
SPECIFICATIONS

PRELIMINARY

FOR

WATER TOWER REPAIR AND COATING 2011

WEST BRANCH, IOWA



VEENSTRA & KIMM, INC.

**PLANS AND SPECIFICATIONS
FOR
WATER TOWER REPAIR AND COATING 2011
WEST BRANCH, IOWA**

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Signed:

Date:



David R. Schechinger, P.E.
Iowa License No. 16538
My license renewal date is December 31, 2012

Detailed parts covered by this seal:

ALL

Prepared by
VEENSTRA & KIMM, INC.
Coralville,
Iowa

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WATER TOWER REPAIR AND COATING 2011
WEST BRANCH, IOWA

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NOTICE OF HEARING AND LETTING

NOTICE OF PUBLIC HEARING ON PROPOSED PLANS, SPECIFICATIONS, FORM OF CONTRACT AND ESTIMATE OF COST FOR THE CONSTRUCTION OF THE WATER TOWER REPAIR AND COATING 2011 WEST BRANCH, IOWA, AND FOR THE TAKING OF BIDS THEREFOR

Sealed proposals will be received by the City Clerk of the City of West Branch, Iowa, at City Hall, 110 North Popular Street, West Branch, Iowa, until 2:00 P.M. on the 15th day of June, 2011, for the construction of Water Tower Repair And Coating 2011 as described in the plans and specifications therefor, now on file in the office of the City Clerk. Proposals will be opened and the amount of the bids announced by the City Clerk at the time and date specified above.

Also, at 7:00 P.M. on the 20th day of June, 2011, the City Council of said City will, in said Council Chambers, hold a hearing and said Council proposes to adopt plans, specifications, form of contract and estimate of cost and, at the time, date and place specified above, or at such time, date and place as then may be fixed, to act upon proposals and enter into a contract for the construction of said improvements.

At said hearing, the City Council will consider the proposed plans, specifications, form of contract and estimate of cost for the project, the same now being on file in the office of the City Clerk, reference to which is made for a more detailed and complete description of the proposed improvements, and at said time and place the said Council will also receive and consider any objections to said plans, specifications and form of contract or to the estimated cost of said improvements made by any interested party.

The nature and extent of the improvements are as follows:

WATER TOWER REPAIR AND COATING 2011

Furnish all labor, materials and equipment necessary for removal of all exterior existing coating including roof and hatches, surface preparation, apply new coating to all exterior surfaces including roof and hatches; remove all of the dry interior coating including floor, bell, platforms, tube, and hatches; apply new coating to all of the dry interior including floor, bell, platforms, tube, and hatches; structural and related work; welding and grinding; waste disposal; ground surface restoration, and miscellaneous associated work for the 250,000 gallon Elevated Storage Tank.

All work and materials are to be in accordance with the proposed plans, specifications, form of contract and estimate of cost now on file in the office of the City Clerk of West Branch, Iowa, and by this reference made a part thereof as though fully set out and incorporated herein.

All proposals and bids in connection therewith shall be submitted to the City Clerk of said City on or before the time herein set for receiving bids. All proposals shall be made on official bidding blanks furnished by the City, and any alterations in the official form of proposal will entitle the Council, at its option, to reject the proposal involved from consideration. Each proposal shall be sealed and plainly identified.

Each proposal shall be made out on a blank form furnished by the municipality and must be accompanied in a sealed envelope by either (1) a certified or cashier's check drawn on a solvent Iowa bank or a bank chartered under the laws of the United States, or a certified share draft drawn on a credit union in Iowa or chartered under the laws of the United States, in an amount equal to five percent (5%) of the bid, or (2) a bid bond executed by a corporation authorized to contract as a surety in the State of Iowa, in the penal sum of five percent (5%) of the bid.

The bid security should be made payable to the CITY OF WEST BRANCH, IOWA. The bid security must not contain any conditions either in the body or as an endorsement thereon. The bid security shall be forfeited to the City as liquidated damages in the event the successful bidder fails or refuses to enter into a contract within 10 days after the award of contract and post bond satisfactory to the City insuring the faithful fulfillment of the contract and the maintenance of said work, if required, pursuant to the provisions of this notice and other contract documents. Bidders shall use the bid bond form bound in the specifications.

All bidders and subcontractors shall submit with the Proposal three (3) references involving similar projects, including at least one municipal reference. Award of contract or use of specific subcontractors may be denied if sufficient favorable references cannot be verified or may be denied based on past experience on projects with the City of West Branch. References shall include name, address and phone number of contact person, for City information. Reference shall be furnished on the form included in the specifications.

