidders for this Work must be qualified and properly licensed for this particular work by the Nevada State Contractor's Board, and licensed to do business in the City of North Las Vegas prior to the Bid opening. Failure to comply will result in rejection of the bid. Nevada Contractor's License classification, number, and dollar limit must be indicated on the Bid Proposal. Questions concerning license requirements shall be directed to the Nevada State Contractor's Board. Bidders and the successful Contractor and Subcontractors shall comply with all provisions of Nevada Revised Statutes (NRS) Chapter 624 and Nevada Administrative Code, Chapter 624.

Bids shall be submitted in a sealed envelope, plainly marked with the bidder's name and address in the lower left-hand corner, the bid number, and the opening date and time and accompanied by the sealed Bid Proposal, Bid Schedule, Subcontractor Listing, Supplier Listing, Bid Preference Certificate of Eligibility (if applicable), Bid Bond, Non-Collusive Affidavit, and Americans with Disabilities statement.

The City Council of the City of North Las Vegas reserves the right to reject any or all bids or waive any informality in a bid. No bidder may withdraw his bid for a period of 90 days after the date set for the opening thereof. Acceptance, rejection and other requirements of bidders are subject to the NRS Chapter 338, as amended.

The City is an Equal Opportunity Employer and women-owned and minority business enterprises are strongly encouraged to bid.

**BID NO. 1351**

Published:      Review-Journal  
                      August 29, 2009  
                      August 30, 2009

\_\_\_\_\_  
By: Karen Storms, CMC  
    City Clerk

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

## CONTRACT AWARD INSTRUCTIONS

### CI.1 METHOD OF AWARD

The Bid will be awarded to the lowest responsive and responsible Bidder based on the lowest Base Bid and the lowest additive alternate bid, including construction conflicts and adjusted for Nevada State Bidder's Preference, if applicable. Bidder must bid all items to be responsive and considered for award.

### CI.2 TIME OF AWARD

The award, if made, will be within ninety (90) calendar days after the opening of Bids. The City reserves the right to accept or reject any or all Bids received.

#### A. Documents

One (1) set of the Contract Documents and Specifications will be provided the Contractor without charges upon award of the Contract.

### CI.3 BONDS

See Bonding Requirements at the end of specifications required for this bid and contract. (Performance, Guarantee, Material and Labor)

### CI.4 INSURANCE

#### A. General

If the Contractor fails to maintain any of the insurance coverages required herein, then the City will have the option to declare the Contractor in breach, or may purchase replacement insurance or pay the premiums that are due on existing policies in order that the required coverages may be maintained. The Contractor is responsible for any expenses paid by the City to maintain such insurance and the City may collect the same from the Contractor or deduct the amount paid from any sums due the Contractor under the Contract.

The insurance requirements specified herein do not relieve the Contractor of his responsibility or limit the amount of his liability to the City or other persons, and the Contractor is encouraged to purchase such additional insurance as he deems necessary.

Contractor is responsible for and must remedy all damage or loss to any property, including property of City, caused in whole or in part by the Contractor, any subcontractor or anyone employed, directed or supervised by Contractor. The Contractor is responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work.

#### B. Worker's Compensation Insurance (Mandatory)

Contractor agrees, as precondition to the performance of any work under this Contract, to secure and maintain in full force and effect, during the term of this Contract, Worker's Compensation Insurance. Contractor further agrees to provide the City with a work certificate and/or a certificate issued by the State Industrial Insurance System (SIIS) in accordance with the NRS 616.280.

#### C. Contractor's Liability Insurance (Mandatory)

After award of Contract, the Contractor shall promptly obtain, at its own expense, all the insurance required as stated herein, and shall submit coverage verification within 15 days for review and approval by the City prior to Contractor's execution of the Contract. The

Contractor further agrees to furnish certificates of insurance as indicated below. The certificates for each insurance policy are to be signed by a person authorized by that insurer and licensed by the State of Nevada. Each insurance policy supplied by the Contractor must be endorsed to provide that the coverage shall not be suspended, voided, canceled or reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail "return receipt requested" has been given to the City. This notice requirement does not waive the insurance requirements contained herein.

The Notice to Proceed with the Work under this Contract will not be issued, and the Contractor shall not commence work, until such insurance has been approved by the City. The Contractor shall not allow any subcontractors to commence work on its subcontract until all similar insurance required of the subcontractor has been obtained and verified by Contractor. Such insurance shall remain in full force and effect at all times during the execution of the Work and until the final completion and acceptance thereof and at all times thereafter as dictated in this Contract.

**TABLE FOR INSURANCE AMOUNTS**

<u>GENERAL LIABILITY</u>	<u>PER OCCURRENCE</u>	<u>AGGREGATE</u>
WORKERS COMPENSATION	IN ACCORDANCE WITH NEVADA STATE STATUES	
COMMERCIAL GENERAL LIABILITY	\$1,000,000	\$2,000,000
BODILY INJURY & PROPERTY	\$1,000,000	
DAMAGE COMBINED	\$1,000,000	
PRODUCTS & COMPLETED	\$1,000,000	
OPERATION	\$1,000,000	
INDEPENDENT CONTRACTORS	\$1,000,000	
BLANKET CONTRACTORS	\$1,000,000	

\*DEDUCTIBLE SHALL NOT EXCEED FIVE THOUSAND DOLLARS (\$5,000).

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AUTOMOBILE LIABILITY		
COMPREHENSIVE	\$1,000,000	
BODILY INJURY & PROPERTY		
DAMAGE COMBINED		
OWNED		
HIRED		
NON-OWNED		

\*DEDUCTIBLE SHALL NOT EXCEED FIVE THOUSAND DOLLARS (\$5,000).

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NOTE: The City of North Las Vegas shall be named as Certificate Holder and shall be **named as additionally insured** as it pertains to this Project only and such notation shall appear on the Certificate of Insurance furnished by the successful Bidder's surety company.

In addition, the City will require of the surety company to give thirty (30) calendar days written notice to the City of any proposed cancellation of the coverages above, and any exclusions to the effect that the surety company will "endeavor to inform" must be stricken from the Certificate of Insurance.

#### **CI.5 INDEMNIFICATION**

The Contractor shall protect, indemnify and hold the City and its officers, agents, employees, and volunteers and other retained consultants, harmless from and against any and all claims, damages, losses, suits, actions, decrees, judgments, attorney's fees, court costs and other expenses of any kind or character which the City, its officers, employees, agents, consulting engineers or other retained consultants may suffer, or which may be sought against, recovered from or obtainable against the City, its officers, employees, agents, consulting engineers or other retained consultants, as a result of, or by reason of, or arising out of, or on account of, or in consequence of (i) the operations of the Contractor, its subcontractors or agents, or anyone directly or indirectly employed by any subcontractor or agent, in the fulfillment or performance of the terms, conditions or covenants of this agreement, regardless of whether or not the occurrence which gave rise to such claim, damage, loss, suit, action, judgment or expense was caused, in part, by the party indemnified hereunder; or (ii) as a result of, or by reason, or arising out of, or on account of, or in consequence of, any neglect in safeguarding the Work; or (iii) through the use of unacceptable materials in constructing the Work; or (iv) because of any claim or amount recovered under the "Nevada Industrial Insurance Act," or any other law, ordinance, order or decree. Any money due the Contractor under and by virtue of this Agreement which is considered necessary by the City for such purpose, may be retained by the City for its protection; or in case no money is due, its surety may be held until all such claims, damages, losses, suits, actions, decrees, judgments, attorney's fees and court costs and other expenses of any kind or character as aforesaid shall have been settled and suitable evidence to that effect furnished to the City; provided, however, that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that it is adequately protected by public liability and property damage insurance as required by CONTRACTOR'S "LIABILITY INSURANCE."

In this connection, it is expressly agreed that the Contractor shall, at its own expense, defend the City, its officers, employees, agents, consulting engineers and other retained consultants, against any and all claims, suits or actions which may be brought against them, or any of them, as a result of, or by reason of, or arising out of, or on account of, or in consequence of any act or omission against which the Contractor has indemnified the City. If the Contractor shall fail to do so, the City shall have the right, but not the obligation, to defend the same and to charge all direct and incidental costs of such defense to the Contractor, including attorney's fees and court costs.

Reimbursement to the Contractor by the City of North Las Vegas, in whole or in part, for the costs of protecting traffic shall not serve to relieve the Contractor of its responsibility as set forth in these Standard Specifications.

The Contractor guarantees the payment of all just claims for materials, supplies and labor, and all other just claims against it or any subcontractor, made in connection with this Agreement.

#### **CI.6 PATENT INDEMNITY**

Contractor hereby indemnifies and shall defend and hold harmless City, and its officers, agents, employees, and volunteers respectively from and against all claims, losses, costs, damages, and expenses, including attorney's fees, incurred by City and its representatives, respectively, as a result of or in connection with any claims or actions based upon infringement or alleged infringement of any patent and arising out of the use of the equipment or materials furnished under the Contract by Contractor, or out of the processes or actions employed by, or on behalf of Contractor in connection with the performance of the Contract. Contractor shall, at its sole expense, promptly defend against any such claim or action unless directed otherwise by City or its

representatives; provided that City or its representatives shall have notified Contractor upon becoming aware of such claims or actions, and provided further that Contractor's aforementioned obligations shall not apply to equipment, materials, or processes furnished or specified by City or its representatives.

#### **CI.7 NOTICE TO PROCEED**

Notice to Proceed for Work - After receipt of all required post-bid information, the Construction Manager will issue the Notice to Proceed. The Notice to Proceed will be issued within ten (10) calendar days of receipt of approved bonds, insurance certificates and Contract signed by Contractor. A Conditional Notice to Proceed for such items as permits, shop drawings, and the ordering of materials (subject to approval of the shop drawings), may be issued by the Project Manager immediately following Award of this Contract by the City Council. However, no field work, including potholing, will be authorized.

#### **CI.8 TIME: COMPLETION OF PROJECT**

##### **A. Time**

The successful Bidder, upon becoming the Contractor after having entered into a Contract with the City, shall commence the Work to be performed under the Contract on the date set by the City in the written Notice-to-Proceed, continuing the Work in accordance with the approved schedule and shall complete the entire Work within one hundred and twenty(120) calendar days after the effective date of the Notice-to-Proceed. Further, separable portions of the Work may be subject to intermediate, or substantial completion and/or specific dates as established in the Special Conditions.

##### **B. Liquidated Damages**

In case of failure on the part of the Contractor to complete the Work within the time(s) specified in the Contract, or within such additional time(s) as may be granted by formal action of the City Council or the Contractor fails to prosecute the Work, or any separable part thereof, with such diligence as will insure its completion within the time(s) specified in the Contract or any extensions thereof, the Contractor shall pay to the City, as liquidated damages, the sum of five hundred dollars (\$500) for each calendar day for delay until such reasonable time as may be required for construction completion of the Work, together with any increased costs incurred by the City in completing the Work.

Time stated for completion shall include the resolution of all punch list items, final cleanup and demobilization.

The signing of the proposal by the Bidder shall be prima facie evidence that the Bidder agrees that the amount of penalty is fair and reasonable.

**END OF CONTRACT AWARD**

## GENERAL CONDITIONS

### SECTION 1.0

#### INTENT, DEFINITIONS, ABBREVIATIONS

##### GC 1.1 INTENT OF CONTRACT DOCUMENTS

The intent of the Plans and specifications is to describe the details for the construction and completion of the Work which the Contractor undertakes to perform in accordance with the terms of the Contract. Plans and specifications are divided into groups for the convenience of the City, Engineer, and Construction Manager. These divisions are not for apportioning Work or responsibility for Work among subcontractors, suppliers, and manufacturers.

Where the Plans or specifications describe portions of the Work in general terms but not in complete detail, it is understood that only the best general practice is to prevail and that only materials and workmanship of the best quality are to be used. The Contractor shall furnish tools, equipment, and incidentals, and do all the Work involved in executing the Contract in a satisfactory and complete manner.

In the event the materials and/or equipment are to be furnished by the City, as designated in the General Conditions, this shall not relieve the Contractor of the above requirements to furnish all other labor, materials, and equipment to complete the Contract.

##### GC 1.2 GOVERNING ORDER OF BIDDING AND CONTRACT DOCUMENTS

The Bidding and Contract Documents include various divisions, sections, and conditions which are essential parts for the Work to be provided by the successful Bidder. A requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete Work. In case of discrepancy, the following precedence will govern:

- 1) Special Conditions (if applicable)
- 2) Permits
- 3) Special Provisions
- 4) General Conditions
- 5) Drawings

Detailed plans shall have precedence over general plans. Addenda, change orders, and supplemental agreements will take precedence over any of the above.

##### GC 2.1 DUST CONTROL

As applicant, the Contractor is responsible for obtaining the Dust Control Permit and for ensuring that all contractor personnel, subcontractors, and all other persons abide by the conditions of the permit. The Contractor is also responsible for familiarizing himself with all pertinent Clark County and City regulations and practices and for supplying complete copies of the Dust Control Permit and Dust Mitigation Plan, if applicable, to all subcontractors.

Any contracts between the prime Contractor and applicable subcontractors must provide a monetary allowance for any dust control options specified in either the Dust Control Permit or, if applicable, the Dust Mitigation Plan.

In accordance with Section 94.4.11 of the "Air Quality Control Regulations", if at any time the Contractor's operations cause more than 50 acres of disturbed soil to exist, the Contractor shall cause to have in place a person (dust control monitor) with full authority to ensure that Dust Control Measures are implemented, including inspections, record keeping, deployment of resources, and shut-down or modification of construction activities as needed.

Throughout the Project area and for the duration of the Project, all disturbed soils must be maintained to minimize wind erosion and particulate emissions. Best available control measures (BACM) are required 24

hours a day, 7 days a week, whether or not there is current construction activity on site. When any part of the Project area is inactive for a period of 30 days or longer, long term stabilization shall be implemented within 10 days following cessation of active operations in that area. As permit holder, the Contractor shall notify the Health District in writing within 10 days following the cessation of active operations on all or part of the Project Area.

The Contractor's superintendent or other designated on-site representative, and all water truck drivers and water pull drivers on the Project shall be required to have successfully completed a Clark County Air Quality Management Department Dust Control Class.

As permit holder, the Contractor shall keep records of construction site self-inspections for the Project duration in accordance with Section 94.8.1.

## SPECIAL CONDITIONS

### SC 1.0 GENERAL – SUMMARY OF WORK

#### SC 1.1 CONTRACT DESCRIPTION

A. The "Project" of which the "Work" of this contract is to be completed is titled "**EAST RESERVOIRS RECOATING**" and is located in the City of North Las Vegas at 7220 East Carey Avenue. The work consists of furnishing all material, equipment, labor, incidentals and services required for sandblasting, surface preparation, disposal of blast material, application of surface coating, curing of coating, painting, disinfection and other work as necessary to successfully repaint the exterior of steel water reservoirs, one 3 million gallon or one 7.5 million gallon or both and the above ground yard piping and pumps. The dimensions of the two tanks are the 7.5 million gallon tank is 201.5 feet in diameter, 32 feet in height. The 3.0 million gallon tank is 128 feet in diameter and 32 feet in height. The 7.5 MG tank will require lead abatement. Based on this the City will require a lead abatement plan prior to any blasting work commencing on this tank. The smaller 3 MG tank does not have lead concentrations that will warrant lead abatement. Contractor is to sandblast and recoat the P2B Pump Station which has 4 pumps, a bypass, relief valves, & etc. Coating requirement and color are same as in specifications for the tanks. The MCC cabinet shall be coated with the same materials as specified for the tanks, but the MCC cabinet will only be brush blasted (SSPC-SP7). The pump station piping will be blasted to a near white surface (SSPC-SP10) and coated the same as required for the tanks. The pump and the motors will be protected during the blasting of the pipes to prevent the abrasive material from entering them. The pump and the motors will have the paint removed with hand tools (SSPC-SP2). and painted per spec The work shall also include the addition of 24 lineal feet of fabricated steel handrails and 32 lineal feet of steel ladder, including steel cage and climb prevention as noted in attached detail, the fabrication and install of 36" roof vents Exhibit C, fabrication and install of a 30" Manhole Exhibit D and supply and installation of Water Level Indicators.

The interior specifications have been included in the bid document for touching up purposes only. Specifically with regard to interior areas opposite welded spots for the ladders and handrails.

QP1 and QP2 Certifications are required and the contractor to have a NACE certified inspector on staff is desirable.

Water and 120 V power are available at the site. The Contractor will be allowed to store materials and equipment onsite. The facility shall be kept secure during non-working hours, but the City will not be held responsible for any instances of theft or vandalism. Subcontractors are required to have License. Any contractor or subcontractor will be required to have a CNLV business license prior to the award of the job. This project is not subject to the prevailing wage requirements established by the NV labor commission.

- B. The contract bid amount for the bid items shall include full compensation for furnishing all materials; protection and restoration, if damaged, of all existing facilities and improvements required to remain in place; related items of work not otherwise provided for; and all labor, tools, equipment, incidentals, and transportation necessary to complete the work as specified herein, and as directed by the City's designated representative.
- C. The work is to be under a single General Contract with a Contractor who holds the appropriate local and state licenses to complete the work.

## **SC 2.0 DESCRIPTION OF BID ITEMS AND BASIS OF PAYMENT**

### **SC 2.1 BID ITEM 1**

#### Construction Conflicts (Total Project)

This Bid Item is present in the Contract Documents to account for corrections, alterations, or modifications of the work that are not included in the Contract and are approved by the City's designated representative, and increase the amount of the work to be done. This bid item is not guaranteed to be fully distributed to the Contractor.

Measurements for work under this item shall be based on actual quantities of a similar item, negotiated lump sum of the actual labor, material and equipment used to perform the work or on a Force Account basis. The method of payment shall be determined by the City. No work shall occur nor payment be made without prior authorization of the City.

Payment for actual labor, materials and equipment shall be made as specified in Section 109.03 of the Uniform Standard Specifications. Equipment rental rates used for this contract shall be those contained in the "Rental Rate Blue Book for Construction Equipment" as published by Machinery Information Division of K-III Directory Corporation, 1735 Technology Drive, Suite 410, San Jose, CA 95110, Volume 1. The hourly rate to be paid shall be the weekly blue book rate divided by forty (40) plus the estimated operating cost per hour shown therein.

Overtime shall be paid in accordance with the Standard Specifications.

No compensation shall be made to the Contractor for equipment repair or equipment maintenance.

The Contractor will pay for transportation of equipment to and from the job site.

The labor surcharge for this item as established by Uniform Standards Section 109.03 (a) (2) shall be a maximum of 25%.

The City has entered a budgeted amount for the Bidder in the Bid No. 1 "Construction Conflicts".

## SC 2.2 BID ITEM 2

Mobilization/Demobilization

### DESCRIPTION OF BID ITEM

Furnish all labor, material, tools, equipment, and incidentals to provide for preparatory work and/or operations, incidentals, and other costs not otherwise paid for prior to beginning the Work. This item includes, but is not limited to, those operations necessary for the movement of personnel, equipment, supplies, and incidentals to the project site, permits, establishment of all site offices, Project sign, and other work or operations which must be performed in support of the Project.

### BASIS OF PAYMENT

Measurement of payment for work under this item shall be one lump sum basis. Payment for all WORK will be made at the Lump Sum Amount bid for this item and will be paid fifty percent (50%) for mobilization and fifty percent (50%) for demobilization.

## SC 2.3 BID ITEM 3

Sandblast and Recoat: (7.5 Million Gallon Exterior or 3.0 Million Gallon Exterior or both, P2B Pump station piping)

### DESCRIPTION OF BID ITEM

Furnish all labor, material, tools, equipment, and incidentals for the application of a completed exterior coating system including surface preparation, abrasive blast material, abrasive near-white blasting, testing for the level of leachable lead (TCLP) in the blast waste material by an EPLAT-certified laboratory, disposal of non-hazardous blast waste material, coating and disinfection of steel water reservoir (one 3 million gallon exterior or one 7.5 million gallon exterior or both) and the coating of the P2B pump station. Also included in the Lump Sum bid will be any and all required Dust Control measures per General Conditions Section GC2.1.