By virtue of statutory authority, a preference will be given to projects and provisions grown, and coal produced within the State of Iowa, and preference will be given to Iowa domestic labor in the construction of the improvements.

The award of contract will be made to the lowest responsible bidder submitting the lowest responsive bid, which shall be determined without regard to state or local law whereby preference is given on factors other than the amount of the bid.

The City Council reserves the right to reject any and all bids, to waive informalities and technicalities and to enter into such contract as it shall deem for the best interest of the City. The City reserves the right to defer acceptance of any proposal for a period not to exceed thirty (30) from the date of receiving bids.

The successful bidder will be required to furnish a bond in an amount equal to one hundred percent (100%) of the contract price, said bond to be issued by a responsible surety approved by the City Council and shall guarantee the faithful performance of the contract and the terms and conditions therein contained and shall guarantee the prompt payment for all materials and labor and protect and save harmless the City from claims and damages of any kind caused by the operations of the Contractor, and shall guarantee the work against faulty workmanship and materials for a period as required by the specifications after its completion and acceptance by the City Council.

Payment of the cost of said project will be made from any one or a combination of the following sources at the sole discretion of the City Council: (1) cash to be derived from the proceeds of the issuance and sale of Water Revenue Bonds, which will be payable solely and only out of the future net revenues of the water utility, and/or from such other cash funds on hand of said City as may be lawfully used for said purpose; (2) cash derived from the proceeds of the issuance and sale of General Obligation Bonds of said City; or (3) cash from such general funds of said City as may be legally used for such purpose.

Payment to the Contractor will be based on monthly estimates equivalent to ninety-five percent (95%) of the contract value of the work completed including materials and equipment delivered to the job during the preceding calendar month, and will be based upon an estimate prepared by the Contractor on the first day of the month, subject to the approval of the Engineer.

The Engineer will certify to the City for payment of each approved estimate on or before the tenth (10th) day of the month. Such monthly payments shall in no way be construed as an act of acceptance for any part of the work partially or totally completed. The balance of the five (5) percent due the Contractor will be paid not earlier than thirty-one (31) days from the date of final acceptance of said work by the City, subject to the conditions and in accordance with the provisions of Chapter 573 of the Code of Iowa. No such partial or final payment will be due until the Contractor has certified to the City Clerk that the materials, labor and services involved in each estimate have been paid for in accordance with the requirements stated in the specifications.

The City will issue a sales tax exemption certificate applicable for all materials purchased for the project.

Liquidated damages in the amount of Two Hundred Dollars (\$200.00) per consecutive calendar day will be assessed for each day that work shall remain uncompleted after the end of the contract period, with due allowance for extensions of the contract period due to conditions beyond the control of the Contractor. Inclement weather shall not be considered for extension of the contract period.

Plans and specifications governing the construction of the proposed improvements, and also the prior proceedings of the City Council referring to and defining said proposed

improvements are hereby made a part of this notice and the proposed contract by reference and the proposed contract shall be executed in compliance therewith.

Copies of said plans and specifications and form of contract are now on file in the office of the City Clerk, for examination by bidders. Copies are available from TECHNIGRAPHICS, 125 South Dubuque Street, Iowa City, Iowa 52240. Contact Jill Chambers at 319-354-5950 or email jchambers@techiowa.com. A refundable deposit of \$30 is required. Please make checks to Veenstra & Kimm, Inc. Mail said deposit checks to Technigraphics, P.O. Box 1846, Iowa City, Iowa 52244-1846, Attn: Jill Chambers. Upon receiving deposit check, plans and specifications will be mailed out. When plans and specifications are returned in good condition within 30 days of the bid date, deposit checks will be returned.

This notice is given by order of the Council of the City of West Branch, Iowa.

CITY OF WEST BRANCH, IOWA

Mayor

Attest:

City Clerk

INSTRUCTIONS TO BIDDERS

WATER TOWER REPAIR AND COATING 2011 WEST BRANCH, IOWA

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1. DEFINITION OF TERMS

- 1.1 "Owner", and "City" shall mean the City of West Branch, Iowa, acting through the City Council or an authorized representative of the City Council.
- 1.2 "Person" shall mean any individual partnership, society, association, joint stock company, corporation, estate, receiver, trustee, assignee or referee, whether appointed by a court or otherwise, and any combination of individuals.
- 1.3 "Bidder" shall mean any person who submits a proposal to furnish the work described in the Contract Documents.
- 1.4 "Contractor" shall mean the person with whom the Owner may enter into contract for the execution of the work specified.
- 1.5 "Subcontractor" shall mean the person supplying materials, labor, equipment and appurtenances for the work, such person having contractual relations with the Contractor, but not with the Owner.
- 1.6 "Engineer" shall mean Veenstra & Kimm, Inc., West Des Moines, Iowa.
- 1.7 "Work" shall mean the work to be done and the equipment, supplies and materials to be furnished under the contract; unless some other meaning is indicated by the context.

2. CONTRACT DOCUMENTS

2.1 The Contract Documents, sometimes referred to as the "specifications," shall mean and include the following parts as used herein:

- 2.1.1 Notice of Hearing and Letting
- 2.1.2 Instructions to Bidders
- 2.1.3 Proposal
- 2.1.4 Contract
- 2.1.5 Bond
- 2.1.6 General Conditions
- 2.1.7 Special Conditions
- 2.1.8 Plans List
- 2.1.9 Photographs
- 2.1.10 Detailed Specifications
- 2.1.11 Numbered addenda issued to the foregoing.

2.2 The specifications and photographs are complementary; what is called for by one shall be as binding as if called for by all.

3. METHOD OF BIDDING

3.1 Bidders shall submit unit and lump sum bids for the work covered by the specifications. Prices shall cover complete work and include all costs incidental thereto, unless indicated otherwise.

3.2 Bids will be computed using quantities shown on Proposal. Where unit price bids are called for, quantities are approximate and only for comparison of bids. Engineer retains right to change location, quantities and combination of units required during progress of construction. Compensation due Contractor will be computed on basis of final quantities of completed work.

3.3 In the event of discrepancies between unit prices and unit price extensions listed in bidder's proposal, unit prices shall govern and unit price extensions shall be corrected, as necessary, for agreement with unit prices. The total price will be determined on the basis of corrected extensions of the unit price.

3.4 Bidders must submit prices for all items listed in the Proposal. Failure to do so could cause rejection of the bid.

3.5 Contract award will be made on the lowest responsive responsible bid, with regard to the work if accepted by Owner.

4. QUALIFICATIONS OF BIDDERS

- 4.1 Bidders shall be prepared to satisfy Owner as to integrity, experience, adequacy of equipment, personnel and financial ability to perform work specified.
- 4.2 If successful bidder is a non-Iowa corporation, it shall submit proof to Owner prior to execution of contract that it has been authorized by Secretary of State to do business in Iowa.

5. SUBMISSION OF BIDS

- 5.1 Bidders shall submit the Proposal stamped "Official Bid" and the Proposal stamped "Engineer's Copy". The Proposal stamped "Official Bid" is considered the original Proposal and shall be used for bidding. The copy of the Proposal stamped "Engineer's Copy" is for the use of the Engineer only. The copy of the Proposal stamped "Bidder's Copy" is for the use of the Bidder only. Submit in a sealed envelope. Envelope shall bear return address of the bidder and shall be addressed as follows:

To:
City Clerk
City of West Branch
304 East Main Street
PO Box 218
West Branch, Iowa 52358

Proposal for:
Water Tower Repair And Coating 2011

- 5.2 Bids shall be signed by a legally authorized representative of bidder.
- 5.3 Bidders shall submit the specified bid security with the Proposal.

6. WITHDRAWAL OF BIDS

- 6.1 A bidder may withdraw his bid at any time prior to scheduled closing time for receipt of bids, but no bid shall be withdrawn for a period of 45 calendar days thereafter.

7. BID SECURITY

- 7.1 Each bid shall be accompanied by bid security in the form and amount as set out in the Notice of Hearing and Letting.
- 7.2 Bid security shall be enclosed in a sealed envelope with the bid.

7.3 The bid security shall be forfeited and become the property of the Owner in case the bidder fails or refuses to enter into contract and to furnish bond within 15 calendar days after his proposal shall have been accepted.

7.4 Bid security of the unsuccessful bidders will be returned as soon as the successful bidder is determined and has entered into a contract; bid security of successful bidder will be returned upon execution of contract and furnishing of bond.

7.5 Bidders shall use bid bond form included with specifications.

8. EXAMINATION OF WORK

8.1 Bidders shall familiarize themselves with the specifications and with all conditions which will affect construction. It will be assumed that bidders have made a personal examination of job and physical conditions affecting the work.

9. EXECUTION OF CONTRACT

9.1 Successful bidder shall enter into a written contract with Owner within 15 days after acceptance of its Proposal on forms included with these specifications, for the performance of the work awarded to the Contractor.

9.2 The contract, when executed, shall be deemed to include the entire agreement between the parties hereto, and Contractor shall not claim any modification thereof resulting from any representation or promise made at any time by any representative of Owner or any other person.