Contractor is to sand ballast and recoat the P2B Pump Station which has 4 pumps, a bypass, relief valves, & etc. Coating requirement and color are same as in specifications for the tanks. The MCC cabinet shall be coated with the same materials as specified for the tanks, but the MCC cabinet will only be brush blasted (SSPC-SP7). The pump station piping will be blasted to a near white surface and coated the same as required for the tanks. The pump and the motors will be protected during the blasting of the pipes to prevent the abrasive material from entering them. The pump and the motors will have the paint removed with hand tools (SSPC- SP2) and painted per spec.

### BASIS OF PAYMENT

Measurement of payment for work under this item shall be one lump sum basis. Payment for all WORK will be made at the Lump Sum Amount bid for this item and will be measured as a percentage of actual work completed for each bid sub item.

**Note: Only one tank at a time will allowed to be out of service during the sandblast, recoat and the ladder, hand rail, roof vent and manhole installation/fabrication.**

#### **SC 2.4 BID ITEM 4**

##### Removal of Hazardous Waste Material

###### DESCRIPTION OF BID ITEM

Furnish all labor, material, tools, equipment, and incidentals to package, transport, and dispose of hazardous waste material contaminated with lead or other hazardous heavy metals as determined from appropriate certified tests and obtained from the interior and/or exterior of the East steel reservoirs. The Contractor shall package, provide storage containers, and transport to an approved, Nevada Certified hazardous waste storage site equipped to store spent blast abrasive material and removed paint containing lead or other hazardous heavy metals. All work to be performed under this bid item shall be supervised directly by a person certified by OSHA and the Nevada Department of Environmental Protection (NDEP) as a Certified Environmental Manager capable of handling hazardous waste material containing lead or other hazardous heavy metals. This bid item does NOT include testing for the level of leachable lead and other hazardous heavy metals in blast waste material and collected paint residue.

###### BASIS OF PAYMENT

Measurement of payment for work under this item shall be one lump sum basis. Payment for all WORK will be made at the Lump Sum Amount bid for this item and will be measured as a percentage of actual work completed.

#### **SC 2.5 BID ITEM 5**

##### Fabrication & Installation of Handrails

###### DESCRIPTION OF BID ITEM

Furnish all labor, material, tools, equipment, and incidentals to provide for the fabrications and installation of handrails as shown in the attached detail. Each reservoir shall have handrails installed at the top of the existing ladder. The handrails shall extend a minimum 6' distance from each side of the existing ladder and shall be welded and coated as part of the exterior recoating process. This is to be completed prior to recoat.

###### BASIS OF PAYMENT

Measurement of payment for work under this item shall be one lump sum basis. Payment for all WORK will be made at the Lump Sum Amount bid for this item and will be measured as a percentage of the amount of actual work completed.

#### **SC 2.6 BID ITEM 6**

##### Fabrication & Installation of Ladder Extensions and Safety Climb

###### DESCRIPTION OF BID ITEM

Furnish all labor, material, tools, equipment, and incidentals to provide for the fabrications and installation of ladder and safety cage extensions and Safety Clim. Each reservoir shall have the existing ladder and cage extended to match the detail provided. This will also include the addition of a climb prevention shield as shown in the same detail. The ladder shall be extended to within 10" of the existing concrete ring wall foundation. The safety cage will be extended to within 10' of existing grade. The ladder climb prevention device shall be a minimum of 8'- 6" in length. This is to be completed prior to recoat.

**BASIS OF PAYMENT**

Measurement of payment for work under this item shall be one lump sum basis. Payment for all WORK will be made at the Lump Sum Amount bid for this item and will be measured as a percentage of the amount of actual work completed.

**SC 2.7 BID ITEM 7**

Fabrication & Installation of 36" Roof Vents

**DESCRIPTION OF BID ITEM**

Furnish all labor, material, tools, equipment, and incidentals to provide for the fabrications and installation of the 36" roof vents. Each reservoir shall have the existing roof vent removed and replaced per Exhibit C detail provided.

**BASIS OF PAYMENT**

Measurement of payment for work under this item shall be one lump sum basis. Payment for all WORK will be made at the Lump Sum Amount bid for this item and will be measured as a percentage of the amount of actual work completed.

**SC 2.8 BID ITEM 8**

Supply and Installation of Water Level Indicators

**DESCRIPTION OF BID ITEM**

Supply the exact replacement for the Water Level Indicators, Manufactured by Varec part number N6700-ST-42. Furnish all labor, material, tools, equipment, and incidentals to provide for the installation Water Level Indicators.

**BASIS OF PAYMENT**

Measurement of payment for work under this item shall be one lump sum basis. Payment for all WORK will be made at the Lump Sum Amount bid for this item and will be measured as a percentage of the amount of actual work completed.

**SC 2.9 BID ITEM 9**

Fabrication & Installation of a 30" Manhole

**DESCRIPTION OF BID ITEM**

Furnish all labor, material, tools, equipment, and incidentals to provide for the fabrications and installation of the 30" manhole. The 3.0 Million Gallon reservoir shall have a manhole installed per Exhibit D detail provided.

**BASIS OF PAYMENT**

Measurement of payment for work under this item shall be one lump sum basis. Payment for all WORK will be made at the Lump Sum Amount bid for this item and will be measured as a percentage of the amount of actual work completed.

**Note: Only one tank at a time will allowed to be out of service during the sandblast, recoat and the ladder, hand rail, roof vent and manhole installation/fabrication.**

### **SC 3.0 PERMITS**

Contractor shall apply for, obtain and comply with all conditions of a Clark County Dust Control Permit as required. The permit may be obtained through the Clark County Department of Air Quality and Environmental Management located at 500 South Grand Central Parkway, 1<sup>st</sup> floor, PO Box 558270, Las Vegas, NV 89155. Contractor shall bear all costs for any required permit(s).

### **SC 4.0 SPECIAL ACCESS REQUIREMENTS**

The work will be performed within the secured East Reservoirs Site located at 7220 East Carey Avenue. Contractor must call the Utilities Operator On-call Cell Phone at 376-5077 to gain access to the site at the beginning of each work day or will be allowed to daisy chain their own secure lock as long as an extra key is provided to the Utilities Dept. Contractor will be responsible for site security while onsite and shall make the facility secure after the end of each working day.

### **SC 5.0 CIVIL ENGINEER**

**NOTE: THE ENGINEER'S APPROVAL AND SUBSEQUENT SEAL IS LIMITED TO THE PORTIONS OF THESE DOCUMENTS AS PREPARED BY OR UNDER THE DIRECT SUPERVISION OF THE ENGINEER.**

## SECTION 01110

### SUMMARY OF WORK

#### PART I GENERAL

##### 1.01 SUMMARY

- A. Section includes: References, Description of Project, Location of Project, Activities by Others, Coordination of Work, Permits and Fees, Work Hour Restrictions.

##### 1.02 REFERENCES

- A. SSPC Specifications or SSPC: Society for Protective Coatings, 4400 Fifth Avenue, Pittsburgh, PA 15213, published standards.
1. Solvent Cleaning – SSPC-SP1.
  2. Hand Tool Cleaning – SSPC-SP2.
  3. Power Tool Cleaning – SSPC-SP3.
  4. White Metal Blast Cleaning – SSPC-SP5.
  5. Commercial Blast Cleaning – SSPC-SP6.
  6. Brush-Off Blast Cleaning – SSPC-SP7.
  7. Near-White Blast Cleaning – SSPC-SP10.
  8. Paint Application Specification No.1 – SSPC-PA1.
  9. Paint Application Specification No. 2 – SSPC-PA2.
- B. NACE: National Association of Corrosion Engineers, P.O. Box 986, Katy, TX 77450, published standards.
1. NACE Standard TM-01-70.
- C. NSF or NSF Standard 61: National Sanitation Foundation Standard 61, most recent edition.
- D. American National Standards Institute (ANSI) standards, most recent editions:
1. ANSI A13.1 - Scheme for Identification of Piping Systems.
- E. Federal Specifications (FS):
1. DOD-P-23236A(SH) – Military Specification, Painting Coating Systems, Steel Ship Tank, Fuel and Salt Water Ballast.
- F. Acceptable Inspection Devices: Acceptable devices for ferrous metal surfaces include, but are not limited to Tinker-Razor Models AP and AP-W holiday detectors and “Inspector” or “Positest” units for dry film thickness gauging or manufacturer recommended device. Inspection devices shall be operated in accordance with the manufacturer’s instructions.

##### 1.03 DESCRIPTION OF WORK

- A. The Work consists of furnishing all material, equipment, labor, incidentals and services required for sandblasting, surface preparation, disposal of blast material including lead contaminated material, application of surface coating, curing of coating, painting, disinfection and other work as necessary to successfully repaint the (one 3.0 million gallon or one 7.5 million gallon or both) steel water reservoirs known as the **EAST RESERVOIRS**. Specific coated or painted surfaces are defined as follows:

1. Exterior of roof and support structure.

2. Shell – exterior, including hatches, vents, and level indicator enclosures.
3. Attachments, accessories, and appurtenances – exterior.
4. Pumps, motors, supply, and discharge pipes, along with appurtenances associated with the pumping station.

B. The following additions will be made to the reservoirs:

1. Furnish and install handrails as shown in the attached detail in exhibit “A”. Each reservoir will have a set of handrails that connect to the existing ladder assembly. The handrails will be welded to the roof of the tank. The CONTRACTOR will provide touch up services on the inside of the reservoirs opposite where the welds for the handrails occur. The cost of touching up the interior surface paint will be included in this bid item. This is required to be completed prior to recoat
2. The existing ladders on each reservoir will be extended as shown on the attached detail in exhibit “B”. The CONTRACTOR will provide touch up services on the inside of the reservoirs opposite where the welds for the ladders occur. The cost of touching up the interior surface paint will be included in this bid item. This is required to be completed prior to recoat.
3. Fabrication & Installation of 36” Roof Vents handrails as shown in the attached detail in exhibit “C”. The CONTRACTOR will provide touch up services on the inside of the reservoirs opposite where the welds for the roof vents occur. The cost of touching up the interior surface paint will be included in this bid item. This is required to be completed prior to recoat.
4. Supply and Installation of Water Level Indicators.
5. Fabrication & Installation of 30” Manhole (3.0 Million Gallon Reservoir only) as shown in the attached detail in exhibit “D”. The CONTRACTOR will provide touch up services on the inside of the reservoirs opposite where the welds for the manhole occur. The cost of touching up the interior surface paint will be included in this bid item. This is required to be completed prior to recoat.

**Note: Only one tank at a time will allowed to be out of service during the sandblast, recoat and the ladder, hand rail, roof vent and manhole installation/fabrication.**

C. Except as Specifically Noted Otherwise, Provide and Pay For:

1. Insurance and bonds, fees and permits.
2. Labor, materials, and equipment.
3. Tools, equipment, and machinery required for construction.
4. Utilities required for construction.
5. Other facilities and services necessary for proper execution and completion of the Work.

D. Secure and pay for all permits, government fees and licenses.

E. Comply with codes, ordinances, regulations, orders, and other legal requirements of public authorities having bearing on the performance of the Work.

#### 1.04 LOCATION OF PROJECT

The Work is located at the City of North Las Vegas facilities (see Exhibit “A” for Vicinity map):

**EAST RESERVOIR SITE – 7220 EAST CAREY AVE.**

**1.05 ACTIVITIES BY OTHERS**

- A. Owner, utilities, and others may perform activities within Project area while the Work is in progress.
  - 1. Schedule the Work with Owner, utilities, and others to minimize mutual interference.
- B. Cooperate with others to minimize interference and delays.
  - 1. When cooperation fails, submit recommendations and perform Work in coordination with work of others as directed by the PROJECT MANAGER.
- C. When the Work depends on proper execution or results upon work performed by others, inspect and promptly report apparent discrepancies or defects in work performed by others.
  - 1. Assume responsibility for work performed by others, except for defects reported as specified in this paragraph and defects which may become apparent in work performed by others after execution of the Work.

**1.06 COORDINATION OF WORK**

- A. Maintain overall coordination of the Work.

**1.07 PERMITS AND FEES**

- A. Contractor shall submit to City's designated representative, within 10 calendar days of beginning work, a complete list of all permits, shall specify the agency or utility required to grant the permit, the expected date of submission for the permit, and the required date for receipt of the permit.
- B. Contractor shall obtain and submit to City's designated representative, at least 2 working days prior to the prosecution of the work, one copy of each permit necessarily procured for prosecution of the work.
  - 1. Required permits are the responsibility of Contractor.
  - 2. Contractor shall comply with all requirements of each permit for the duration of this Contract and shall hold Owner harmless in the event that Contractor fails to meet required permit conditions, including all Dust Control Permit stipulations.
- C. Contractor shall obtain, at no additional cost to Owner, all permits and licenses required for prosecution of the work; and pay all taxes properly assessed against all materials, equipment, services, or property used in connection with the work. No reimbursement will be made for permit fees.
- D. Contractor shall bear all costs of overtime for inspections required on work performed outside of normal working hours, as well as all costs relating to traffic control safeguarding of persons or property.

**1.08 WORK HOUR RESTRICTIONS**

- A. Construction will be allowed between the hours of 6:00 a.m. and 3:30 p.m., Monday through Friday (Normal Working Hours).
- B. Contractor may request to work outside the Normal Working Hours by submitting a request to the City's designated representative in writing. Site location (proximity to residential dwellings) and working conditions (equipment noise levels) will dictate permission being granted by the City's designated representative.
- C. Contractor shall be responsible for inspection and additional administration costs incurred by the City, or its agents and representatives, for work by Contractor outside the hours defined above on weekdays in excess of 9 hours, or any work on weekends or holidays recognized by the City.
  - 1. Such costs will be withheld from the succeeding monthly progress payment.
  - 2. Work specifically required to be performed outside Normal Working Hours as may be specified, or work required by Engineer in writing, to be performed outside the Normal Working Hours, is excluded from withholding of payment.
- D. Notify the City's designated representative at least 24 hours prior to starting any work approved for outside the Normal Working Hours defined above.

**PART II MATERIALS**

Not Used.

**PART III EXECUTION**

Not Used.

**END OF SECTION**

## SECTION 01200

### MEASUREMENT AND PAYMENT

#### PART I GENERAL

##### 1.01 SUMMARY

- A. Payment: Description of bid items and basis of payment.

##### 1.02 SUMMARY

- A. Protective coating of specified surfaces including:
1. Surface preparation.
  2. Pretreatment.
  3. Coating application.
  4. Touch-up of factory-coated surfaces.
  5. Protection of surfaces not to be coated.
  6. Clean-up and ancillary work.

##### 1.03 REFERENCES

- A. SSPC Specification or SSPC: Society for Protective Coatings, 4400 Fifth Avenue, Pittsburgh, PA 15213, published standards.
1. Solvent Cleaning – SSPC-SP1.
  2. Hand Tool Cleaning – SSPC-SP2.
  3. Power Tool Cleaning – SSPC-SP3.
  4. White Metal Blast Cleaning – SSPC-SP5.
  5. Commercial Blast Cleaning – SSPC-SP6.
  6. Brush-Off Blast Cleaning – SSPC-SP7.
  7. Near-White Blast Cleaning – SSPC-SP10.
  8. Paint Application Specification No. 1 – SSPC-PA1.
  9. Paint Application Specification No. 2 – SSPC-PA2.
- B. NACE: National Association of Corrosion Engineers, P.O. Box 986, Katy, TX 77450.
1. NACE Standard TM-01-70.
- C. NSF or NSF Standard 61: National Sanitation Foundation Standard 61, most recent edition.
- D. American National Standards Institute (ANSI) standards, most recent editions:
1. ANSI A13.1 – Standard 61: National Sanitation Foundation Standard 61, or most recent edition.
- E. Federal Specifications (FS):
1. DOD-P-23236A(SH) – Military Specification, Paint Coating Systems, Steel Ship Tank, Fuel and Salt Water Ballast.
- F. OSHA Occupational Safety and Health Standards, most recent editions:
1. General Industry Safety Orders, Article 112 of 29CFR1910.

##### 1.04 DEFINITIONS

- A. Term “paint”, “coating”, or “finishes”, includes surface treatments, emulsions, enamels, paints, epoxy resins, and other protective coatings except galvanizing or anodizing, whether used as pretreatment, primer, intermediate coat, or finish coat.
- B. Term “DFT” means minimum dry film thickness.

1.05 **SUBMITTALS**

- A. Submittals: Comply with Section 01330.
- B. Samples:
  - 1. Submit samples of paint, finishes, and other coating materials specified.
  - 2. Submit samples of 8-1/2 by 11 – inch sheet metal.
  - 3. Completely coat over entire surface of each sample with one protective coating material, type, and color.
- C. Coating Materials List:
  - 1. Prior to or with samples submittal, submit lists of coating materials.
  - 2. Indicate manufacturer and coating number, keyed to coating systems specified.
- D. Paint Manufacturer’s Information: For each paint system to be used, submit the following listed data at least 30 days prior to painting.
  - 1. Paint manufacturer’s data sheet for each product used, including statements on suitability of material for intended use.
  - 2. Paint manufacturer’s instructions and recommendations on surface preparation and application.
  - 3. Colors available for each product (where applicable).
  - 4. Compatibility of shop and field applied coatings (where applicable).
  - 5. Material safety data sheet for each product used.
  - 6. Two sets of color samples to match each color selected by Project Engineer from manufacturer’s standard color sheets.
    - a. Specified custom mixed colors: Make color samples using color formulations prepared to match color samples furnished by Engineer.
    - b. Show color formula on back of each color sample.
  - 7. Manufacturer’s instructions regarding storage, mixing, thinning, and application.

1.06 **QUALITY ASSURANCE**

- A. Protective coatings applicator qualifications:
  - 1. Maintain valid state license as required for performance of painting and coating Work specified.
  - 2. **Submittal:** Provide five references, including name, address, and telephone number for each owner and photos showing previous successful experience with specified or comparable coating systems prior to commencing any site work.
- B. Only use coating materials suitable for intended application and recommended by manufacturer for intended service.
- C. Compatibility:
  - 1. In each coating system, use only compatible materials from a single manufacturer.
  - 2. Ensure compatibility of primers and finish coats.
  - 3. If necessary, subject to Project Engineer’s approval, apply barrier coat between existing prime coat and subsequent field coats to ensure compatibility.

- D. Provide standard products of manufacturers regularly producing such materials for essentially identical service conditions.
- E. Where requested, provide Project Engineer with names of minimum of 10 successful applications of proposed manufacturer's products demonstrating compliance with above paragraph.

#### 1.07 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products in accordance with manufacturer's recommendations.
- B. Seal coating materials in containers that plainly show:
  1. Designated name, formula, or specification number.
  2. Batch number.
  3. Color.
  4. Date of manufacture, manufacturer's directions, and name of manufacturer.
  5. Maintain the containers so the above information is plainly legible when used.

#### 1.08 WARRANTY

- A. Warranty Certificate: Upon completion and acceptance of recoating by the City the Contractor shall complete and submit the warranty certificate provided at the end of this section. This will serve as notification to the start of the one year warranty period when certificate is accepted by the City.
- B. Warranty Inspection: Warranty Inspection shall be conducted eleven months following acceptance of the warranty certificate. The Contractor shall be present at this inspection. All defective work shall be repaired in strict accordance with these specifications and to the satisfaction of the Project Engineer.
  1. Notification: The Owner shall establish the date for the inspection and shall notify the Contractor at least 30 days in advance.
  2. Inspection: The entire coating system shall be visually inspected and shall include all surfaces as defined in Section 01110 1.02 F. All defective coating as well as damaged or rusting spots shall be satisfactorily repaired by and at the sole expense of the Contractor. All repaired areas interior and exterior shall then be electrically tested as specified in the above mentioned section and repair/electrical testing procedures repeated until surface is acceptable to the Project Engineer.
  3. Inspection Report: The Owner shall prepare and deliver to the Contractor an inspection report within 14 days of the inspection, covering the first anniversary inspection, establishing the number and type of failures observed; the percentage of the surface area where failure has occurred, and the names of the persons making the inspections.
  4. Schedule: Upon completion of inspection and receipt of Inspection Report as noted herein, Owner shall establish a date for Contractor to proceed with remedial work. Any delay on part of Contractor to meet schedule established by Owner shall constitute breach of this contract and Owner may proceed to have defects remedied as outlined under General Conditions.
  5. Remedial Work: Any location where coating or paint has peeled, bubbled, or cracked and any location where rusting is evident shall be considered to be a failure of the system. The Contractor shall make repairs at all points where failures are observed by removing the deteriorated coating or paint, cleaning the surface, and recoating or repainting with the system. If the area of failure exceeds 25% of a specific coated or painted surface, the entire coating or paint system may be required to be removed and recoated or repainted in accordance with the original specification.

6. Costs: All noted costs for Contractor's inspection and all cost for repair shall be borne by the Contractor and in figuring this bid, the Contractor shall include an appropriate amount of testing and repair as no additional allowance will be paid by the Owner for said inspection and repair.

## **PART II PRODUCTS**

### **2.01 COLORS**

- A. Refer to approved color schedule provided.
- B. Provide slightly different shade for each coat to facilitate inspection of surface coverage of each coat.
- C. Engineer shall select finish colors from manufacturer's standard color samples submitted to Project Engineer.

### **2.02 SUBSTITUTIONS**

- A. Submit requests for substitution in accordance with Section 01630.
- B. Substitute or "OR Equivalent" Submittals:
  1. Unless otherwise indicated, specified materials are from catalogs of companies listed in Section 2.03(B).
  2. Materials by other manufacturers may be acceptable if established as being compatible with and of equivalent quality to coatings of companies listed.
  3. Provide satisfactory documentation, at no cost to Owner, from firm manufacturing proposed substitute material that proposed material meets specified requirements and is equivalent or better than listed materials in the following properties:
    - a. Quality.
    - b. Durability.
    - c. Resistance to abrasion and physical damage.
    - d. Life expectancy.
    - e. Ability to recoat in future.
    - f. Solids content by volume.
    - g. Dry film thickness per coat.
    - h. Compatibility with other coatings.
    - i. Suitability for intended service.
    - j. Resistance to chemical attack.
    - k. Temperature limitations in service and during application.
    - l. Type and quality of recommended undercoats and topcoats.
    - m. Ease of application.
    - n. Ease of repairing damaged areas.
    - o. Stability of colors.
- C. Pay cost for testing and analyzing proposed substitute materials as may be required by the Project Engineer.
- D. If proposed substitution requires changes in contract work, Contractor shall bear costs incurred by substitution.

### **2.03 INDUSTRIAL COATING SYSTEMS**

- A. Material Sources:
  1. Each of the following manufacturers is capable of supplying specified industrial coating materials.

2. Where manufacturers and paint numbers are listed, it is to show type and quality of coating required.
3. Show proposed substitute materials to satisfy material descriptions and to be equivalent to or exceed properties of listed materials.

B. Acceptable manufacturers:

1. Devoe Coatings Company.
2. Tnemec Coatings Company.
3. Or an approved Equivalent.

2.04 DESCRIPTION OF BID ITEMS

A. Full compensation: Payment for each and all items of the proposal shall constitute full compensation for supplying and transporting the materials to the site of the work, construction or placement of the item, all labor, supervision, materials, equipment, tools, supplies, construction maintenance and incidentals necessary to complete the work in accordance with these Contract Documents, the detailed drawings, the Uniform Standard Specifications for Public Works Construction Off-Site Improvements, Clark County, Nevada, latest revisions, or as directed by the Owner.

B. Subsidiary Obligation: All work not specifically set forth as a pay item in the Bid Schedule will be considered a subsidiary obligation of the Contractor and all costs in connection therewith shall be included in the prices bid.

C. Estimated Quantities: All estimated quantities stipulated in the Bid Schedule or other Contract Documents are approximate and are to be used only: (a) as a basis for estimating the probable cost of the Work and (b) for the purpose of comparing the bids submitted for the Work. The actual amounts of work done and materials furnished under unit price items may differ from the estimated quantities. The basis of payment for work and materials will be the actual amount of work done and materials furnished. Contractor agrees that he will make no claim for damages, anticipated profits, or otherwise on account of any difference between the amounts of work actually performed and materials actually furnished and the estimated amounts therefore.

D. Bid Items and basis for payment:

1. **Construction Conflicts.** Measurement and payment for work under this item shall be the bid amount of a similar item, negotiated lump sum, proposal or the actual labor, material and equipment used to perform the work or a combination of methods. The method of payment shall be as determined by the Owner.

This is a budgetary sum only. There is no guarantee for payment.

Any and all payments made under this item shall be made under the terms as set forth herein and as approved by the Project Engineer.

Payment for actual labor, materials and equipment shall be made as specified in Section 109.03 of the Uniform Standard Specifications except equipment rental rates used for this contract shall be those contained in the "Rental Rate Blue Book" as published by Neilsen/DATAQUEST, INC., 2800 West Bayshore Road, Palo Alto, California 94303, Copyright 1987.

Overtime shall be paid as per Method 2 described in said "Rental Rate Blue Book."

No compensation shall be made to the Contractor for equipment repair or equipment maintenance.

The Owners have entered a budgeted amount for the Bidder in the Bid Schedule under the Bid Item No. 1, "Construction Conflicts." The BIDDER shall include this amount in the total base bid amount.

2. **Mobilization/Demobilization.** Furnish all labor, material, tools, equipment, and incidentals to provide for preparatory work and/or operations, incidentals, and other costs not otherwise paid for prior to beginning the Work. This item includes, but is not limited to, those operations necessary for the movement of personnel, equipment, supplies, and incidentals to the project site, permits, establishment of all site offices, Project sign, and other work or operations which must be performed in support of the Project. Half of this bid item will be distributed once mobilization is complete. The remaining amount will be distributed upon demobilization and clean-up of project site.
3. **Sandblast and Recoat.** The Lump Sum bid price for each activity shall consist of all labor, materials, equipment and services for the application of a completed exterior coating system including surface preparation, abrasive blast material, abrasive near-white blasting (SSPC-SP10), testing for the level of leachable lead (TCLP) in the blast waste and paint material by an EPLAT-certified laboratory, disposal of non-hazardous blast waste material, coating and disinfection of a 3.0 million gallon or a 7.5 million gallon or both steel reservoirs as well as the pumps and visible yard piping known as the **EAST RESERVOIRS**. The lump sum bid price shall also include the performance of any and all Dust Control measures per General Conditions Section GC2.1.
4. **Removal of Hazardous Waste Material.** The Lump Sum bid price for work under this item shall consist of all labor, material, equipment, and services to package transport and store hazardous waste material contaminated with lead and obtained from the exterior, interior, and P2B pump station of the **EAST RESERVOIR** site. The Contactor shall package, provide storage containers, and transport to an approved, Nevada Certified hazardous waste storage site equipped to store blast abrasive material containing lead or other hazardous heavy metals. All work to be performed under this bid item shall be supervised directly by a person certified by OSHA and the Nevada Department of Environmental Protection (NDEP) as a Certified Environmental Manager capable of handling hazardous waste material containing lead. Contractor shall provide the OWNER with all necessary documents including, but not limited to, bills of lading, invoices, etc: identifying number of containers, size, weight, and hazardous waste storage site. This bid item does not include testing for the level of leachable lead in blast waste material.
5. **Fabrication & Installation of Handrails.** The lump sum bid price for under this item shall consist of all labor, material, equipment, and services to install handrails at the top of each existing ladder for the two reservoirs at the **EAST RESERVOIR** site. The handrails shall be fabricated and installed by a competent welder and any damage to existing coatings during installation will be repaired to pre-welded condition. This includes coatings damaged on the interior of the reservoirs. This is required to be completed prior to recoat.
6. **Fabrication & Installation of Ladder Extensions and Safety Climb.** The lump sum bid price for under this item shall consist of all labor, material, equipment, and services to install ladder, safety cage extensions and safety climb system of each existing ladder for the two reservoirs at the **EAST RESERVOIR** site. The ladders and safety climb shall be fabricated and installed by a competent welder and any damage to existing coatings during installation will be repaired to pre-welded condition. This includes coatings damaged on the interior of the reservoirs. This is required to be completed prior to recoat.

7. **Fabrication & Installation of 30" Manhole.** The lump sum bid price for under this item shall consist of all labor, material, equipment, and services to install a 30" Manhole for the 3.0 Million Gallon reservoir at the **EAST RESERVOIR** site. The manhole shall be fabricated and installed by a competent welder and any damage to existing coatings during installation will be repaired to pre-welded condition. This includes coatings damaged on the interior of the reservoirs. This is required to be completed prior to recoat.

**Note: Only one tank at a time will allowed to be out of service during the sandblast, recoat and the ladder, hand rail, roof vent and manhole installation/fabrication.**

**PART II MATERIALS**  
Not Used.

**PART III EXECUTION**  
Not Used.

**WARRANTY FORM**

Warranty For

East Reservoir Recoating

CITY OF NORTH LAS VEGAS  
North Las Vegas, Nevada

We hereby guarantee the East Reservoir Recoating that we have recoated for a period of one (1) year from \_\_\_\_\_ the date of acceptance of the Work by the City of North Las Vegas.

The following items are excluded from the provisions of this warranty:

\_\_\_\_\_  
\_\_\_\_\_

We agree that if any of the material or equipment should fail due to any reason other than improper maintenance or improper operation, or should any portion of the Work fail to fulfill any of the requirements of the Contract Documents, we will, within ten (10) days after written notice of such defects, commence to repair or replace the same together with any other work which may be damaged or displaced in so doing.

In the event of our failure to comply with the above mentioned conditions within a reasonable time after being notified, or should the urgency of the case require repairs or replacements to be made before we can be notified or respond to notification, we do hereby authorize the City of North Las Vegas, to proceed to have the defect repaired and made good at our expense, and we will pay the cost therefore upon demand.

The warranty provided herein shall not be in lieu of, but shall be in addition to any warranties or other obligations otherwise imposed by the Contract Documents and by law.

Contractor: \_\_\_\_\_

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

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

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

**END OF SECTION**

## SECTION 01290

### SCHEDULE OF VALUES

#### PART I GENERAL

##### 1.01 SUMMARY

- A. Section includes: preparation, format, and submittal of Schedule of Values.

##### 1.02 PREPARATION

- A. Prepare satisfactory Schedule of Values identifying costs of Major Items of Work.
- B. Divide the Work into the following Major Items of Work:

###### Option A

1. Sandblast and Recoat
  - a. 3.0 million gallon steel reservoir exterior
  - b. P2B Pump station & above ground yard pipe
2. Removal of Hazardous Waste Material
3. Handrail installation
4. Ladder and Safety Cage Extension
5. 36-inch Roof Vent
6. Water level Indicator
7. 30-inch Manhole

###### Option B

1. Sandblast and Recoat
  - a. 7.5 million gallon steel reservoir exterior
  - b. P2B Pump station & above ground yard pipe
2. Removal of Hazardous Waste Material
3. Handrail installation
4. Ladder and Safety Cage Extension
5. 36-inch Roof Vent
6. Water level Indicator

###### Option C

1. Sandblast and Recoat
  - a. 7.5 million gallon steel reservoir exterior
  - b. 3.0 million gallon steel reservoir exterior
  - c. P2B Pump station & above ground yard pipe
2. Removal of Hazardous Waste Material
3. Handrail installation
4. Ladder and Safety Cage Extension
5. 36-inch Roof Vent
6. Water level Indicator

- C. Assign process to Major Items of Work which aggregate the Contract Price. Base prices on costs associated with scheduled activities for each Major Item of Work.

1.03 SUBMITTAL

- A. Submit preliminary Schedule of Values no later than ten (10) working days following effective date of Notice to Proceed.
- B. Submit corrected Schedule of Values within ten (10) days upon receipt of reviewed Schedule of Values, but no later than ten (10) days prior to anticipated submittal of first Application for Payment. No progress payment will be issued without an approved schedule of values.
- C. Upon request, support prices with data which will substantiate their correctness.

**PART II MATERIALS**

Not Used.

**PART III EXECUTION**

Not Used.

**END OF SECTION**

## SECTION 01330

### SUBMITTAL PROCEDURES

#### PART 1 GENERAL

##### 1.01 SUMMARY

- A. Comply with provisions specified in Owner's General Requirements for Submittal Procedures.
- B. Contractor shall not submit copies of Contract Drawings and Standard Drawings to serve as shop drawings.
- C. Provide Submittals to the City's designated representative.

#### PART 2 EXECUTION

##### 1.01 SCHEDULE OF SUBMITTALS

- A. Provide submittals as specified in the following sections and as required by the City's designated representative.

- 1. 01110
- 2. 01200
- 3. 01290
- 4. 01330
- 5. 01630
- 6. 01655
- 7. 02516
- 8. 09970

The following is a list of required submittals and is not intended to be all inclusive. Other incidental submittals may be requested by the Owner. It is the Contractors responsibility to review these Specifications to determine specified submittals.

##### Coating Materials List:

Prior to or with samples submittal, submit lists of coating materials. Indicate manufacturer and coating number, keyed to coating systems specified.

Paint Manufacturer's Information: For each coating to be used, submit the following listed data at least 30 days prior to painting.

- 1. Paint manufacturer's data sheet for each product used, including statements on suitability of material for intended use.
- 2. Paint manufacturer's instructions and recommendations on surface preparation and application.

The colors available for each coating type shall be listed.

Compatibility of shop and field applied coatings (where applicable).

Material Safety Data Sheet (MSDS) for each product used.

Show color formula on back of each color sample.

Submit to the City's designated representative copies of each manufacturer's instructions regarding storage, mixing, thinning, and application.

## 1.01 SUBSTITUTIONS

- A. Submit requests for substitution in accordance with Section 01630.
- B. Substitute or "OR Equivalent" Submittals:
  - 1. Unless otherwise indicated, specified materials are from catalogs of companies listed below.
  - 2. Materials by other manufacturers may be acceptable if established as being compatible with and of equivalent quality to coatings of companies listed.
  - 3. Provide satisfactory documentation, at no cost to Owner, from firm manufacturing proposed substitute material that proposed material meets specified requirements and is equivalent or better than listed materials in the following properties:

Quality

Durability

Resistance to abrasion and physical damage

Life expectancy

Ability to recoat in future

Solids content by volume

Dry film thickness per coat

Compatibility with other coatings

Suitability for intended service (NSF certified)

Resistance to chemical attack

Temperature limitations in service and during application

Type and quality of recommended undercoats and topcoats

Ease of application

Ease of repairing damaged areas

Stability of colors

Submit proposed testing schedule for review and approval by the City's designated representative, at least three days prior to testing.

Proposed plans for water conveyance, disinfection, control and disposal shall also be submitted in writing.

#### 1.01 REQUIRED SHOP DRAWINGS

- A. The Contractor shall submit drawings/procedures/methods of the blast containment system. This submittal does not relinquish any responsibility for conformance with the applicable environmental control regulations.
- B. The Contractor's submittal shall include details for capturing, collecting, and storing the lead contaminated coating blast residue, all in compliance with the regulations of applicable environmental control regulations.
- C. The Contractor shall submit a written company safety plan and identify the individual responsible for safety enforcement for the duration of the project.
- D. The Contractor shall submit a procedure for handling over spray prevention.
- E. The Contractor shall submit data certifying the chemical composition of the blast abrasive to be used. The blast abrasive shall not contain levels of Barium, Beryllium, Cadmium, Chromium, Mercury, Nickel, Lead or Copper in concentrations greater than that allowed by RCRA. The maximum Selenium concentration allowed for all blast abrasives used shall be .05 mg/L. The blast abrasive shall be tested according to the RCRA's TCLFP metals Leachate Test.
- F. The Contractor shall assess the bolts for corrosion and submit list of bolts to be repaired or replaced around the project site.

**END OF SECTION**

**SECTION 01630**

**SUBSTITUTION OF PROCEDURES**

PART 1 GENERAL

1.01 SUMMARY

- A. Comply with provisions specified in Owner's General Requirements for Substitution Procedures.
- B. When making substitution requests, use the form provided with this section (Substitution Request form) or similar form acceptable to Owner.

PART 2 PRODUCTION

Not Used.

PART 3 EXECUTION

Not Used.

**END OF SECTION**

**SUBSTITUTION REQUEST  
(After the Bidding Phase)**

---

Project: \_\_\_\_\_ Substitution Request Number: \_\_\_\_\_  
\_\_\_\_\_ From: \_\_\_\_\_  
To: \_\_\_\_\_ Date: \_\_\_\_\_  
\_\_\_\_\_ Engineer's Project #: \_\_\_\_\_  
Re: \_\_\_\_\_ Contract for: \_\_\_\_\_

---

Specification Title: \_\_\_\_\_ Description: \_\_\_\_\_  
Section: \_\_\_\_\_ Page: \_\_\_\_\_ Article/Paragraph: \_\_\_\_\_

---

Proposed Substitution: \_\_\_\_\_  
Manufacturer: \_\_\_\_\_ Address: \_\_\_\_\_ Phone: \_\_\_\_\_  
Trade Name: \_\_\_\_\_ Model No. \_\_\_\_\_  
Installer: \_\_\_\_\_ Address: \_\_\_\_\_ Phone: \_\_\_\_\_  
History:  New Product  2-5 years old  5-10 years old  More than 10 years old  
Differences between proposed substitution and specified product: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Point-by-Point comparative data attached – REQUIRED BY ENGINEER

---

Reason for not providing specified item: \_\_\_\_\_  
\_\_\_\_\_

Similar Installation: Project: \_\_\_\_\_ Engineer: \_\_\_\_\_  
Address: \_\_\_\_\_ Owner: \_\_\_\_\_  
\_\_\_\_\_ Date Installed: \_\_\_\_\_

Proposed substitution affects other parts of Work:  No  Yes, Explain \_\_\_\_\_  
\_\_\_\_\_

---

Savings to Owner for accepting substitution: \_\_\_\_\_

Proposed substitution changes Contract Time:  No  Yes [Add] [Deduct] \_\_\_\_\_ days.

---

Supporting Data Attached:  Drawings  Product Data  Samples  Tests  Reports  \_\_\_\_\_

# SUBSTITUTION REQUEST (Continued)

The undersigned certifies:

- Proposed substitution has been dully investigated an determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to design, including Engineer's design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

Submitted by: \_\_\_\_\_

Signed by : \_\_\_\_\_

Firm: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Telephone: \_\_\_\_\_

Attachments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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### ENGINEER'S REVIEW AND ACTION

- Substitution approved – Make submittals in accordance with Specification Section 01330.
- Substitution approved as noted – Make submittals in accordance with Specification Section 01330.
- Substitution rejected – Use specified materials.
- Substitution Requests received too late – Use specified materials.

Signed By: \_\_\_\_\_

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

---

Additional Comments:  Contractor  Subcontractor  Supplier  Manufacturer  Engineer  \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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## SECTION 01655

### PRODUCT DELIVERY, STORAGE, AND HANDLING

#### PART I GENERAL

##### 1.01 SECTION INCLUDES:

- A. Transportation and handling.
- B. Delivery and storage.
- C. Storage and protection.
- D. Protection after installation.
- E. Maintenance of storage.

##### 1.02 DEFINITIONS

- A. The word "Products", as used herein, is defined to include purchased items for incorporation into the Work, regardless of whether specifically purchased for the project or taken from Contractor's stock of previously purchased products.
- B. The word "Materials" is defined as products which must be substantially cut, shaped, worked, mixed, finished, refined, or otherwise fabricated, processed, installed, or applied to form units of work.
- C. The word "Equipment" is defined as products with operational parts, regardless of whether motorized or manually operated, and particularly including products with service connections (wiring, piping, and other like items).
- D. Definitions in this Article are not intended to negate the meaning of other terms used in the Contract Documents, including "specialties", "structure", "finishes", "accessories", "furnishings", "special construction", and similar terms, which are self-explanatory and have recognized meanings in the construction industry.
- E. Neither "Products", "Materials", nor "Equipment" includes machinery and equipment used for preparation, fabrication, conveying, and erection of the Work.

##### 1.03 QUALITY ASSURANCE

- A. Material and equipment incorporated into the work:
  - 1. Conform to applicable specifications and standards.
  - 2. Comply with size, make type and quality specified, or as approved in writing by Engineer.
- B. Manufactured and Fabricated Products:
  - 1. Designed, fabricated, and assembled in accord with acceptable engineering and shop practices.
  - 2. Like parts of duplicate units shall be manufactured to standard sizes and gauges, to be interchangeable.
  - 3. Two or more items of same kind shall be identical, by same manufacturer.
  - 4. Products shall be suitable for service conditions.