10. CONTRACT TERMINATION

10.1 Provisions of law, as contained in Chapter 573A of the Code of Iowa shall apply to and be a part of this contract. Chapter 573A provides for termination of contracts for construction of public improvements when construction or work thereon is stopped because of a national emergency. The provisions of Chapter 573A shall include subcontractors and sureties upon any bond given or filed in connection therewith.

11. PHOTOGRAPHS

11.1 A portion of the work to be completed is shown on the following photographs (Appendix A), all of which are an integral part of the contract documents. The photographs may not completely show all areas requiring repair.

12. TAXES

12.1 The Owner will issue a sales tax exemption certificate for all materials purchased on the project. The Owner will issue the appropriate tax exemption certificates and authorization letters to the Contractor and all subcontractors completing work on the project. Tax exemption certificates are applicable only for the specific project for which the tax exemption certificate is issued.

12.2 Contractor shall provide a listing to the Owner identifying all appropriate subcontractors qualified for use of the tax exemption certificate. Contractor and subcontractors may make copies of the certificate and provide to each supplier providing construction material a copy of the tax exemption certificate.

12.3 Income tax:

12.3.1 Successful bidder is subject to payment of Iowa income tax on income from this work in amounts prescribed by law.

12.3.2 If successful bidder is a non-Iowa partnership, individual or association, he shall furnish evidence prior to execution of contract, that bond or securities have been posted with the Iowa Department of Revenue in the amount required by law.

13. PREFERENCE FOR LABOR AND MATERIALS

13.1 Contractor shall observe the laws of the State of Iowa with regard to preference for labor and materials. So far as may be done under the law, Contractor shall give preference to local concerns in the purchase of materials, insurance and bonds.

13.2 The Iowa Reciprocal Preference Act (SF2160) applies to the contract with respect to bidders who are not Iowa residents.

14. PAYMENT

14.1 Payment will be made as set forth in Notice of Hearing and Letting.

15. APPROVAL OF MATERIALS

15.1 Approval of substitutions of any materials or equipment other than that specified shall be obtained in writing from Engineer. Otherwise, it will be assumed Contractor will furnish materials or equipment specified.

16. PERIOD OF GUARANTEE AND BOND

16.1 Contractor shall guarantee work for a period of 2 years from date of final acceptance. Surety bond furnished by Contractor shall run for a like period.

17. INSPECTION AFTER ONE YEAR

17.1 Successful bidder will be required, by contract, to participate in a 1 year inspection of all replacement items and coated surfaces of 10th Street elevated storage tank approximately 1 year after acceptance of the work set forth in these specifications. Any deficiencies shall be corrected at no cost to Owner.

17.2 Notice of 1 year inspection will be provided.

PROPOSAL

WATER TOWER REPAIR AND COATING 2011
WEST BRANCH, IOWA

Name of Bidder _____
Address of Bidder _____

To: City Administrator
City of West Branch
304 East Main Street
PO Box 218
West Branch, Iowa 52358

The undersigned bidder submits herewith bid security amounting to five percent (5%) of the total amount of the bid which shall become the property of the City of West Branch, Iowa, should the undersigned fail or refuse to execute a contract and to furnish bond as called for in the specifications within the time provided.

The undersigned bidder, having examined the Contract Documents, and having familiarized himself with the nature and location of the work to be done and the conditions under which the work will be performed, hereby proposes to provide the required labor, services and materials and to perform the work described in the specifications, and addenda __, __, __ and __, within the time and for the sum or sums stated hereinafter on attached proposal schedule which is hereby made a part of this proposal.

The undersigned bidder certifies that this proposal is made in good faith, without collusion or connection with any other person or persons bidding on the work.

The undersigned bidder states that this proposal is made in conformity with the specifications and agrees that in the event of any discrepancies or differences between any conditions of his proposal and the specifications prepared by VEENSTRA & KIMM, INC. that the provisions of the latter shall prevail.

Bidder _____
By _____
Title _____

PROPOSAL SCHEDULE

WATER TOWER REPAIR AND COATING 2011

1. Complete Water Tower Repair and Coating 2011 for the following unit and lump sum prices:

<u>Description</u>	<u>Unit</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Extended Price</u>
1.1 Furnish all labor, materials and equipment necessary for removal of all exterior existing coating including roof and hatches, surface preparation, apply new coating to all exterior surfaces including roof and hatches; remove all of the interior dry coating including floor, bell, platforms, tube and hatches; apply new coating to all of the dry interior including floor, bell, platforms, tube and hatches; brush blast clean all of the interior wet area roof including riser and overflow piping above HWL, apply a coating to all interior wet area roof, riser and piping; structural and related work; welding and grinding; waste disposal; ground surface restoration. and misc. work.	LS	xxxxxx	xxxxxx	\$ _____
1.2 Related Work	LS	xxxxxx	xxxxxx	\$ _____
1.3 Interior Spot Repair	SF	250	\$	_____
1.4 Welding	Hour	30		_____
1.5 Grinding	Hour	50		_____
		TOTAL BID (Items 1.1 - 1.5)		_____

Proposal

2. The work under the contract shall commence within ten (10) days after date set forth in the written Notice to Proceed and the work shall be completed by October 1, 2011.
3. Liquidated damages in the amount of Two Hundred Dollars (\$200.00) per consecutive calendar day will be assessed for each day that the work shall remain uncompleted after the end of the contract period, with due allowance for extensions of the contract period due to conditions beyond the control of the Contractor.

BID BOND

KNOW ALL MEN BY THESE PRESENTS: That we, _____

, of, _____,

as Principal, and _____

of _____,

as Surety, are held and firmly bound unto the City of West Branch, Iowa, hereinafter defined as Obligee, in the penal sum of five percent (5%) of the total amount of the bid (\$ _____), for which payment said Principal and Surety bind themselves, their heirs, executors, administrators, successors, and assigns jointly and severally, firmly by these presents.

The condition of the above obligation is such that whereas the Principal has submitted to the City of West Branch, Iowa, a certain bid, in a sealed envelope, and hereby made a part hereof to enter into a contract in writing, for: WATER TOWER REPAIR AND COATING 2011.

NOW THEREFORE, if the said bid by said Principal be accepted, and the Principal shall enter into a contract with the Obligee in accordance with the terms of such bid, and give such bond as may be specified in the contract documents with good and sufficient surety for the faithful performance of such contract, for the prompt payment of labor and material furnished in the prosecution thereof, and for the maintenance of said improvements as may be required therein, then this obligation shall become null and void or in the event of the failure of the Principal to enter such contract and give such bond, the Principal shall pay to the Obligee the full amount of the bid bond, together with court costs, attorney's fees, and any other expense of recovery.

Signed and sealed this _____ day of _____, 2011.

Principal

By _____
Contractor's Signature

Surety

By _____
Attorney-in-Fact

CONTRACT

THIS AGREEMENT, made and entered into this ____ day of _____, 20____, by and between the City of West Branch, Iowa, party of the first part, hereinafter referred to as the "Owner", and _____, party of the second part, hereinafter referred to as the "Contractor".

WITNESSETH: THAT WHEREAS, the Owner has heretofore caused to be prepared certain plans, specifications and proposal blanks, dated the ____ day of _____, 20____, for Water Tower Repair And Coating 2011 under the terms and conditions therein fully stated and set forth, and,

WHEREAS, said plans, specifications and proposal blanks accurately and fully describe the terms and conditions upon which the Contractor is willing to perform the work specified:

NOW, THEREFORE, IT IS AGREED:

1. That the Owner hereby accepts the proposal of the Contractor for the work, as follows:

2. That this contract consists of the following component parts which are made a part of this agreement and contract as fully and absolutely as if they were set out in detail in this contract:

2.1 Contract Documents, including:

- 2.1.1 Notice of Hearing and Letting
- 2.1.2 Instructions to Bidders
- 2.1.3 Proposal
- 2.1.4 Bond
- 2.1.5 General Conditions
- 2.1.6 Special Conditions
- 2.1.7 Plans List
- 2.1.8 Photographs
- 2.1.9 Detailed Specifications
- 2.1.10 Numbered addenda issued to the foregoing.

2.2 This Instrument.

2.3 The above components are complementary and what is called for by one shall be as binding as if called for by all.

3. That payments are to be made to the Contractor in accordance with and subject to the provisions embodied in the documents made a part of this contract.

4. That this contract is executed in triplicate.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hand and seal the date first written above.

CONTRACTOR:

CITY OF WEST BRANCH

By _____
Mayor

By _____

Title _____

ATTEST:

Title _____

BOND

KNOW ALL MEN: That we, _____,
of _____, hereinafter called the Principal, and
_____, hereinafter called the Surety, are held and firmly bound unto the City of West Branch,
Iowa, hereinafter called the Owner in the sum of _____
Dollars (\$ _____), for the payment whereof the Principal and Surety bind
themselves, their heirs, executors, administrators, successors and assigns, jointly and
severally, firmly, by these presents.