- 5. Equipment capacities, sizes, and dimensions shown or specified shall be complied with unless variations are specifically approved in writing.
- C. Do not use material or equipment for any purpose other than that for which it is designed or specified.
- D. Reused Materials: Materials and equipment shall be new and unused, except as otherwise specifically indicated, specified or approved.
- E. Source Limitations: to the greatest extent possible for each unit of work, provide products, materials, and equipment of a singular generic kind from a single source.
- F. Compatibility of Options:
  - 1. Where more than one choice is available as options for Contractor's selection of a product, material, or equipment, select an option which is compatible with other products, materials, or equipment.
  - 2. Compatibility is a basic general requirement of product, material, and equipment selections.

**PART II PRODUCTS**

Not Used.

**PART III EXECUTION**

3.01 TRANSPORTATION AND HANDLING

- A. Transport and handle Products in accordance with manufacturer's instructions and by methods to avoid damage.
- B. Provide equipment and personnel to handle Products by methods to prevent soiling, disfigurement, or damage to Products or packaging.
- C. Provide additional protection during handling to prevent marring and/or damaging products, packaging, and surrounding surfaces.

3.02 PRODUCT DELIVERY AND STORAGE

- A. Deliver and store the material in accordance with manufacturer's written recommendations and by methods and means which will prevent damage, deterioration, and loss including theft.
- B. Arrange deliveries of Products in accordance with construction schedule. Coordinate to avoid conflict with work and conditions at the site.
- C. Schedule deliveries to minimize long-term storage of products at site and overcrowding of construction spaces.
- D. Coordinate to ensure minimum holding or storage times for flammable, hazardous, easily damaged, or sensitive materials subject to deterioration, theft, and other sources of loss.
- E. Deliver Products in undamaged condition, in manufacturer's original containers or packaging, with identifying labels intact and legible.

- F. Promptly inspect shipments to ensure that Products comply with requirements, quantities are correct, and Products are undamaged.

### 3.03 STORAGE AND PROTECTION

- A. Store Products in accordance with manufacturer's written instructions and with seals and labels intact and legible.
- B. Store sensitive Products in weather-tight, climate controlled enclosures.
- C. Maintain temperature and humidity ranges within tolerances required by manufacturer's recommendations.
- D. Provide off-site storage and protection when site does not permit on-site storage and protection.
- E. Cover Products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation or potential degradation of Product.
- F. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- G. Provide equipment and personnel to store Products by methods to prevent soiling, disfigurement, or damage.
- H. Arrange storage of Products to permit access for inspection. Periodically inspect to verify Products are undamaged and are maintained in acceptable condition.

### 3.04 PROTECTION AFTER INSTALLATION

- A. Provide substantial coverings as necessary to protect installed products from damage from traffic and subsequent construction operations.
- B. Remove when no longer needed.

### 3.05 MAINTENANCE OF STORAGE

- A. Inspect stored Products on a scheduled basis. Maintain a log of inspections to be made available on request.
- B. Comply with manufacturer's Product storage requirements and recommendations.
- C. Continuously maintain manufacturer-required environmental conditions.
- D. Ensure that surfaces of Products exposed to the elements are not damaged and that finishes are not weathered.

**END OF SECTION**

## SECTION 02516

### RESERVOIR TESTING AND DISINFECTION

#### PART I GENERAL

##### 1.01 SUMMARY

- A. Furnish equipment, labor, and materials required for testing and disinfecting reservoir and associated piping.
  - 1. Coordinate with City of North Las Vegas for water for testing and disinfection.
  - 2. Disinfection shall be accomplished by chlorination in accordance with AWWA C652.
  - 3. Chlorine dosages and chlorinating operations shall be approved by, and done in, the presence of the City's designated representative.

##### 1.02 REFERENCES

- A. American Water Works Association (AWWA) standards, most recent editions:
  - 1. AWWA B300 – Standard for Hypochlorites.
  - 2. AWWA B301 – Standard for Liquids Chlorine.
  - 3. AWWA C651 – Standard for Disinfecting Water Mains.
  - 4. AWWA C652 – Standard for Disinfection of Water Storage Facilities.

##### 1.03 SUBMITTALS

- A. Submittals: Comply with Section 01330.
- B. Submit proposed testing schedule for review and approval by the City's designated representative, at least three days prior to testing.
- C. Proposed plans for water conveyance, disinfection, control and disposal shall also be submitted in writing.

#### PART II PRODUCTS

##### 2.01 MATERIAL REQUIREMENTS

- A. Subject to City's designated representative's review, determine and furnish test equipment, chemicals for chlorination, temporary valves, bulkheads or other water control equipment and materials.
- B. Chlorine for Disinfection
  - 1. Liquid chlorine shall be in accordance with AWWA B301.
  - 2. Sodium hypochlorite solution and calcium hypochlorite granules or tablets shall be in accordance with AWWA B300.

#### PART III EXECUTION

##### 3.01 GENERAL

- A. Pressure pipelines shall be tested. Disinfection is accomplished by chlorination. Chlorinating and testing operations shall be performed in presence of the City's designated representative.

3.02 TESTING RESERVOIR

- A. Prior to starting reservoir test, valves and corporation stops shall be closed and marked, and shall be certified closed by Contractor in writing. Sealant, paints and coatings shall have attained their specified age for exposure to water, but not less than 7 days, prior to filling reservoir. Reservoir shall be thoroughly cleaned, pressure washed, prior to filling. Floor and walls shall be clean and free from caked mud or other gross dirt. Special attention shall be directed to removing miscellaneous metals (nails, wires, clips and so forth) prior to filling reservoir. The City's designated representative will make an inspection of completed structure prior to filling.

3.03 DISINFECTION OF RESERVOIR

- A. Disinfection of reservoir shall be accomplished at same time that reservoir is tested unless otherwise approved by the City's designated representative.
- B. Disinfecting of interior surfaces shall be accomplished in the presence of the City's designated representative in accordance with AWWA C652 as modified herein.
- C. Perform disinfection after protective coating has been applied to the interior surfaces and is totally cured.
  - 1. Prior to disinfecting, clean the completed interior by pressure washing with clean water.
  - 2. Residual water and contamination removed during washing process shall be flushed from reservoir.
  - 3. This operation shall be accomplished after completion of interior coatings work as directed by the City's designated representative.
  - 4. If required to remove dust, spent abrasive, or other surface contaminants, clean all surfaces with an approved cleaner or detergent applied via high pressure or hot solution method.
    - a. Then, rinse cleaned surfaces with clean water.
    - b. Flush residual water and contaminants from reservoir.
- D. To avoid any detrimental environmental impact, Contractor shall either transport the wastewater off-site with proper disposal or test the wastewater to ensure compliance with federal, state, and local requirements prior to on-site disposal to the local sewer system as approved by the City's designated representative.
- E. After completion of curing and cleaning cycles, as noted above, all interior surfaces shall be jet washed with a chlorine solution having a content of 200 ppm.
  - 1. Remove chlorine solution which accumulates on the bottom in accordance with all federal, state, and local standards.
  - 2. This chlorinated water will not be permitted to be discharged into the tank drain or into the storm drain system without dechlorination.
  - 3. Take precautions to prevent chlorine solution from flowing back into piping, which is supplying water.
- G. After 24-hour period is complete, bring water level to within one foot of overflow elevation.
- H. Maintain a chlorine residual of 1 to 2 ppm in reservoir during all testing and disinfection procedures. Monitor and add chlorine as necessary to maintain residual level.
- I. A seven-day soaking period shall follow initial filling to determine the presence of any leached organics.
  - 1. Before the tank is placed into service, perform bacteriological and VOC testing.
  - 2. Analyze samples of water in the tank by State of Nevada Certified Laboratory.

3. Analyses will be for volatile organic compounds by EPA Method 542.2 or equivalent (this test includes TCE, PCE, xylenes, toluene, ketones, carbon tetrachloride, and similar compounds).
  4. Chlorine residuals shall be less than 3 ppm prior to starting the soak test.
- J. If the test results are above either (1) 0.005 mg/l for TCE, 0.004 mg/l for PCE, 0.62 mg/l for xylenes, 0.10 mg/l for toluene, 0.75 mg/l for methyl-ethyl ketone (to be used as representative for all ketone compounds), 0.005 mg/l for carbon tetrachloride, or (2) the regulatory agency's recommended Action level Limits, whichever is less, Contractor shall drain the water from the tank and flush, refill, and retest at no additional cost to the Owner. Provide as many curing, soaking, and flushing cycles as necessary to reduce the leached volatile organic compounds to levels below the requirements.
1. Upon completion of testing and disinfection procedure, assist City's designated representative in collection of bacteriological samples.
    - i. City's designated representative will determine number of samples and locations where samples are taken.
    - ii. Provide sterilized sample bottles and have samples tested at an independent laboratory.
    - iii. Repeat sampling procedures as required, until results satisfactory to City are obtained.
  2. City will take bacteriological samples from each available sampling port.
    - i. Each sample will be analyzed for total coliform, bacteria and fecal coliform bacteria.
    - ii. If results are not satisfactory after two separate sample operations, repeat disinfection procedure for reservoir at no additional cost to Owner.

### 3.03 RELEASE OF WATER

- A. Contractor may find it necessary to release water from site during testing and disinfection of reservoir and associated piping.
- B. Carefully control (below 600 gpm) such releases and make required arrangements with the City's designated representative to reduce possibility of flooding or icing.

**END OF SECTION**

## SECTION 09970

### COATINGS

#### PART I GENERAL

##### 1.01 PURPOSE

The purpose of this specification is to establish methods and procedures for surface preparation, coating, curing of coating, painting, and disinfection of steel water tanks.

##### 1.02 SCOPE OF WORK

Work to be accomplished includes furnishing an application of protective coatings and paints to interior (patching) and exterior surfaces, and disinfection of interior surfaces, including surface preparation and other work necessary to accomplish the approved result of a totally protected and usable structure, including all attachments, accessories and appurtenances for **EAST RESERVOIRS**.

**Note: Only one tank at a time will allowed to be out of service during the sandblast, recoat and the ladder, hand rail, roof vent and manhole installation/fabrication.**

##### 1.03 REFERENCE SPECIFICATIONS AND STANDARDS

- A. Without limiting the general aspects or other requirements of this specification, work, and equipment shall conform to applicable requirements of municipal, state and federal codes, laws and ordinances governing the work, City of North Las Vegas, Steel Structures Painting Council, American Water Works Association, American Society for Testing and Materials, Occupational Safety and Health Administration, Environmental Protection Agency, and Manufacturer's printed instructions, subject to City's designated representative's approval.
- B. The City's designated representative's decision shall be final as to interpretation and/or conflict between any of the referenced code, laws, ordinances, specifications and standards contained herein.

##### 1.04 CONTRACTOR

- A. The Contractor shall be a Nevada State-licensed Painting and Decorating Contractor. The Contractor shall have a minimum of five (5) years practical experience and successful history in the application of specified products to surfaces of steel structures and tanks. The Contractor shall substantiate this requirement by furnishing a written list of a minimum of five (5) references with accompanying photos of the work.
- B. The Near White blast cleaning procedure of the interior and exterior of the tank, including the handling, removal and transportation of the blast material to a Certified Hazardous Waste Site shall be performed by a Contractor/Subcontractor certified by OSHA and the Applicable Hazardous Waste Removal Governing Ordinances, Institutions required by the Federal Government, State of Nevada, Clark County, and the Environmental Protection Agency. The Contractor shall also be qualified under the Resource Conservation and Recovery Act [RCRA] (40 CFR 265).

##### 1.05 WORK SCHEDULING

- A. Work shall be accomplished during a nine-hour per day shift, excluding holidays. Work accomplished during hours or on days other than specified above, shall be subject to a

written request to the City. If permission is granted to perform work during hours other than stated above, the Contractor shall bear all additional expenses of City's personnel and Inspector's services created by change to extraordinary work hours, including standby time due to late crew arrival or "no show" by crew.

**Note: Only one tank at a time will allowed to be out of service during the sandblast, recoat and the ladder, hand rail, roof vent and manhole installation/fabrication.**

- B. Inspections requested by or made necessary as a result of actions by the Contractor on Saturdays, Sundays, or holidays, must be scheduled and approved by the City's designated representative and paid for by Contractor at the prevailing rate for overtime or holiday work.
- C. The Contractor shall maintain copies of the Material Safety Data Sheet (MSDS) for all materials to be used in coating and painting operations including, but not limited to, coatings, paints, thinners, solvents, and cleaning fluids. The MSDS's shall be readily available on-site at all times.

#### 1.06 AIR MONITORING

The airborne lead pollutant criterion, under the National Ambient Air Quality Standard, shall not exceed 1.5 micrograms of lead per cubic meter of air averaged over a 90 calendar day period. The Contractor shall provide for City use of Contractor-supplied testing equipment required to determine levels of airborne lead pollutant.

#### 1.06a SOIL TESTING

Contractor shall have initial soil samples collected and tested. Once the Contractor is complete with the recoating process the Contractor shall again take soil samples and have it tested for lead and other heavy metals. The results will be provided to the City and any soil removal or remediation will be identified at that time. The cost for contaminated soil removal will be the responsibility of the Contractor. This activity will be paid from the hazardous material removal bid item.

#### 1.07 REQUIRED SHOP DRAWINGS

- A. The Contractor shall submit drawings/procedures/methods of the blast containment system. This submittal does not relinquish any responsibility for conformance with the applicable environmental control regulations.
- B. The Contractor's submittal shall include details for capturing, collecting, and storing the lead contaminated coating blast residue, all in compliance with the regulations of applicable environmental control regulations.
- C. The Contractor shall submit a procedure for handling a medical emergency occurring inside of the tank during abrasive blasting and coating for the interior of the tank.
- D. The Contractor shall submit a procedure for handling over spray prevention, from Blast Cleaning and Coating.
- E. The Contractor shall submit data certifying the chemical composition of the blast abrasive to be used. The blast abrasive shall not contain levels of Barium, Beryllium, Cadmium, Chromium, Mercury, Nickel, Lead or Copper in concentrations greater than that allowed by RCRA. The maximum Selenium concentration allowed for all blast abrasive used

shall be .05 mg/L. The blast abrasive shall be tested according to the RCRA's TCLP metals Leachate Test.

- F. Inspections: Inspection of the applied coating will be accomplished as a joint effort involving the Contractor and the Inspector.

The Contractor shall provide the following testing devices to be jointly used on this project by the Contractor and the City's designated representative. The devices shall become the property of the City after the project.

1. Surface profile Comparator or Testex Tape to measure surface profile prior to painting.
2. Psychrometer and psychrometric tables or charts for humidity/dew point determination.
3. Dry film gauge and calibration blocks for paint thickness testing.
4. Wet film gauge for paint thickness testing.
5. 10X magnifier for examination.
6. Holiday detector – sponge/low voltage for defect determination.
7. Combustible gas analyzer (sniffer) for safety.

The Inspector will witness all testing as performed by the Contractor. Contractor shall coordinate with the Inspector for daily witnessing of psychrometer and temperature readings.

- G. Holiday Testing:

1. Holiday test coated ferrous surfaces:
  - a. Surfaces which will be submerged in water or other liquids.
  - b. Surfaces enclosed in vapor space in such structures.
  - c. Surfaces coated with submerged and severe service coating systems.
2. Mark and repair or recoat areas which contain holidays in accordance with coating manufacturer's printed instructions and then retest.
3. Coatings with DFT Exceeding 20 mils:
  - a. Use pulse-type holiday detector such as Tinker & Razor Model AP-W, D. E. Stearns Co. Model 14/20, or equivalent.
  - b. Adjust unit to operate at voltage required to cause spark jump across air gap equivalent to twice specified coating thickness.
4. Coatings with DFT of 20 mils or less:
  - a. Use Tinker & Razor Model M1 non-destructive type holiday detector, K-D Bird Dog, or equivalent.
  - b. Unit shall operate at less than 75 volts.
  - c. For thickness between 10 and 20 mils, add non-sudsing type wetting agent, such as Kodak Photo-Flo, or equivalent, to water prior to wetting detector sponge.

- H. Film Thickness Testing:

1. On ferrous metals, measure dry coating thickness in accordance with SSPC Paint Application Specification No. 2.
  - a. Use magnetic-type dry film thickness gage such as Mikrotest model FM, Elcometer model 111/1EZ, or equivalent.
  - b. Test each coat for correct thickness.
  - c. Make no measurements until at least 8 hours after application of coating thickness at a time of application using wet film gage.
2. On non-ferrous metals and other substrates, measure coating thicknesses at time of application using wet film gage.

- I. Surface Preparation:

1. Evaluate blast cleaned surface preparation work based on comparison of blasted surfaces with standard samples available from NACE.
2. Use NACE standard TM-01-70.
3. The Contractor will be required to blast and coat the underside of all non-fixed support columns during interior recoating applications.

## 1.08 QUALITY ASSURANCE

A. General: Quality assurance procedures and practices shall be used to monitor all phases of surface preparation, application, and inspection throughout the duration of the project. Procedures and practices not specifically defined herein may be used provided they meet recognized and acceptable professional standards and are approved by the City's designated representative.

B. All materials furnished on all work accomplished under the Contract shall be subject to inspection by the City's designated representative. The Contractor shall be held strictly to the true intent of the specifications in regard to quality of materials, workmanship, and diligent execution of the Contract.

The City's designated representative reserves the right to inspect any and all work procedures employed by the Contractor to ensure that said procedures are in absolute compliance with the governing specifications, industry accepted inspection criteria, and coating manufacturer's published information. The Contractor is responsible for providing safe accessibility and adequate lighting to inspection personnel upon request of the City's designated representative. The Contractor is responsible for having on-site at all times recently calibrated inspection equipment available for use by the City's designated representative.

C. Work accomplished in the absence of prescribed inspection may be required to be removed and replaced under the proper inspection, and the entire cost of removal and replacement, including the cost of all materials borne by the Contractor.

In the event that a pre-identified schedule is put in place and approved by the City of North Las Vegas, some work may proceed without full inspection presence. Any rejection of said work at the time of inspection will require all unsatisfactory conditions to be repaired at the Contractor's expense.

D. Surface Preparation: No coating shall be applied to a steel surface which has a temperature over 125 degrees. Surface preparation will be based upon comparison with: "Pictorial Surface Preparation Standards for Painting Steel Surfaces", SSPC-V1s 1, ASTM Designation D2200, NACE Standard TM-01-70, and as described below. Anchor profile for prepared surfaces shall be measured by using a non-destructive instrument such as a Keene-Tator Surface Profile Comparator or Testex Press-O-Film System. Temperature and dew point requirements noted herein shall apply to all surface preparation operations, except low and high temperature limits shall be determined after submittals are reviewed by the City's designated representative.

E. Application: No coating or paint shall be applied; when the surrounding air temperature or the temperature of the surface to be coated or painted is outside of the published material manufacturers recommendations to wet or damp surfaces or in rain, snow, fog or mist; when the temperature is less than 5°F above the dew point; when it is expected the air temperature will drop below manufacturers recommendations, or less than 5°F above the dew point within eight hours after application of coating or paint. Dew point shall be measured by use of an instrument such as a Sling Psychrometer in conjunction with U.S. Department of Commerce Weather Bureau Psychrometric Tables or equivalents.

If the above conditions are prevalent, coating or paint application shall be delayed or postponed until conditions are favorable. The day's coating or paint application shall be completed in time to permit the film sufficient drying time prior to damage by atmospheric conditions.

The Contractor shall conduct all operations so as to confine abrasive blasting debris and paint over spray to within the bounds of the sites. The Contractor shall take all precautions necessary to prevent adverse off-site consequences of painting operations, and shall submit at the Pre-Construction Conference a procedure for over spray prevention. Any complaints received by the Owner relating to any such potential off-site problems will be immediately delivered to the Contractor. The Contractor shall immediately halt painting work and shall take whatever corrective action required to mitigate any such problems. All costs associated with protection of off-site properties and/or correction of damage to property as a result of painting operations shall be borne directly by the Contractor at no additional expenses to the Owner.