WHEREAS, the Principal has, by means of a written Agreement dated _____,
2011, entered into a Contract with the Owner for Water Tower Repair And Coating 2011,
which Agreement includes a guarantee of all work against defective workmanship and
materials for a period of two (2) years from the date of final acceptance of the work by the
Owner, a copy of which Agreement is by reference made a part hereof;

Now, therefore, the condition of this Obligation is such that, if the Principal shall faithfully
perform the Contract on his part and shall fully indemnify and save harmless the Owner
from all costs and damage which he may suffer by reason of failure so to do and shall fully
reimburse and repay the Owner all outlay and expense which the Owner may incur in
making good any such default,

And Further, that if the Principal shall pay all persons who have contracts directly with the
Principal for labor or materials, failing which such persons shall have a direct right of
action against the Principal and Surety under this Obligation, subject to the Owner's
priority,

Then this Obligation shall be null and void, otherwise it shall remain in full force and
effect.

Provided, however, that no suit, action or proceeding by reason of any default whatever
shall be brought on this Bond after three (3) years from the date of final acceptance of the
work.

And Provided, that any alterations which may be made in the terms of the Contract, or in
the work to be done under it, or the giving by the Owner of any extension of time for the
performance of the Contract, or any other forbearance on the part of either the Owner or
the Principal to the other shall not in any way release the Principal and the Surety, or
either of them, their heirs, executors, administrators, successors or assigns from their
liability hereunder, notice to the Surety of any such alteration, extension or forbearance
being hereby waived.

And Further Provided, the Principal and Surety on this Bond hereby agree to pay all
persons, firms, or corporations having contracts directly with the Principal or with
subcontractors all just claims due them for labor performed or material furnished, in the
performance of the Contract on account of which this Bond is given, when the same are
not satisfied out of the portion of the contract price which the Owner shall retain until
completion of the improvements, but the Principal and Surety shall not be liable to said
persons, firms, or corporations unless the claims of said claimants against said portions of
the contract price shall have been established as provided by law.

The Surety on this Bond shall be deemed and held, any contract to the contrary notwithstanding, to consent without notice:

- a. To the extension of time to the Principal in which to perform the Contract.
- b. To changes in the plans, specifications, or Contract, when such changes do not involve an increase of more than twenty percent (20%) of the total contract price, and shall then be released only as to such excess increase.
- c. That no provision of this Bond or of any other contract shall be valid which limits to less than three (3) years from the date of final acceptance of the work the right to sue on this Bond for defects in workmanship or materials not discovered or known to the Owner at the time such work was accepted.

The Bond is executed in triplicate.

Signed and Sealed this ____ day of _____, 2011.

PRINCIPAL: _____
Contractor

Signature

Title

SURETY: _____
Surety Company

Signature, Attorney-in-Fact

Name of Attorney-in-Fact

Company Name

Company Address (Including Zip Code)

Company Telephone Number

GENERAL CONDITIONS

WATER TOWER REPAIR AND COATING 2011
WEST BRANCH, IOWA

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1. CONTRACT DOCUMENTS

- 1.1 All documents listed or identified as part of contract are each and all essential and component parts of agreement between Owner and Contractor.
- 1.2 Contract Documents shall be signed in triplicate by Owner and Contractor.
- 1.3 Contract Documents are complementary, and what is called for by any one shall be as binding as if called for by all. The intention of documents is to include all labor and materials, equipment and transportation necessary for proper execution of work. It is not intended that materials or work not covered by or properly inferable from any heading, branch, class or trade of the specifications shall be supplied unless distinctly noted. Materials or work described in words, which have a well known technical or trade meaning, shall be held to refer to such recognized standards.

2. SURETY BOND

- 2.1 Contractor shall furnish a good and sufficient surety bond in full amount of contract prior to signing contract. Surety bond shall guarantee faithful performance of all provisions of contract and payment of all bills and obligations arising from said contract. Should surety become irresponsible during time contract is in force, Owner may require additional and sufficient sureties. Contractor shall furnish said additional sureties to satisfaction of Owner within ten (10) days after written notice to do so. In default thereof, contract may be suspended as hereinafter provided.

3. CONTRACTOR'S RESPONSIBILITY

- 3.1 Contractor shall assume full responsibility for safekeeping of all materials and equipment and for all unfinished work until final acceptance by Owner. Materials and equipment which are damaged or destroyed from any cause shall be replaced at Contractor's expense.
- 3.2 Contractor shall indemnify and save harmless Owner against any liens filed for non-payment of Contractor's bills in connection with contract work. Contractor shall furnish Owner satisfactory evidence that all persons who have done work or furnished materials, equipment, or service of any type, under the contract have been fully paid prior to acceptance of work by Owner.
- 3.3 Contractor shall erect and maintain such barriers and lights as will prevent accidents as a consequence of its work. It shall indemnify and save harmless the Owner and its agents from all suits brought against Contractor for any injuries received or sustained by any person or persons by or through Contractor, its servants, or agents, in construction of work, or by or in consequence of any acts or omissions or negligence in performing contract work.

4. SUBCONTRACTS

- 4.1 Contractor shall not assign, sub-let or transfer the whole or any part of work herein specified without written consent of Owner. Assignment, sub-letting or transfer shall not relieve Contractor from its responsibilities set forth herein.
- 4.2 Detailed specifications are separated into titled parts for convenience or reference and to facilitate letting of contracts and subcontracts. Such arrangement shall not obligate Engineer to establish limits on contracts between Contractors and subcontractors.

5. CONTRACTOR'S EMPLOYEES

- 5.1 Contractor shall personally supervise its work or provide a capable superintendent satisfactory to Engineer. Superintendent shall be authorized to receive instructions from Engineer.
- 5.2 Incompetent or incorrigible employees shall be dismissed by the Contractor or its representative when requested by Engineer. Such dismissed persons shall not be permitted to return to work without written consent of Engineer.
- 5.3 Contractor shall give preference to local labor in execution of this contract, insofar as is practicable.

6. PERMITS AND REGULATIONS

- 6.1 In execution of work specified herein, Contractor shall conform to regulations and ordinances of any governmental body which may apply in execution of specified work. Contractor shall obtain such permits and licenses as may be required for construction of work.

7. PATENTS

- 7.1 All fees or royalties for patented inventions, equipment or arrangements used in construction or erection of work, or any part thereof, shall be included in contract price. Contractor shall protect and hold harmless Owner against any and all claims or litigation by reason of infringement of any patent rights on any materials, equipment of construction furnished by Contractor.

8. GUARANTEE

- 8.1 Contractor shall guarantee all work against faulty workmanship and materials for the period specified after date of final acceptance of work by Owner unless otherwise set out in "SPECIAL CONDITIONS" or "INSTRUCTIONS TO BIDDERS." Contractor shall repair or replace any defective workmanship and materials in a manner acceptable to Owner, without expense to Owner, within ten (10) days after written notification by Owner of such defect. If said repairs or replacements are not made within ten (10) days, Owner may make said repairs or replacements and charge the cost to Contractor.

8.2 Contractor shall provide Owner with a good and sufficient surety maintenance bond in the full amount of contract prior to signing contract. Maintenance bond shall run for the period specified from time of acceptance to protect Owner from faulty workmanship and materials as outlined in preceding paragraph.

9. SHOP DRAWINGS

9.1 Contractor shall provide Engineer with drawings, data and information regarding materials or equipment specified, or as may be called for by Engineer, for its review, within a reasonable time after award of contract. After review, Engineer shall return to Contractor one copy within a reasonable time after receipt.

9.1.1 Submit 5 copies of all shop drawing submittals.

9.2 Fabrication and shipment of materials or equipment prior to Engineer's review of drawings, data and information mentioned above shall be at Contractor's risk.

10. THE ENGINEER

10.1 Engineer shall make general observation of work as agent of Owner. Engineer's general observation shall not be construed that it shall direct or control operations of Contractor.

11. PLANS AND SPECIFICATIONS

11.1 Engineer shall provide Contractor with five sets of plans and specifications after execution of contract. If additional plans and specifications are required, Contractor shall compensate Engineer for costs of printing.

11.2 Engineer shall provide Contractor with additional and supplemental plans as may be required to show details of construction after approval of manufacturers' drawings and data on materials and equipment.

11.3 Engineer will provide Contractor with such revised plans and specifications as may be required to show any authorized changes or extra work.

12. INTERPRETATION OF PLANS AND SPECIFICATIONS

- 12.1 Plans and specifications shall be interpreted by Engineer. Its decision shall be final and binding on all parties concerned.
- 12.2 Contractor will not be allowed to take advantage of errors or omissions in plans and specifications. Engineer will provide full instructions when errors or omissions are discovered.

13. DECISIONS BY ENGINEER

- 13.1 Engineer shall make decisions, in writing, on claims between Contractor and Owner within a reasonable time after presentation. Such decisions shall be regarded as final except for appropriate legal recourse.