1. Owner approval of Contractor's over spray prevention procedures and City's designated representative's presence on project site shall not relieve the Contractor from responsibility for over spray. Daily approval of procedures will be required prior to the start of spray operations.
- F. Thickness and Holiday Checking: Thickness of coatings and paint shall be checked with a non-destructive, magnetic type thickness gauge. An instrument such as a Tooke Gauge should be used if a destructive tester is deemed necessary. Coating integrity of the interior coated surfaces shall be tested in accordance with AWWA D102. Pinhole testing of all interior coated surfaces shall be tested with an approved inspection device. All pinholes shall be marked, repaired in accordance with the coating manufacturer's printed recommendations and retested. Holiday detectors shall not exceed the voltage recommended by the manufacturer of the coating system. No pinholes or other irregularities will be permitted in the final coating.
- G. Coating notes on Drawings:
1. Show exceptions to schedules.
  2. Show or extend limits of coating systems
  3. Or clarify or show details for application of coating systems.
- H. Coatings in potable water shall meet National Sanitation Foundation Standard 61.
- I. Contractor shall forward copies of foreman's daily reports on a weekly basis to the City's designated representative. Daily reports shall include, but not be limited to, psychrometer and temperature readings, summary to work, progress to date, and amount of coating used.

#### 1.09 SAFETY AND HEALTH REQUIREMENTS

- A. General: Ventilation, electrical grounding, and care in handling coatings, paints, solvents, and equipment are essential during coating and painting projects. Contractor shall conform with safety requirements set forth by regulatory agencies applicable to the construction industry and manufacturer's printed instructions and appropriate technical bulletins and manuals. The Contractor shall provide and require use of personal protective life-saving equipment for persons working in or about the project site.

Proper safety precautions shall be observed to protect against potential toxicity and flammability of coating. Safe handling and application practices are required and should include, but not be limited to, provision of:

1. SSPC-PA3 – “Guide to Safety and Paint Application”
  2. SSPC-PS17.00 – “Section 8 – Safety”
  3. Coating Manufacturer’s Material Safety Data Sheets
- B. Access Facilities: All ladders, scaffolding, and rigging shall be designed for their intended uses. Ladders and scaffolding shall be erected where requested by the City’s designated representative to facilitate inspection and be moved by the Contractor to locations requested by the City’s designated representative.
- C. Ventilations: Where ventilation is used to control hazardous exposure, all equipment shall be explosion-proof, or industrial design and shall be approved by the City’s designated representative. Household-type venting equipment will not be acceptable. Ventilation shall reduce the concentration of air contaminate to the degree a hazard does not exist within the confined space. Air circulation and exhausting of solvent vapors shall be continued until coating has fully cured. Force air induction during blast cleaning and coating applications operations is mandatory. If dehumidification equipment is used, equipment must be operated on a continuing basis during all blasting, coating and curing operations, including shifts during which no work is being accomplished.
1. Ventilation systems shall be furnished and installed by the Contractor in accordance with these specifications. The Contractor shall make modifications to the ventilation system as directed by the City’s designated representative to ensure a safe working environment and complete removal of all solvent vapors. Upon completion of the final curing period, as determined by the City’s designated representative, the Contractor shall remove the ventilation system.
    - a. The exhaust blower capacity shall be sufficient to maintain air changes within reservoir interior in accordance with OSHA, coating manufacturer’s recommendations and Clark County regulations.
  2. If Contractor proposes to use dehumidification equipment, or any other alternate ventilation system, Contractor must submit, in advance, for approval by the City’s designated representative, a complete list of the equipment and procedures for its use.
- D. Head and Face Protection and Respiratory Devices: Equipment shall include protective helmets which shall be worn by all persons while in the vicinity of the work. During abrasive blasting operations, nozzle men shall wear U.S. Bureau of Mines approved air-supplied helmets and all other persons who are exposed to blasting dust shall wear approved filter-type respiratory and safety goggles. When coatings are applied in confined areas all persons exposed to toxic vapors shall wear approved air-supplied masks. Barrier creams shall be used on any exposed areas of skin.
1. The Contractor shall provide two sets of filter-type respirators and safety goggles, and an air-supplied mask to be used by City personnel when required for inspection purposes. All of the above-mentioned devices shall be kept in good working order.
- E. Grounding: Blasting, spray and air hoses shall be grounded to prevent accumulation of charges of static electricity.
- F. Illumination: Spark-proof artificial lighting shall be provided for all work in confined spaces. Light bulbs shall be guarded to prevent breakage. Lighting fixtures and flexible cords shall comply with the requirements of NFPA 70 “National Electric Code” for the atmosphere in which they will be used. Whenever required by the City’s designated representative, the Contractor shall provide additional illumination and necessary

supports to cover all areas to be inspected. The level of illumination for inspection purposes shall be determined by the City's designated representative.

- G. Toxicity and Explosiveness: The solvents used with specified protective coatings are explosive at low concentrations and are highly toxic. Because of toxicity, the maximum allowable concentration of vapor shall be kept below the maximum safe concentration for eight-hour exposure, plus Lower Explosive Limit must be strictly adhered to. The Contractor shall be solely responsible for all regulations related to safety personnel and handling of such materials.
- H. Protective Clothing: Coating and paint materials may be irritating to the skin and eyes. When handling and mixing paints, workmen shall wear gloves and eye shields.
- I. Fire: During mixing and application of coatings and paints, all flames, welding, and smoking shall be prohibited in the vicinity. Appropriate type fire extinguishers shall be provided by the Contractor and kept at the jobsite during all operations.
- J. Sound Levels: Whenever the occupational noise exposure exceeds the maximum allowable sound levels, the Contractor shall provide and require the use of approved ear protective devices.
  - 1. General sound levels for project shall be those which will not affect routine facility or neighborhood activities. Whenever levels are objectionable, they shall be adjusted as directed by the City's designated representative.

#### 1.10 CONTROL OF LEAD PAINT WASTE

- A. CONTRACTORS Responsibilities:
  - 1. Plan and implement all measures required to protect workers from exposure and prevent pollution due to lead and other hazardous materials that may be contained in paint wastes.
  - 2. Measures shall include all required testing, planning, reporting, removal, containment, and disposal activities associated with protection against lead contamination.
    - a. Worker Protection: Comply with 29 CFR Part 1926 (OSHA Lead Exposure in Construction).
    - b. Pollution Prevention: Comply with all requirements of the Nevada Division of Environmental Protection.
  - 3. Retain Certified Industrial Hygienist or other qualified person(s) as required to advise CONTRACTOR and certify that all applicable lead control requirements have been met at the completion of the project. Submit qualifications of proposed qualified person(s) for review. Submit final report for each site summarizing all test plans, all tests, and all recommendations made during the coating removal work. Certify in writing that all work was completed in conformance with the specialist's recommendations and in accordance with applicable laws and requirements.
  - 4. Retain a Third Party Paint Inspector qualified for lead paint environments to inspect all surface preparation and coating applications prior to complete removal of lead paint waste from the site.
- B. Testing and Planning:
  - 1. Sampling and Testing: Collect samples of used blast material and paint residue in identified areas and analyze in a state certified laboratory for content of lead and other regulated materials.

- a. Collect additional samples of existing paint, at CONTRACTOR's option.
  - b. The City will collect soil samples from Project sites and planned locations of waste storage areas. Soil samples will be collected from the areas after completion of all field work. A minimum of three (3) samples shall be collected from each reservoir site. The samples shall be analyzed in a laboratory and the results used to demonstrate the effectiveness of CONTRACTOR's pollution prevention plans.
  - c. Air monitoring for lead shall conform to OSHA regulations.
  - d. Submit all test results for ENGINEER's review.
  - e. Reservoirs surrounded by asphalt or concrete pavement shall be excluded from soil sample requirements.
2. Control Plan: Prepare a written plan for protection of workers and the environment from paint wastes and associated debris produced by work on this Project.
- a. Comply with regulations as stated herein and all other laws as applicable.
  - b. Submit Control Plan for ENGINEER's review.
  - c. Anticipated controls for environmental protection include containment and disposal of existing paint that will be removed in preparation for new painting, and existing paint that may become detached from existing facilities that are demolished and removed for disposal.
  - d. Anticipated controls for worker protection include breathing and skin protection to the degree indicated by OSHA regulations and the amount of lead or other hazardous substances found in paint wastes and debris.
- C. Control of Lead or Other Hazardous Paint Wastes:
- 1. Handle and contain paint debris including abrasive blast material to prevent release of dust or particles to the atmosphere or surrounding areas during demolition, surface preparation, or other activities. Minimize any water added to wastes for dust control unless such water is collected and properly disposed.
  - 2. Store all used abrasive blast material in designated containers provided by CONTRACTOR. Containers shall consist of barrels, dumpsters, or similar facilities with tight-fitting covers located near the site. Do not place trash or any other waste materials in the containers. Keep containers covered to prevent dispersal by weather conditions.
  - 3. Collect and test representative samples of all paint waste and debris to determine if the material is classified as hazardous as the Nevada Division of Environmental Protection. All testing shall be completed by state-certified laboratory. Submit laboratory report immediately upon receipt for ENGINEER's review.
  - 4. CONTRACTOR shall dispose of paint waste material and debris in a legal manner and based on test results. Contact ENGINEER immediately for further instruction in the event that paint wastes and debris cannot be disposed as ordinary waste.
- D. Worker Protection Against Lead or Other Hazardous Paint Waste:
- 1. Provide all required measures for protection of workers against lead and other hazardous paint waste materials during demolition, surface preparation, or other activities. Measures shall include training, air monitoring, breathing protection, skin protection, hygiene facilities or other measures as indicated by OSHA regulations.
  - 2. Worker protection measures shall conform to the CONTRACTOR's Control Plan.
- E. Certification:
- 1. Notify ENGINEER at such time when lead paint removal and disposal are completed and the work sites may be safely entered for inspection.
  - 2. Submit certification that the Project sites are free of lead paint wastes associated with this Project and that disposal of wastes has met applicable requirements.

F. Lead Content:

1. Samples of the existing coatings were taken for analysis of lead by Broadbent & Associates Inc. The results are shown in the attachment included with these specifications.

**PART II MATERIALS**

2.01 GENERAL

A. Materials specified are those which have been evaluated for the specified service. Products of DEVOE Inc. are listed to establish a standard of quality. Standard products other than the specified will be accepted when it is proved to the satisfaction of the City's designated representative they are equal in composition, durability, usefulness, and convenience for the purpose intended. Substitutions will be considered, provided the following minimum conditions are met:

1. The proposed coating or point system shall have a dry film thickness equal to or greater than that of the specified system.
2. The proposed coating or point system shall employ an equal or greater number of separate coats.
3. All requests for substitution shall carry full descriptive literature and directions for application, along with complete information on generic type, non-volatile content by volume and a list of 10 similar projects, all at least three years old, where the coatings or paints have been applied to similar exposure.
4. If the above mentioned data appears to be in order, the City's designated representative may require that the Contractor provide certified laboratory data sheets showing the results of complete spectrographic and durability tests accomplished on the proposed substitute. Tests shall be accomplished by an independent testing laboratory satisfactory to the City's designated representative and all costs incurred in the testing programs shall be borne by the Contractor.

In any case, the City's designated representative shall be sole and final judge of the acceptability of any proposed substitution. Requests for substitutions must be approved in writing prior to date of bid.

- B. All materials shall be brought to the jobsite in the original sealed containers. They shall not be opened or used until Owner's representative has physically inspected contents and obtained necessary data from information printed on containers or label.
- C. Flammability, toxicity, allergenic properties, and any other characteristics requiring field precautions shall be identified and specific safety practices shall be stipulated.
- D. All coating and paint shall be stored in enclosed structures to protect them from weather and excessive heat or cold. Flammable coatings and paints must be stored to conform with City, County, State, and Federal safety codes for flammable coating and paint materials. At all times coatings and paints shall be protected from freezing.
- E. Contractor shall use products of same manufacturer for all coats. Daily paint mixing must be limited to the use of the same batch numbers.
- F. In all cases the paint manufacturer shall certify in writing, that the coating materials are compatible with the service environment of the interior surface of a steel potable water reservoir. Water quality data is available by request.

## 2.02 INTERIOR COATING MATERIALS

- A. Coating materials for interior surfaces shall conform to regulations and applicable requirements of local, state, and federal air pollution and health regulatory agencies. Products containing perchloroethylene, lead, chromium, and/or zinc will not be permitted.
- B. Each of the following manufacturers is capable of supplying the coating materials specified. Submit proposed substitution requests in compliance with Section 01630 and requirements specified below.  
Acceptable manufacturers:
1. Devoe Coatings Company.
  2. Tnemec Paints.
  3. Or an approved Equivalent.
- C. For touching up purposes the interior wall and roof coatings shall consist of a two-component epoxy system, immersion resistant, and compliant with NSF-61. The following coating is an approved epoxy coating:
1. First Coat: Bar-Rust 233H Epoxy or equal (Off-white; 4-6 mil DFT)
  2. Intermediate coat: Bar-Rust 233H Epoxy or equal (Buff; 4-6 mil DFT)
  3. Top coat: Bar-Rust 233H Epoxy or equal (Off-White; 4-6 mil DFT)
  4. This system shall provide a total coating of 12.0 – 18.0 mils DFT)
- D. For touching up purposes the tank bottom coating shall consist of a high-solids two-component epoxy system that is immersion resistant and compliant with NSF-61. Following is an approved epoxy system:
1. First coat: Devran 133 100 percent Solids Epoxy or equal (Off-white; 15-20 mil DFT)
  2. Top coat: Devran 133 100 percent Solids Epoxy or equal (White; 15-20 mil DFT)
  3. This system shall provide a total coating of 30.0 – 40.0 mils DFT

## 2.03 EXTERIOR PAINT MATERIALS

- A. Paint materials for the complete exterior of the steel tank shall consist of the following system. Finish coat color shall be approved by the City's designated representative before ordering of coating.
- B. The following coating system or an approved equal has been approved for this contract:
1. Prime coat: Bar-Rust 231 Epoxy or equal (3.0 – 4.0 mils DFT)
  2. Finish coat: Devthane 379 Gloss Polyurethane (2.0 – 4.0 mil DFT; color to be selected by the City's designated representative.)
  3. This system shall provide a total coating of 5.0 – 8.0 mils DFT
  4. Contractor shall pay for a supply of maintenance paints (5 gallons of the City-selected color) and provide the City with a letter from the paint vendor crediting the City for the maintenance paint.

## 2.04 DISINFECTION MATERIALS

Disinfection materials shall conform to all requirements of AWWA Standard C62-86 (see Section 02526, Reservoir Testing and Disinfection).

## 2.05 CAULK – FOR INTERIOR AND EXTERIOR

- A. Use Sikaflex – 1a polyurethane caulk or approved equal for all caulking applications on this project.

- B. Upon completion of exterior priming operations and proper drying interval, void between foundation and tank bottom plate extension, after removal of defective felt, shall be filled flush with the joint sealant specified above under caulk. If required, excessively deep voids can be filled with an approved backing material to allow correct filling of the exterior void with the specified material.
- C. Joint sealant may be applied by caulking gun, trowel, or other approved method. Sealant shall be pressed firmly into voids to ensure 100 percent filling/sealing.

### **PART III EXECUTION**

#### **3.01 GENERAL**

- A. All surface preparation, coating, and paint applications shall conform to applicable standards of the Steel Structures Pointing Council, American Water Works Association, City of North Las Vegas, and the manufacturer's printed instructions.
- B. All work shall be accomplished by skilled craftsmen qualified to accomplish the required work in a manner comparable with the best standards of practice. Continuity of personnel shall be maintained and transfers of key personnel shall be coordinated with the City's designated representative.
- C. The Contractor shall provide a supervisor to be at the work site during cleaning, application and disinfection operations. The supervisor shall have the authority to sign daily quality control reports, coordinate work and make other decisions pertaining to the fulfillment of the their contract.
- D. The Contractor shall provide approved sanitary facilities for all Contractor personnel as no existing facilities will be available to the Contractor. Facilities shall be maintained during the project to complete standards established by Owner, and shall be removed prior to Contractor's departure from the site at completion of the project.
- E. Dust, dirt, oil grease or any foreign matter which will affect the adhesion or durability of the finished surface must be removed by washing with clean rags dipped in an approved commercial cleaning solvent, rinsed with clean water and wiped dry with clean rags.
- F. The Contractor shall remove all sludge, mud, water or any foreign matter from the floor of the reservoir tank, prior to the start of work.
- G. The Contractor's coating and painting equipment shall be designed for application of materials specified and shall be maintained in first class working condition.
  - 1. Cleanliness of compressed air supply shall be verified daily, and as deemed necessary by City's designated representative, by directing a stream of air, without abrasive, from the blast nozzle onto a white blotter or cloth for twenty seconds. If oil or water appears on the blotter or cloth, all traps and separators shall be blown down until subsequent twenty-second tests show no further oil or water.
- H. Application of the first coat shall follow immediately after surface preparation and cleaning within an eight-hour working day. Any cleaned areas not receiving first coat within an eight-hour period shall be reblasted prior to application of first coat.
  - 1. If dehumidification equipment is used, cleaned areas may have first coat applied at last shift of the week, provided dehumidification equipment has run continually

during the complete week, and surface meets all requirements of the specification.

- I. Because of the presence of moisture and possible contaminants in the atmosphere, care shall be taken to ensure previously coated or painted surfaces are protected or recleaned prior to application of subsequent coat(s). Methods of protection and recleaning shall be approved by the City's designated representative.
  1. Project is subject to intermittent shutdown if, in the opinion of the City's designated representative, cleaning, coating and painting operations are creating a localized condition detrimental to ongoing activities, personnel or adjacent property.
  2. In the event of emergency shutdown by the City's designated representative, Contractor shall immediately correct deficiencies. All additional costs created by shutdown shall be borne by the Contractor.
- J. The Contractor shall provide, at their own expense, all necessary power for their operations under the Contract.

### 3.02 SURFACE PREPARATION, GENERAL

- A. The latest revision of the following surface preparation specifications of the Steel Structures Painting Council shall be from a part of this specification. (Note: An element of surface area is defined as any given square inch of surface).
  1. Solvent Cleaning (SSPC-SP1): Removal of oil, grease, soil and other contaminants by use of solvents, emulsions, cleaning compounds, steam cleaning or similar materials and methods, which involve a solvent or cleaning action.
  2. Hand Tool Cleaning (SSPC- SP2): Removal of loose rust, loose mill scale and other detrimental foreign matter present to degree specified by hand chipping, scraping, sanding and wire brushing.
  3. Power Tool Cleaning (SSPC-SP3): Removal of loose rust, loose mill scale and other detrimental foreign matter present to degree specified by power wire brushing, power impact tools or power sanders.
  4. White Metal Blast Cleaning (SSPC-SP5): Blast cleaning to white metal cleanliness until 100% of the surface area is free of all visible residues.
  5. Commercial Blast Cleaning (SSPC-SP6): Blast cleaning until at least two-thirds of each element of surface area is free of all visible residue.
  6. Brush-off Blast Cleaning (SSPC-SP7): Blast cleaning to remove loose rust, loose mill scale, and other detrimental foreign matter present to the degree specified.
  7. Near-White Blast Cleaning: (SSPC-SP10): Blast cleaning to near-white metal cleanliness, until at least ninety-five% of each element of surface area is free of all visible residues.
  8. Power Tool Cleaning to Bare Metal (SSPC-SP11): Power tool cleaning to produce a bare metal surface and to retain or produce a surface and to retain or produce a surface profile of at least one mil.

- B. Abrasive blasting nozzles shall be equipped with "deadman" emergency shut off nozzles. Blast nozzle pressure shall be a minimum of 95 P.S.I. and shall be verified by using an approved nozzle pressure gauge at each start-up period or as directed by the City's designated representative.
- C. All blast hose connections shall be taped with duct tape prior to pressurizing. All taped connections shall be visually inspected for leaks within five minutes after start of blast cleaning operations and at the end of blast cleaning operations. Leaking connections shall be immediately repaired to prevent further damage.
- D. Interior blast cleaning for all surfaces shall be by dry method unless otherwise directed.
- E. Particle size of abrasives used in blast cleaning shall be that which will produce a 2.0 mil surface profile, or in accordance with recommendations of the manufacturer of the specified coating or paint system to be applied, subject to approval of the City's designated representative.
- F. Select type and size of abrasive to produce surface profile meeting coating manufacturer's recommendation for particular coating and service conditions. Abrasives for submerged and severe service coating systems: clean, hard, sharp cutting crushed slag.
- G. Do not reuse abrasive unless otherwise approved by City's designated representative. For automated shop blasting systems, maintain clean oil-free abrasives.
- H. Comply with applicable federal, state, and local air pollution control regulations for blast cleaning.
- I. Supply compressed air for air blast cleaning at adequate pressure from well maintained compressors equipped with oil/moisture separators which remove at least 95 percent of contaminants.
- J. Clean surfaces of dust and residual particles from cleaning operations by dry air blast cleaning, vacuuming, or another approved method prior to painting.
- K. Enclosed areas and other areas where dust settling is problem: Vacuum cleaned and wipe with tack cloth.
- L. Remove damaged or defective coating by specified blast cleaning to meet clean surface requirements before recoating.
- M. Abrasive used in blast cleaning operations shall be new, washed, graded and free of contaminants which would interfere with adhesion of coatings and points and shall not be reused unless specifically approved by the City's designated representative.
- N. During blast cleaning operations, caution shall be exercised to ensure existing coatings, paints, and insulation are not exposed to abrasive from blast cleaning.
- O. Blast cleaning from rolling scaffolds shall only be accomplished within confines of interior perimeter of scaffold. Reaching beyond limits of perimeter will be allowed only if blast nozzle is maintained in a position which will produce a profile acceptable to the City's designated representative.
- P. The Contractor shall keep the area of his work in a clean condition and shall not permit blasting materials to accumulate as to constitute a nuisance or hazard to the prosecution of the work of the work of the operation of the existing facilities. Spent abrasives and

other debris shall be removed at the Contractor's expense, as directed by the City's designated representative.

If waste is determined to be hazardous, disposal by Contractor shall meet requirements of all regulatory agencies for handling and disposing of such wastes.

- Q. Blast cleaned and coated/painted surfaces shall be cleaned prior to application of specified coatings or paints via combinations of blowing with clean dry air, brushing/brooming and/or vacuuming as directed by the City's designated representative. Air hose for blowing shall be equipped with a shut-off device.
- R. Interior Area Surface Preparation shall be abrasive blasted in accordance with SSPC-SP-3 requirements, or power tool cleaned in accordance with SSPC-SP11 requirements as determined by Field Inspector. Coating shall be applied the same day as surface preparations.

### 3.03 SURFACE INTERIOR PREPARATION, SPECIFIC

- A. Interior roof, roof rafters, ring girders, columns, interior shell, floor, overflow, and all interior carbon steel surfaces including area between roof plates and support beams shall be prepared as follows:

Power Tool Cleaning = SSPC-SP3 or SSPC-SP11  
Blast profile = 2.0 m minimum  
Touch-up = SSPC-SP11

- B. The blast waste must be contained and tested for the level of leachable lead by an approved certified laboratory prior to removal from the reservoir site, and disposed of accordingly. If the level of leachable lead exceeds the maximum allowable amount (5 milligrams per liter), the Contractor shall remove the material from the reservoir and place the material into suitable containers for transport to a certified hazardous material storage site. If the level of leachable lead is below the maximum allowable the Contractor shall be responsible to remove and dispose of the material at a non-hazardous material storage site. All cost for testing of the blast wastes shall be the responsibility of the Contractor. Placing hazardous material in suitable containers and transport to a certified hazardous material storage site is a separate bid item.

- C. Strict adherence to the following codes of Federal Regulations will be required and verified:

1. 29 CFR 1910, "OSHA General Industry Standards"
2. 29 CFR 1910.134, "Respiratory Protection"
3. 29 CFR 1910.1000, "Air Contaminant-Permissible Exposure Limits"
4. 29 CFR 1910.1020, "Employee Access to exposure and Medical Records"
5. 29 CFR 1926, "OSHA Construction Industry Standards"
6. 29 CFR 1926.59, "Hazard Communication"
7. 29 CFR 1926.62, "Lead Exposure in Construction; Interim Final Rule"
8. 40 CFR 261, "Identification and Listing of Hazardous Waste"
9. 40 CFR 262, "Standards Applicable to Generators of Hazardous Waste"
10. 40 CFR 263, "Standards Applicable to Transporters of Hazardous Waste"
11. 40 CFR 264, "Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities"

- F. The exterior coating was sampled and analyzed for lead content. The results are shown in the following table:

<b>Paint Sample Lead Concentration</b>					
<b>Piping</b>		<b>3.0 Million Gallon Tank</b>		<b>6.0 Million Gallon Tank</b>	
<b>Sample ID</b>	<b>Lead (Pb) mg/Kg</b>	<b>Sample ID</b>	<b>Lead (Pb) mg/Kg</b>	<b>Sample ID</b>	<b>Lead (Pb) mg/Kg</b>
PL-1	380	MCT-1	23	TT-1	11,000
PL-3	250	MCT-2	9.3	TT-2	18,000
		MCT-3	11	TT-3	29,000
		MCT-4	21	TT-4	17,000
		MCT-5	6.2	TT-5	30,000
		MCT-6	18	TT-6	25,000

Maximum Permissible Lead content 5000 mg/Kg

### 3.04 APPLICATION, GENERAL

- A. Coating and paint application shall conform to the requirements of the Steel Structures Painting Council Paint Application Specification SSPC-PA1, latest revision, for "Shop, Filed and Maintenance Painting", the American Water Works Association, the City of North Las Vegas, and the manufacturer of the coating and paint materials printed literature and as specified herein.
- B. Thinning shall only be permitted as recommended by the manufacturer and approved by the City's designated representative, and shall not exceed limits set by applicable regulatory agencies.
1. If Contractor applied any coatings which have been modified or thinned to such a degree as to cause them to exceed established volatile organic compound (VOC) levels, Contractor shall be responsible for any fines, costs, remedies, or legal action and costs which may result.
- C. Each application of coating and paint shall be applied evenly, free of brush marks, sags, runs and no evidence of poor workmanship. Care should be exercised to avoid lapping on glass or hardware. Coating and paint shall be sharply cut to lines. Finished surfaces shall be free from defects or blemishes.
- D. Protective coverings and drop cloths shall be used to protect floors, fixtures, outlet and overflow pipes, equipment, prepared surfaces, and applied coatings or paints. Personnel entering reservoir or walking on exterior roof of reservoir shall take precautions to prevent damage or contamination of coated or painted surfaces. Care shall be exercised to prevent coating or paint from being spattered onto surfaces which are not to be coated or painted. Surfaces from which material cannot be removed satisfactorily shall be repainted or recoated as required to produce a finish satisfactory to the City's designated representative.
- E. All material shall be applied as specified herein.

- F. All welds and irregular surfaces shall receive a brush coat of the specified product prior to application of the prime coat. Coating/paint shall be brushed in multiple directions to ensure penetration and overage, as directed by City's designated representative. These areas include, but are not limited to, welds, roof lap seams, nuts, bolts, ends and flanges of rafters, etc.
- G. At conclusion of each day's blast cleaning and coating operations, a 6" wide strip of blast cleaned substrate shall remain uncoated to facilitate locating point of origin for successive day's blast cleaning operations. If dehumidification is employed, this 6" strip shall remain at any point of material application.
- H. Epoxy primed surfaces or other multi-component materials exposed to excessive sunlight or an excessive time interval beyond manufacturer's recommended recoat cycle, shall be scarified by Brush-off Blast Cleaning (SSPC-SP7) or methods approved by City's designated representative, prior to application of additional coating or paint. Scarified coating shall have sufficient depth to assure a mechanical bond of the subsequent coat.

### 3.05 QUALITY CONTROL

- A. All epoxy and urethane paints & coating components shall be mixed in exact proportions specified by the manufacturer. Care shall be exercised to ensure all material is removed from containers during mixing and metering operations.
- B. All paints & coatings shall be thoroughly mixed, using an approved slow-speed power mixer until all components are thoroughly combined and are of a smooth consistency. Paints & coatings shall not be applied beyond pot-life limits or recoat cycles specified by manufacturer.
- C. Thinners shall be added to paints & coatings only as required in accordance with manufacturer's printed literature. Quantities of thinner shall not exceed limits set by applicable regulatory agencies.
- D. Application shall be as directed by the manufacturer and approved by the City's designated representative. Drying time between coats shall be strictly observed as stated in manufacturer's printed instructions.
- E. Interior epoxy coats shall contain sufficient approved color additive as an indication of coverage or the coats must be of contrasting color. The finish coat shall be white in color.
- F. Care should be exercised during spray operations to hold the spray nozzle perpendicular and sufficiently close to surfaces being coated to avoid excessive evaporation of volatile constituents an loss of material into the air or the bridging of cracks and crevices. Reaching beyond limits of scaffold perimeter will not be permitted. All overspray shall be removed as directed by the City's designated representative.
  - 1. Paint shall not be applied when wind speed exceeds fifteen miles per hour or when damage to surrounding properties is likely.
  - 2. Contractor shall contain overspray and abrasive blast debris as detailed in the approved procedure submitted to the Owner.
- G. Upon completion of interior coating operations, after curing intervals in accordance with manufacturer's recommendations, holiday detection shall be accomplished, using the specified instrument and in accordance with NACE Standard RP0188-88. Repair and retesting shall be accomplished as specified. Coatings under 20 mils and over shall be detected using a Tinker-Razor M-1 67 ½ V detector. Coating at 20 mils and over shall be

detected using a Tinker-Razor AP-W at a voltage setting as prescribed in the above-noted NACE Standard. The Contractor is responsible for providing appropriate holiday detection equipment with calibration verification and in good condition. The Contractor is responsible for performing holiday detection testing in strict accordance with the above-noted NACE Standard in the presence of the City's designated representative.

- H. All mixing, thinning, application and holiday detection of coating shall be accomplished in the presence of the City's designated representative.

### 3.06 EXTERIOR SURFACE PREPARATION

- A. Prepare surfaces in accordance with the coating manufacturer's current Product Data Sheets instruction and SSPC SP10 as described below. Evaluate surfaces by SSPC-VIS 1-89.

1. Paint shall not be applied when wind speed exceeds fifteen miles per hour or when damage to surrounding properties is likely.
2. Contractor shall contain over spray and abrasive blast debris as detailed in the approved procedure submitted to the Owner.

- B. Remove defective felt material beneath tank which extends to and beyond the edge of the bottom plate extension to form a clean void beneath the tank for subsequent filling with the specified joint sealant materials.

- C. Anchor profile shall be 1.5 to 2.0 mils. Use only clean, fresh grit or abrasive.

- D. Apply primer or first coat as soon as possible after the abrasive blasting operation is finished and always before the surface starts to rust. If the abrasive blasted surface changes color or rust flume begins to form, re-clean the surface to the SP10 standard.

- E. Clean and coat ladders connected to the tank to this specification.

- F. No coating work shall begin before the prepared surfaces or the manner of preparation is approved by the City's designated representative.

- G. Keep the work area in a clean condition and do not permit blasting materials and dust to accumulate and constitute a public nuisance or interfere with the prosecution of the work. Remove spent abrasives and other debris as required to maintain a clean working environment.

- H. Blast cleaned surfaces shall be cleaned before application of specified coatings or paints via a combination of blowing with clean dry air, brushing/brooming, and/or vacuuming. Air hose for blowing shall be at least 2 inches in diameter and shall be equipped with a shut-off device.

- I. The blast waste must be contained, tested for the level of leachable lead by an approved certified laboratory prior to removal from the reservoir, and disposed of accordingly. If the level of leachable lead exceeds the maximum allowable amount (5 milligrams per liter), the Contractor shall remove the material from the reservoir and place the material into suitable containers for transport to a certified hazardous material storage site. If the level of leachable lead is below the maximum allowable the Contractor shall be responsible to remove and dispose of the material at a non-hazardous material storage site. All cost for testing of the blast wastes shall be the responsibility of the Contractor. Placing

hazardous material in suitable containers and transport to a certified hazardous material storage site is a separate bid item.

### 3.07 FINAL CURING INTERIOR

- A. Upon completion and acceptance of applied coating system. Contractor shall furnish an approved exhaust fan or blower of sufficient capacity to ensure removal of solvent vapors during curing process. The fan or blower, after approval by City's designated representative shall be installed as directed by the City's designated representative and shall remain in continuous operation until coating is completely cured as determined by the manufacturer of the coating system.
- B. The Contractor may find it necessary to extend the curing time or ventilation time beyond the requirements in order to comply with the regulatory agency requirements or to reduce the leached organic compounds to the required levels. All costs in connection with any extended curing times shall be borne by the Contractor.
- C. In the event that an artificial heat source is employed to force cure the interior coating system, all activities must conform to the coating manufacturer's instructions. Specific information regarding initial cure time prior to heating, localized positioning of heating duct, maximum localized temperatures, and temperature curing curves must be addressed in writing and approved by the City's designated representative.

### 3.08 CLEANUP

Upon completion of the work, all staging, scaffolding and containers shall be removed from the site or disposed of in a manner approved by the City's designated representative. Coating spots upon adjacent surfaces shall be removed and the entire jobsite cleaned. All damage to surfaces resulting from the work of this section shall be cleaned, repaired or refinished to the complete satisfaction of the City's designated representative at no cost to the Owner.

### 3.09 OMISSIONS

Care has been taken to delineate herein those surfaces to be coated. However, if coating requirements have been inadvertently omitted from this section or any other section of the specification, it is intended that all interior metal surfaces, unless specifically exempted herein, shall receive a coating equal to that given the same type surface pursuant to these specifications.

**END OF SECTION**

**NORTH LAS VEGAS, NEVADA**  
**BID PROPOSAL FOR BID NO. 1351**  
East Reservoir Recoating

**Name:** \_\_\_\_\_  
**Address:** \_\_\_\_\_  
**E-mail** \_\_\_\_\_

THE UNDERSIGNED PROPOSES AND AGREES:

1. To complete all work for which a contract may be awarded to him and to furnish any and all labor, equipment, materials, transportation, and other facilities required for the services as set forth in the bid Proposal and Contract Documents.
2. That he has examined the Contract Documents and the site(s) for the proposed work and satisfied himself as to the character, quality of work to be performed, materials to be furnished and as to the requirements of the specifications.
3. If awarded the contract, he will provide the following submittals within fifteen calendar days from receipt of the Notice of Award:
  - a. Certificates of insurance for General Liability and Workman's Compensation certificate as required by law.
  - b. That if he does not provide the submittals on or before the fifteenth (15th) calendar day, he will pay over to the Owner the amount of Two Hundred Dollars (\$200) per day as liquidated damages.
4. That if he does not keep the bonds or insurance policies in effect or allows them to lapse, he will pay over to the Owner the amount of Five Hundred Dollars (\$500) per day as liquidated damages.
5. That this Proposal is genuine and is not sham or collusive, or made in the interest of, or on behalf of any person not herein named, nor he in any manner sought to secure for himself an advantage over any other bidder.
6. He further proposes and agrees that he will accept as full compensation for the work to be performed the price written in the Bid Schedule below.
7. That he has carefully checked the figures below and that Owner will not be responsible for any error or omissions in the preparation of this Bid.
8. That no verbal agreement or conversation with an officer, agent or employee of the Owner, either before or after the execution of the agreement, shall affect or modify any of the terms or obligations of this Proposal.
9. The Bidder hereby acknowledges receipt of the following addenda:

Addendum No. _____	Dated, _____
Addendum No. _____	Dated, _____
Addendum No. _____	Dated, _____
Addendum No. _____	Dated, _____

**OPTION A**

**3.0 MILLION GALLON TANK ONLY**

<b><u>BID ITEM</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>QTY</u></b>	<b><u>PRICE</u></b>
1.	Construction Conflicts	L.S.	<u>\$20,000</u>
2.	Mobilization/Demobilization	L.S.	<u>\$ _____</u>
3.	Sandblast and Recoats		
	a. Exterior of 3.0 Million Gallon Tank	L.S.	<u>\$ _____</u>
	b. P2b Pump Station and piping	L.S.	<u>\$ _____</u>
4.	Removal of Hazardous Waste Materials	L.S.	<u>\$ _____</u>
5.	Fabrication & Installation of Handrails	L.S.	<u>\$ _____</u>
6.	Fabrication & Installation of Ladder Extension	L.S.	<u>\$ _____</u>
7.	Fabrication & Installation of 36-inch Roof Vent	L.S.	<u>\$ _____</u>
8.	Supply and Installation of a Water Level Indicator	L.S.	<u>\$ _____</u>
9.	Fabrication & Installation of 30-inch Manhole	L.S.	<u>\$ _____</u>
	Total		<u>\$ _____</u>

**OPTION B**

**7.5 MILLION GALLON TANK ONLY**

<b><u>BID ITEM</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>QTY</u></b>	<b><u>PRICE</u></b>
1.	Construction Conflicts	L.S.	<u>\$30,000</u>
2.	Mobilization/Demobilization	L.S.	<u>\$ _____</u>
3.	Sandblast and Recoats		
	a. Exterior of 7.5 Million Gallon Tank	L.S.	<u>\$ _____</u>
	b. P2b Pump Station and piping	L.S.	<u>\$ _____</u>
4.	Removal of Hazardous Waste Materials	L.S.	<u>\$ _____</u>
5.	Fabrication & Installation of Handrails	L.S.	<u>\$ _____</u>
6.	Fabrication & Installation of Ladder Extension	L.S.	<u>\$ _____</u>
7.	Fabrication & Installation of 36-inch Roof Vent	L.S.	<u>\$ _____</u>
8.	Supply and Installation of a Water Level Indicator	L.S.	<u>\$ _____</u>
	Total		<u>\$ _____</u>

**OPTION C**

**3.0 MILLION GALLON TANK AND 7.5 MILLION GALLON TANK**

<b><u>BID ITEM</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>QTY</u></b>	<b><u>PRICE</u></b>
1.	Construction Conflicts	L.S.	<u>\$50,000</u>
2.	Mobilization/Demobilization	L.S.	<u>\$ _____</u>
3.	Sandblast and Recoats		
	a. Exterior of 7.5 Million Gallon Tank	L.S.	<u>\$ _____</u>
	b. Exterior of 3.0 Million Gallon Tank	L.S.	<u>\$ _____</u>
	c. P2b Pump Station and piping	L.S.	<u>\$ _____</u>
4.	Removal of Hazardous Waste Materials	L.S.	<u>\$ _____</u>
5.	Fabrication & Installation of Handrails	L.S.	<u>\$ _____</u>
6.	Fabrication & Installation of Ladder Extensions	L.S.	<u>\$ _____</u>
7.	Fabrication & Installation of 36-inch Roof Vents	L.S.	<u>\$ _____</u>
8.	Supply and Installation of Water Level Indicators	L.S.	<u>\$ _____</u>
	<b>Total</b>		<b><u>\$ _____</u></b>

\_\_\_\_\_  
Signature of Bidder

\_\_\_\_\_  
Legal Name of Company

\_\_\_\_\_  
Name of Bidder (print/type)

\_\_\_\_\_  
Company Address

\_\_\_\_\_  
License #

\_\_\_\_\_  
Date of Bid

\_\_\_\_\_  
Telephone #

\_\_\_\_\_  
Fax #

\_\_\_\_\_  
E-mail Address

**AGREEMENT  
FOR  
East Reservoir Repainting**

**THIS SERVICES AGREEMENT** is made and entered into as of the \_\_\_\_ day of \_\_\_\_\_, 2009, by and between the **CITY OF NORTH LAS VEGAS, NEVADA**, a political subdivision of the State of Nevada, (hereinafter referred to as “**CITY**”), and \_\_\_\_\_, a \_\_\_\_\_, (hereinafter referred to as “**SERVICE PROVIDER**”).

**RECITALS:**

1. The CITY intends to contract for reservoir recoating; and
2. The SERVICE PROVIDER’s scope of work and compensation have been derived through the bid process.

**TIME FOR COMPLETION:** The Work which the CONTRACTOR is required to perform under this Contract shall be commenced at a time stipulated by the CITY in the written “Notice-to-Proceed” and shall be completed according to the following:

The Contractor shall have 120 calendar days from the effective Notice to Proceed work date to reach substantial completion. 30 calendar days after notice of substantial completion the Contractor shall achieve final completion of the work described in this agreement. In this agreement substantial completion will be reached when all coatings have been accepted by the City and the affected reservoirs are ready to be disinfected. Final Completion will be issued when the site has been cleaned, the Contractor is demobilized, and all City facilities are disinfected and back in operation.

**LIQUIDATED DAMAGES:** Liquidated Damages shall be assessed in the amounts stated below per day for each calendar day after the required completion date as mandated by this agreement.

- 1) Liquidated Damages for failure to complete the requirements for the Construction Completion milestone within the time period indicated shall be FIVE HUNDRED DOLLARS (\$500) per day.
- 2) Liquidated Damages for late contract documents shall be TWO HUNDRED DOLLARS (\$200) per day.
- 3) Liquidated Damages for late submittals noted shall be TWO HUNDRED DOLLARS (\$200) per day.

**NOW, THEREFORE**, in consideration of the above recitals and mutual promises contained in the bid documents (incorporated by reference), the parties hereto agree to the following terms, conditions, covenants set forth in Sections I through VII hereof.

**SECTION I - RESPONSIBILITY OF SERVICE PROVIDER**

In addition to any other responsibilities of SERVICE PROVIDER set forth in this AGREEMENT, SERVICE PROVIDER shall provide all services in accordance with City of North Las Vegas bid number 1319.

**SECTION II - RESPONSIBILITY OF CITY**

The CITY will cooperate with SERVICE PROVIDER in the performance of services under this AGREEMENT and will be available for consultation with SERVICE PROVIDER at such reasonable times with advance notice as to not conflict with their other responsibilities.

### **SECTION III - SCOPE OF SERVICES**

Services to be performed by the SERVICE PROVIDER shall consist of the Basic Services described in the bid document.

### **SECTION IV - CHANGES TO SCOPE OF SERVICES**

The CITY may at any time, but only by written order, make changes within the general scope of this AGREEMENT and in the services or work to be performed. If such changes cause a significant increase or decrease in the SERVICE PROVIDER's cost or time required for performance of any services under this AGREEMENT, the Parties shall formally amend this AGREEMENT. Any claim of SERVICE PROVIDER for adjustment under this clause must be asserted in writing within thirty (30) calendar days from the date of receipt by the SERVICE PROVIDER of notification of changes by the CITY, or such claim shall be deemed waived by SERVICE PROVIDER and SERVICE PROVIDER will be deemed to have agreed to the changes without modification of the compensation or time of performance hereunder.

### **SECTION V - TERM OF AGREEMENT**

This AGREEMENT commences upon the date it approved by the CITY and shall end within one (1) year thereafter.

### **SECTION VI - COMPENSATION AND TERMS OF PAYMENT**

#### **A. TOTAL COMPENSATION**

1. The CITY shall pay the SERVICE PROVIDER the amount show in the bid document.

#### **B. TERMS OF PAYMENT**

1. Subject to the CITY's right to dispute any charges, the CITY shall make payments to the SERVICE PROVIDER for completed services as invoiced.

2. Payment to the SERVICE PROVIDER shall be made within thirty (30)calendar days of the date CITY receives each invoice provided by the SERVICE PROVIDER to the CITY, provided that such invoice is complete, correct, and undisputed by the CITY, and that it contains the following information:

(a)The SERVICE PROVIDER shall prepare and submit to the CITY a detailed written invoice indicating the completion of bid items for the previous month's invoice period.

### **SECTION VII - MISCELLANEOUS PROVISIONS**

#### **A. SUSPENSION**

CITY may suspend performance by SERVICE PROVIDER under this AGREEMENT for such period of time as CITY, in its sole discretion may prescribe, by providing written notice to SERVICE PROVIDER at least seven (7) calendar days prior to the date on which CITY wishes to suspend such performance. Upon such suspension, CITY shall pay SERVICE PROVIDER an apportioned amount based on a percentage of the month completed. SERVICE PROVIDER shall not perform further work under this AGREEMENT after the effective date of suspension until receipt of written notice from CITY to resume performance.

#### **B. TERMINATION**

The CITY may terminate this AGREEMENT, with or without cause, upon fourteen (14) calendar days prior written notification of the termination to the SERVICE PROVIDER. Notification to the SERVICE PROVIDER of such termination shall be sent by the CITY in accordance with Section XII.U

In the event of termination, the CITY agrees to pay the SERVICE PROVIDER the reasonable value for all work and services performed in accordance with A above.

### **C. INSURANCE**

SERVICE PROVIDER shall procure and maintain, at its own expense, during the entire term of this AGREEMENT the insurances set forth in the bid document.

### **D. INDEMNITY**

Notwithstanding any of the insurance requirements herein above set forth or limits of liability set forth therein, SERVICE PROVIDER shall defend, protect, indemnify and hold harmless the CITY, its officers, agents and employees from any liabilities, claims, damages, losses, expenses, proceedings, suits, actions, decrees, judgments, reasonable attorney fees, and court costs which the CITY suffers, and/or its officers or employees suffer, as a result of, or arising out of, the negligent acts or omissions of the SERVICE PROVIDER, its agents or anyone employed by the SERVICE PROVIDER.

### **E. ASSIGNMENT**

This AGREEMENT shall insure to the benefit of, and be binding upon, the Parties hereto and their respective successors and assigns. The SERVICE PROVIDER shall not assign, sublet or transfer its interest in this AGREEMENT without the prior written approval of the CITY. Nothing contained herein shall be construed as creating any personal liability on the part of any officer or agent of any public body which may be a party hereto.

### **F. WAIVER**

No consent or waiver, express or implied, by either party to this AGREEMENT or of any breach by the other in the performance of any obligations hereunder shall be deemed or construed to be a consent or waiver to or of any other breach by such party hereunder. Failure on the part of any party hereto to complain of any act or failure to act on the other party or to declare that other party in default hereunder, irrespective of how long such failure continues, shall not constitute a waiver of the rights of such party hereunder. Inspection, payment, or tentative approval or acceptance by the CITY or the failure of the CITY to perform any inspection hereunder, shall not constitute a final acceptance of the work or any part thereof and shall not release SERVICE PROVIDER of any of its obligations hereunder.

### **G. SERVICE PROVIDER'S EMPLOYEES**

The SERVICE PROVIDER shall be responsible for maintaining satisfactory standards of employee competency, conduct and integrity, and shall be responsible for taking such disciplinary action with respect to its employees as may be necessary. In the event that SERVICE PROVIDER fails to remove any employee from the contract work whom the CITY deems incompetent, careless or insubordinate, or whose continued employment on the work is deemed by the CITY to be contrary to the public interest, the CITY reserves the right to require such removal as a condition for the continuation of this AGREEMENT.

### **H. INDEPENDENT CONTRACTOR**

It is hereby expressly agreed and understood that in the performance of the services provided herein, the SERVICE PROVIDER and any other person employed by SERVICE PROVIDER hereunder shall be deemed to be an independent contractor and not an agent or employee of the CITY. This AGREEMENT is not intended to create, and shall not be deemed to create, any partnership, joint venture or other similar business arrangement between CITY and SERVICE PROVIDER.

### **I. APPLICABLE LAW**

This AGREEMENT shall be construed and interpreted in accordance with the laws of the State of Nevada.

### **J. COMPLIANCE WITH LAWS**

In connection with the performance of work under this AGREEMENT, the SERVICE PROVIDER agrees not to discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, sexual orientation or age, including, without limitation, with regard to employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including, without limitation, apprenticeship.

#### **K. PROHIBITION AGAINST CONTINGENT FEES**

The SERVICE PROVIDER warrants that no person or entity has been employed or retained to solicit or secure this AGREEMENT upon an agreement or understanding for a commission, percentage, brokerage or contingent fee. For breach of this warranty, the CITY shall have the right to annul this AGREEMENT without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage or contingent fee.

#### **L. DISPUTE RESOLUTION**

Disputes concerning standards of performance, time of performance, scope of work, compensation or terms specified in the AGREEMENT shall be resolved in the following manner:

1. The CITY's representative and the SERVICE PROVIDER's MANAGER will endeavor to conduct good faith negotiations in an effort to resolve any and all disputes in a timely manner.
2. If any disputes between the Parties remain unresolved after thirty (30) calendar days, the CITY's representative and the SERVICE PROVIDER's MANAGER shall, within seven (7) calendar days, prepare a brief, concise written report summarizing the:
  - (a) basis for the dispute,
  - (b) negotiations accomplished and results thereof, and
  - (c) current status of all relevant unresolved issues.
3. Copies of each written summary shall be exchanged between the CITY's representative and the SERVICE PROVIDER's MANAGER, and provided to the CITY Building Maintenance Manager and the SERVICE PROVIDER's PRINCIPAL-IN-CHARGE. Within ten (10) calendar days thereafter, the Director, or his designee, and the SERVICE PROVIDER's PRINCIPAL-IN-CHARGE will meet to resolve the dispute. A written record of these negotiations will be made. The record will summarize:
  - (a) all issues of dispute,
  - (b) the resolutions to resolved issues, and
  - (c) unresolved issues, if any.

The written record will be reviewed by the Director or his designee, and render a determination regarding such dispute.
4. If the SERVICE PROVIDER disagrees with the determination of the Director, or his designee, the SERVICE PROVIDER may only initiate an action in the Eighth Judicial District Court in and for Clark County to resolve such dispute. The CITY retains the right to all remedies available in law or equity. The Parties agree that no dispute under this AGREEMENT shall be submitted to or resolved through arbitration or mediation.

#### **M. ATTORNEY'S FEES**

In the event any action is commenced by either Party against the other in connection herewith, the prevailing Party shall be entitled to its reasonable costs and expenses, including reasonable attorney's fees, as determined by the court.

#### **N. SITE INSPECTION**

SERVICE PROVIDER represents that SERVICE PROVIDER has visited the PROJECT location and is satisfied as to the general condition thereof and that the SERVICE PROVIDER's compensation as provided for in the AGREEMENT is just and reasonable compensation for performance hereunder including reasonably foreseen and foreseeable risks, hazards and difficulties in connection therewith based on such above-ground observations

**O. SEVERABILITY**

In the event that any provision of this AGREEMENT shall be held to be invalid or unenforceable, the remaining provisions of this AGREEMENT shall remain valid and binding on the Parties hereto.

**P. AMENDMENTS**

This AGREEMENT may only be modified by a written Amendment that is executed by both Parties hereto.

**Q. FINAL INTEGRATION**

This AGREEMENT is fully integrated and constitutes the entire agreement and understanding between the Parties concerning the subject matter of this AGREEMENT. This AGREEMENT supersedes all other oral and written negotiations, agreements and understandings of any and every kind relating to the subject matter of this AGREEMENT.

**R. CONSTRUCTION**

In the event of any dispute regarding any provision of this AGREEMENT, the terms of this AGREEMENT shall not be construed more strongly against or in favor of either party. The parties acknowledge that each has participated equally in the negotiation and drafting of this AGREEMENT.

**S. NOTICE**

Any notice required to be given hereunder shall be deemed to have been given when sent to the party to whom it is directed by personal service, hand delivery or U.S. certified mail, return receipt requested, at the following addresses:

TO CITY:  
CITY OF NORTH LAS VEGAS  
UTILITIES DEPARTMENT  
Attention: David H. Bereskin, P.E.  
2829 Fort Sumter Drive  
North Las Vegas, NV 89030

TO SERVICE PROVIDER:  
Attention:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**T. HEADINGS**

The headings of the various Sections of this AGREEMENT have been inserted only for convenience, and shall not be deemed in any manner to modify or limit any of the provisions of this AGREEMENT, or to be used in any manner in the interpretation of this AGREEMENT.

IN WITNESS WHEREOF, the Parties have caused this AGREEMENT to be executed the day and year first above written.

CITY OF NORTH LAS VEGAS, NEVADA

By: \_\_\_\_\_  
SHARI L. BUCK,  
MAYOR

By: \_\_\_\_\_  
CONTRACTOR

APPROVED AS TO FORM: ATTEST:  
NICHOLAS VASKOV  
CITY ATTORNEY

By: \_\_\_\_\_  
CITY ATTORNEY

By: \_\_\_\_\_  
KAREN L. STORMS  
CITY CLERK

**CITY OF NORTH LAS VEGAS**

**NON-COLLUSIVE AFFIDAVIT OF PRIME BIDDER**

STATE OF NEVADA    )

)SS

COUNTY OF CLARK    )

\_\_\_\_\_, being first duly sworn, deposes and says that:

- (1) He is \_\_\_\_\_ of \_\_\_\_\_, the Bidder that has submitted the attached Bid,
- (2) He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;
- (3) Such Bid is genuine and is not a collusive or sham Bid;
- (4) Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly, with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted to or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City or any person interested in the proposed Contract; and
- (5) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in any interest, including this affiant.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

Subscribed and sworn to before me this  
\_\_\_\_\_ day of \_\_\_\_\_

\_\_\_\_\_  
Address

\_\_\_\_\_  
Notary  
My commission expires \_\_\_\_\_

\_\_\_\_\_  
Telephone

**THE AMERICANS WITH DISABILITIES ACT**

The Americans with Disabilities Act (ADA) was enacted on July 26, 1990 by the United States Congress to protect the disabled from discrimination in employment, public accommodations, transportation and telecommunications.

All City of North Las Vegas service contracts to any organization/company which has 15 or more employees, either private or nonprofit, must meet the nondiscrimination provisions of ADA.

The following signed statement is required on all contracts and addenda to all contracts now in effect with the City of North Las Vegas:

"I, \_\_\_\_\_, hereby certify that the below referenced  
(Typed Name)

company is in compliance with the nondiscrimination provisions of the Americans with Disabilities Act."

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Individual, Company or Corporation

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

(The written assurance of compliance with ADA, as set forth by the contracted Company statement, should be signed by an officer of the Company.)



**CITY OF NORTH LAS VEGAS  
EAST RESERVOIR**

**7220 EAST CAREY AVE.**

**SCALE:** NONE

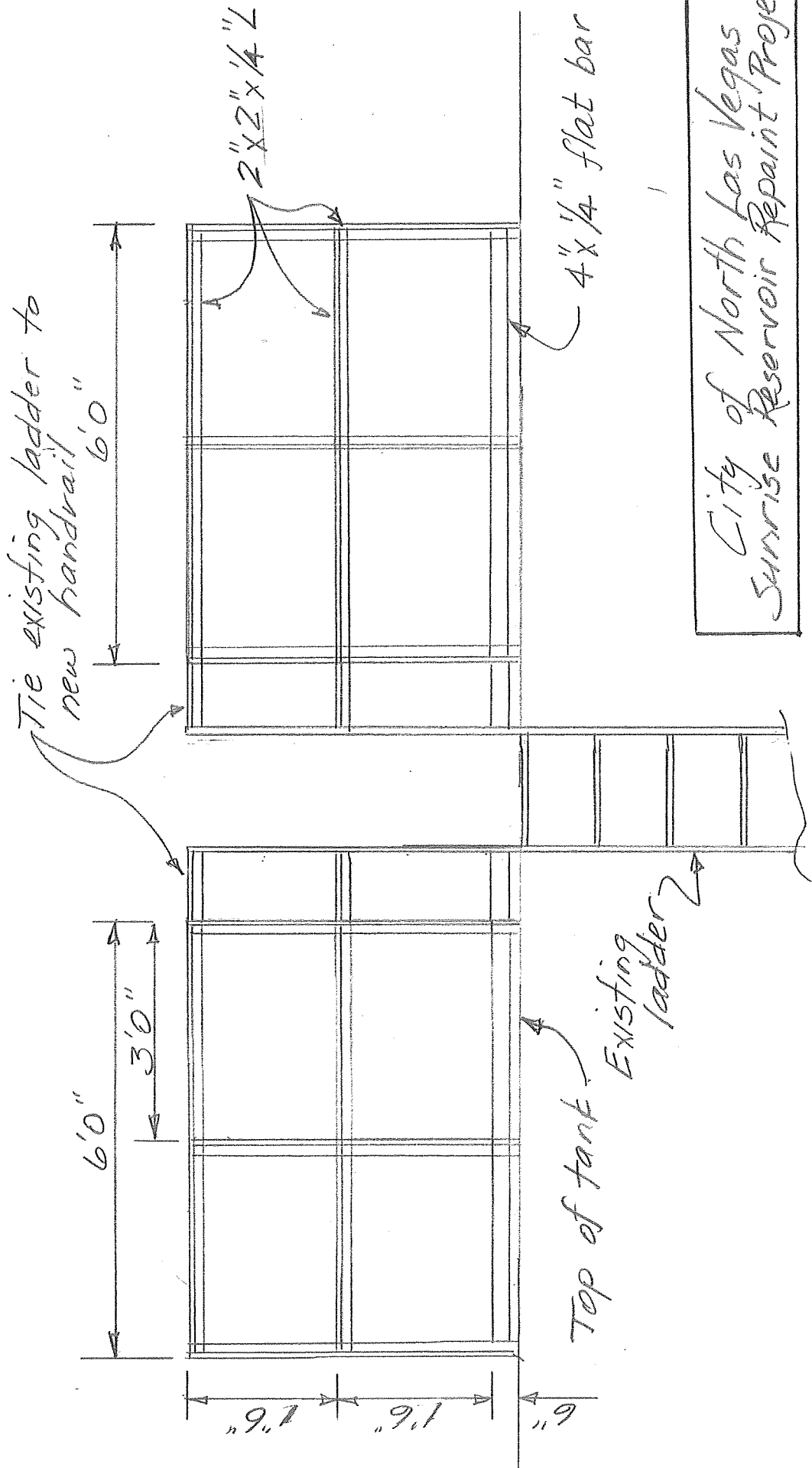
**DRAWING NAME:** C.KROEKER

**DRAWN BY:** DRAWN

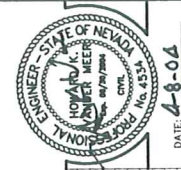
**DATE:** 04/12/09

**SHEET NUMBER** 1 **OF** 1

Handrail - 1 set per each tank



4/04/08



SUBMITTAL 04/07/04

DESIGN: JCL  
 DRAWN: JCL  
 CHECK: JCL  
 ISSUE DATE: 04/07/04  
 PLOT DATE: 04/07/04  
 PLOT TIME: 09:26:06  
 REVISION: 1

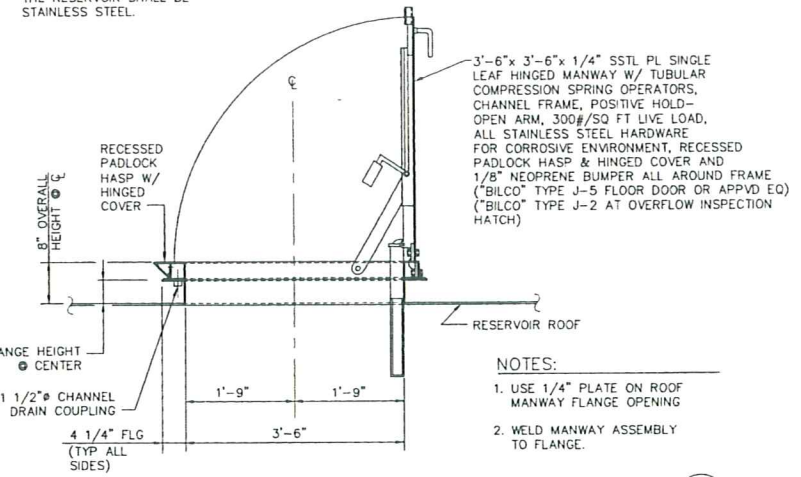
CITY OF NORTH LAS VEGAS  
 2400 ZONE RESERVOIR  
 MECHANICAL DETAILS V

SHEET  
**M6**  
 22 OF 30 SHEETS

10/4078

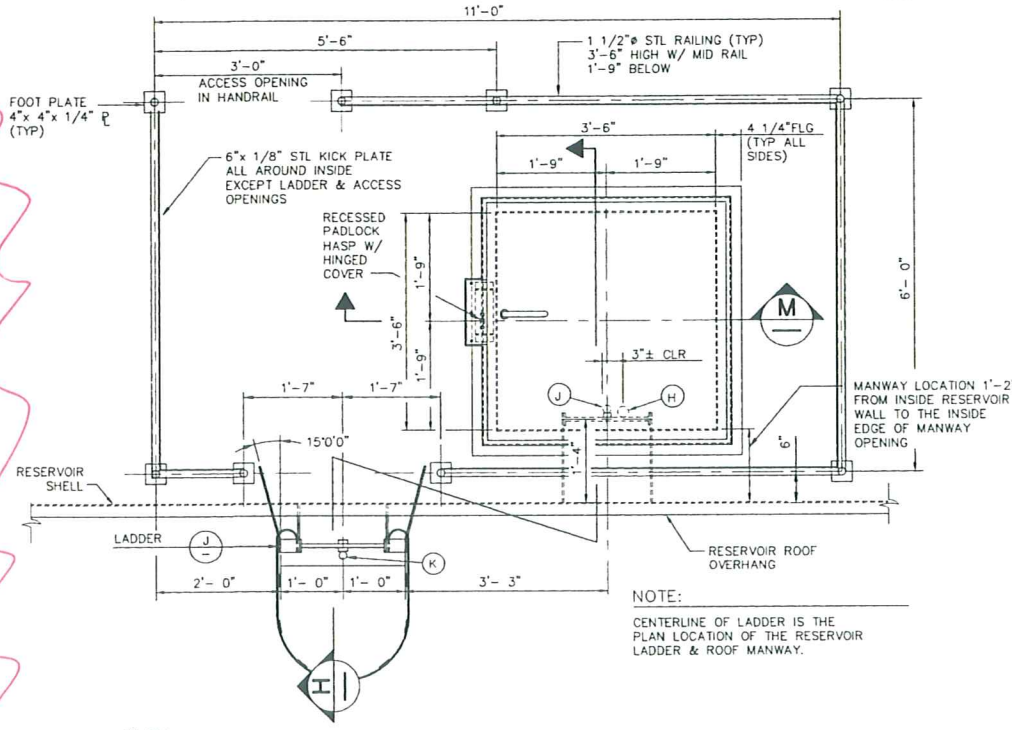
RESERVOIR LADDER MATERIAL			
MARK	DESCRIPTION	MARK	DESCRIPTION
(A)	2 1/2" BAR x 3/8" x (VARIES)	(J)	FALL PREVENTION SYSTEM ("NORTH CONSUMER PRODUCTS" SAFE-T-CLIMB TYPE 304 SSSL W/ REMOVABLE EXTENSION KIT)
(B)	2 1/2" BAR x 3/8" x (VARIES)	(K)	FALL PREVENTION SYSTEM ("NORTH CONSUMER PRODUCTS" SAFE-T-CLIMB STANDARD GALV-T-SAFE-T-PIVOT DISMOUNT SECTION) EXTENDED 4'-6" ABOVE RESERVOIR ROOF EDGE.
(C)	1" BAR x 1/4" x (VARIES)		
(D)	3" BAR x 1/4" x 5'-2 3/4" (BEND)		
(E)	3" BAR x 1/4" x 9'-9" (BEND)		
(F)	2" BAR x 1/4" x 7'-13/16" (BEND)		
(G)	3/4" BAR x 1'-4 3/4"		
(H)	SAFETY POST - ("BILCO" LADDER UP MODEL)		

NOTE:  
 APPURTENANCES INSIDE THE RESERVOIR SHALL BE STAINLESS STEEL.



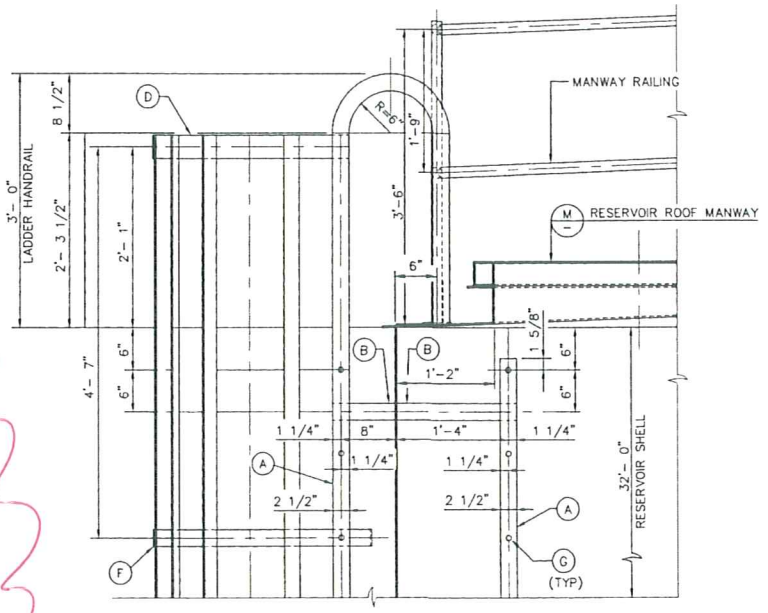
NOTES:  
 1. USE 1/4" PLATE ON ROOF MANWAY FLANGE OPENING  
 2. WELD MANWAY ASSEMBLY TO FLANGE.

SECTION M  
 SCALE: 3/4" = 1'-0"

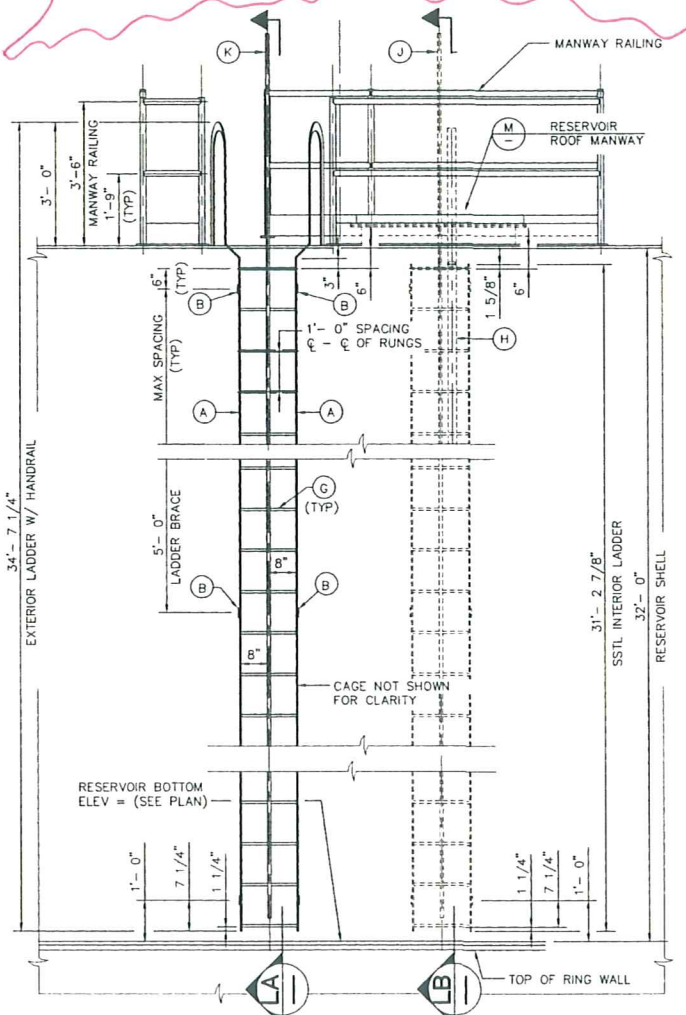


PLAN  
 SCALE: 3/4" = 1'-0"

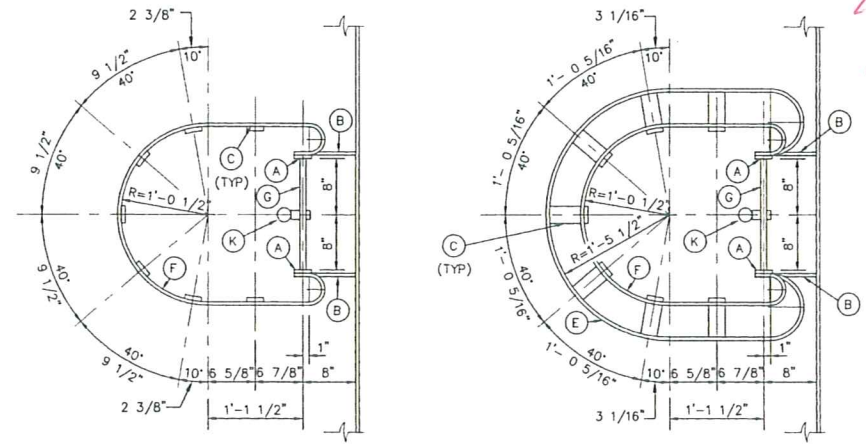
1  
 M6



SECTION H  
 SCALE: 1" = 1'-0"

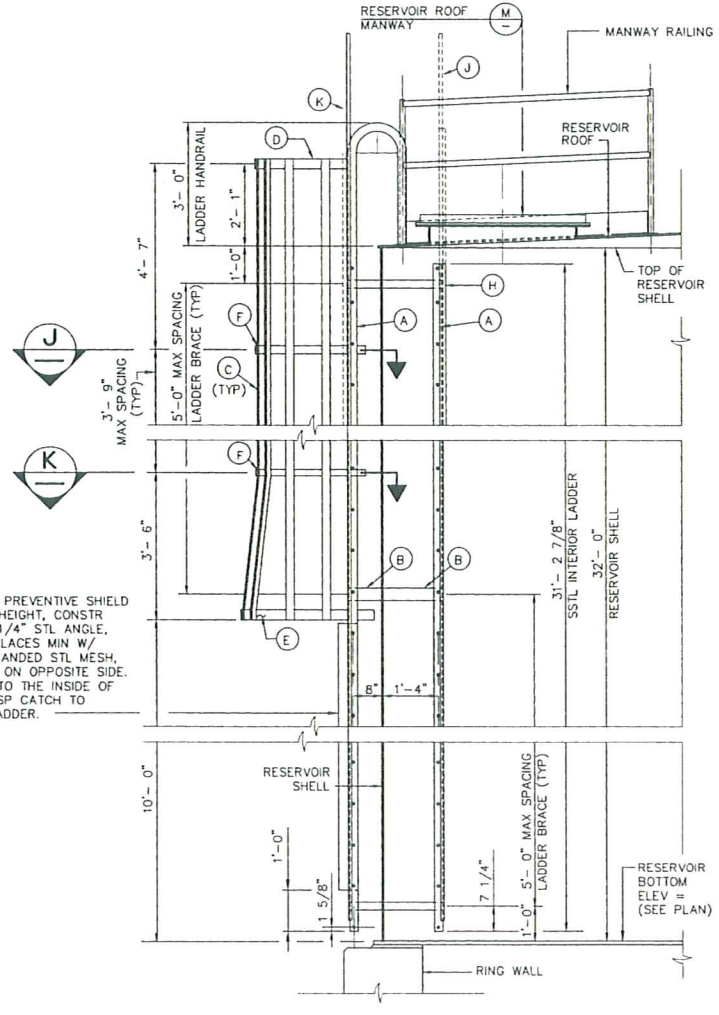


ELEVATION  
 SCALE: 1/2" = 1'-0"



SECTION J  
 SCALE: 1" = 1'-0"

SECTION K  
 SCALE: 1" = 1'-0"

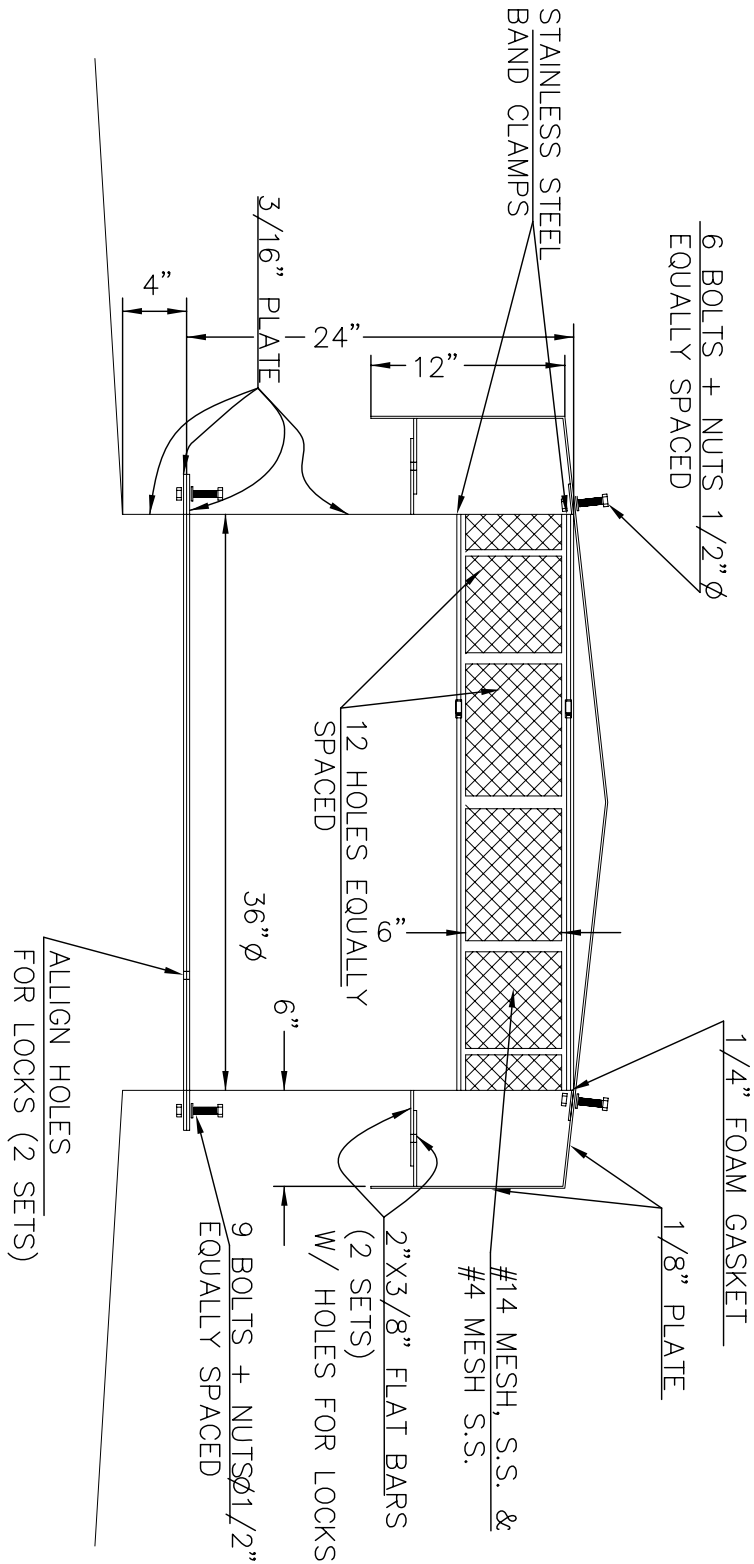


SECTION LA  
 SCALE: 1/2" = 1'-0"

SECTION LB  
 SCALE: 1/2" = 1'-0"

LADDER CLIMB PREVENTIVE SHIELD 8'-8 1/2" IN HEIGHT, CONSTR OF 2" x 2" x 1/4" STL ANGLE, HINGED IN 4 PLACES MIN W/ COVER OF EXPANDED STL MESH, HASP & LOCK ON OPPOSITE SIDE, WELD HINGES TO THE INSIDE OF LADDER & HASP CATCH TO OUTSIDE OF LADDER.

RESERVOIR LADDER, ROOF MANWAY AND RAILING DETAIL



**CITY OF NORTH LAS VEGAS  
UTILITIES DEPARTMENT**

**EXHIBIT C 36" ROOF VENT DETAIL**

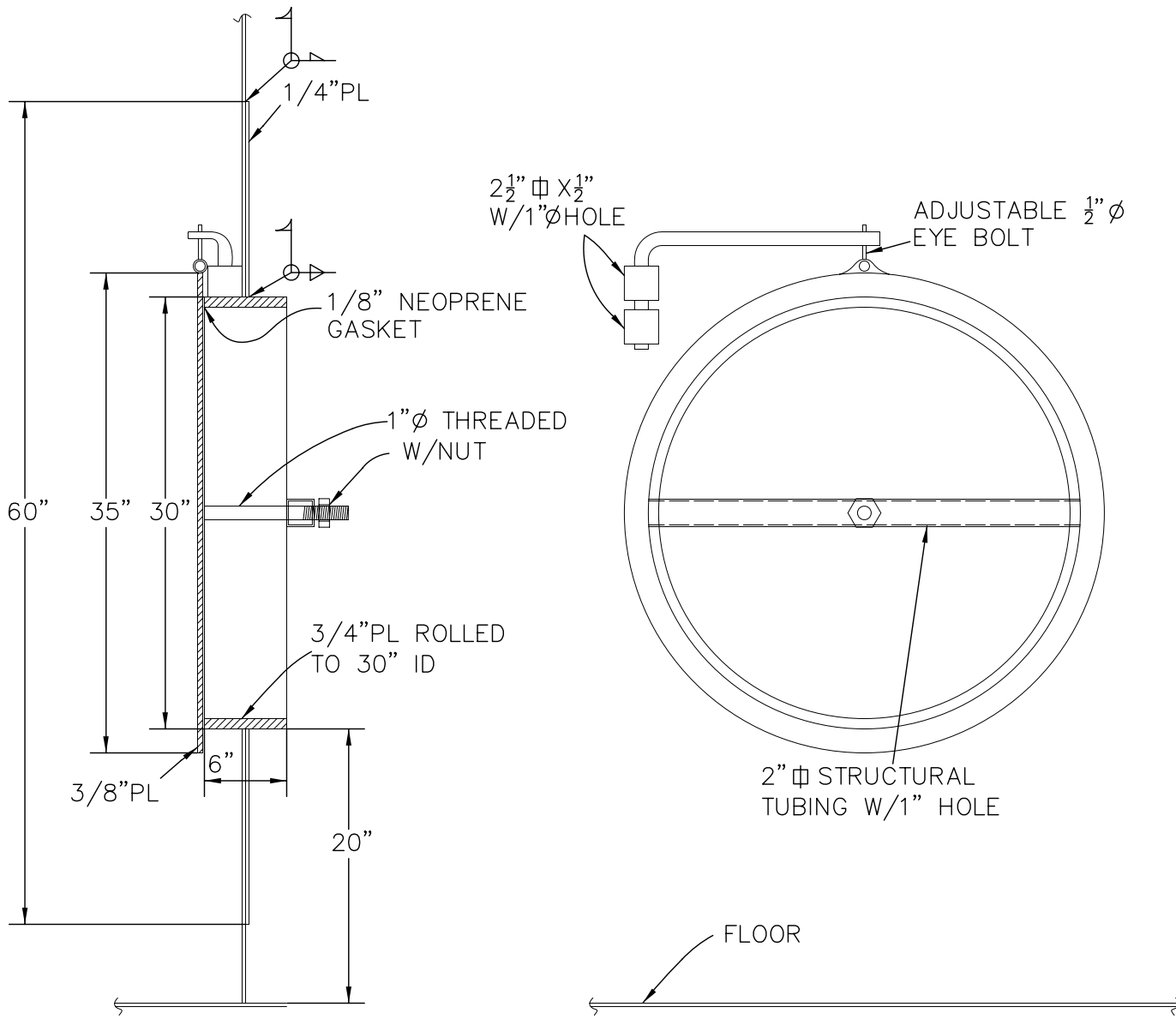
**SCALE:** NONE

**DRAWING NAME:** C.KROEKER

**DRAWN BY:** DRAWN

**DATE:** 07/02/09

**SHEET NUMBER** 1 **OF** 1



**CITY OF NORTH LAS VEGAS  
UTILITIES DEPARTMENT**

**EXHIBIT D MANHOLE -3.0 MG TANK**

**SCALE:** NONE

**DRAWING NAME:** C.KROEKER

**DRAWN BY:** DRAWN

**DATE:** 07/02/09

**SHEET NUMBER** 1 **OF** 1