14. WORKMANSHIP AND MATERIALS

- 14.1 All work done and all materials and equipment furnished by Contractor shall conform to plans and specifications. Competent labor and tradesmen shall be used on all work. Experienced manufacturers' representatives shall be used to supervise installation of equipment.
- 14.2 In absence of detailed specifications in other sections, all materials shall conform to standards of American Society for Testing Materials.
- 14.3 Wherever items of materials or equipment are specified by a manufacturer's name and type, or equal, it is the intent that materials or equipment of other manufacturers, equal in quality and performance, may be substituted. Such substitution may be made only with written authorization of Engineer.
- 14.4 Wherever items of materials or equipment are specified by a manufacturer's name and type, or equal, and additional features of items are specifically required by specifications, additional features specified shall be provided whether or not they are normally included in standard manufacturer's items listed.
- 14.5 Wherever items of materials or equipment are specified by a manufacturer's name and type, or equal, and specified items are or become obsolete and no longer available, Contractor shall provide acceptable equal items which are currently available at no change in contract price.

General Conditions

- 14.6 When proposing "or equal" items or substitutions, Contractor shall furnish general arrangement drawings, full descriptive data, manufacturer's specifications and such performance data as required to satisfy Engineer that materials or equipment proposed are equal to that specified. Burden of proof of equality shall be responsibility of Contractor.
- 14.7 Whenever items of materials or equipment are specified by a manufacturer's name and type and "or equal" is not listed, Contractor shall provide specified equipment without substitution, unless prior approval of Engineer is obtained for any substitution.
- 14.8 Contractor shall abide by Engineer's decision when proposed substitutes of material or equipment are deemed to be unacceptable and in such an event Contractor shall furnish items of equipment or materials specified.
- 14.9 Engineer reserves right to consider such factors as overall project arrangement, overall project cost, and similar factors in determining whether proposed substitutions will be acceptable.

15. ON-SITE REVIEW OR OBSERVATION

- 15.1 All materials used and all work done by Contractor shall be subject at all times to review, observation, tests and approval by Engineer. Contractor shall furnish samples of materials for observation and tests as requested by Engineer. Contractor shall furnish any information required concerning nature or source of any proposed materials or equipment.
- 15.2 Materials, equipment or work which do not satisfactorily meet specifications may be condemned by Engineer by written notice to Contractor. Condemned materials, equipment or work shall be promptly removed and replaced.
- 15.3 Defective materials, equipment or work may be rejected by Engineer at any time prior to final acceptance by Owner even though said defective items may have been previously overlooked.

16. RESIDENT ENGINEER AND/OR ENGINEER TECHNICIANS

- 16.1 Resident engineer and/or engineer technicians may be appointed by Engineer or Owner to ensure that work is performed in accordance with plans and specifications.

General Conditions

16.2 Resident engineer and/or engineer technicians shall have authority to notify Contractor in writing of work which is not being properly performed. Contractor shall be liable for any work determined by Engineer as not being properly performed.

16.3 Resident engineer and/or engineer technicians shall have no authority to permit deviation from plans and specifications and Contractor shall be liable for any deviations made without written order from Engineer.

17. TESTS

17.1 Tests shall be performed by Contractor upon materials and equipment specified, to determine if the materials and equipment meet requirements of specifications, conditions of operation and guarantees of Contractor.

17.2 Tests shall be made in accordance with standards of American Society of Mechanical Engineers, American Society for Testing Materials, Steel Structures Painting Council and other recognized standards.

18. TIME

18.1 Contractor shall commence work within time specified and shall complete work within time specified in contract.

19. DELAYS

19.1 Delays caused by injunction or legal actions, damages by elements, or other causes beyond control of Contractor (of which Owner shall be sole judge) shall entitle Contractor to a reasonable extension of time within which to complete work.

19.2 Application for extension of time shall be made to Owner by Contractor and shall state reasons for request for extension of time.

19.3 No extension of time shall be valid unless made in writing by Owner.

19.4 Normal weather conditions shall not form the basis of request for extension of time. Abnormal weather conditions shall form basis of request for extension of time only to the delay in excess of that resulting from normal weather conditions.

20. CHANGES

- 20.1 Engineer shall have the right to make changes in location and quantities of work as may be deemed advisable with consent of Owner and without notice to sureties on Contractor's bond.
- 20.2 No change shall be made under this paragraph which will increase or decrease total contract amount more than twenty percent (20%) of original contract price and no changes shall be made in plan of improvement that would necessitate additional or different construction processes and equipment.
- 20.3 Amount due Contractor shall be adjusted for changes in following manner:
 - 20.3.1 Where unit prices have been bid, these unit prices shall be used to compute adjustment in compensation.
 - 20.3.2 Where no such unit prices have been bid, Engineer and Contractor shall negotiate a reasonable adjustment in Contractor's compensation. Limitations on compensation in 21.2 of "21. EXTRA WORK" shall apply to changes where compensation is negotiated.
 - 20.3.3 No changes shall be authorized unless they are shown on revised plans or in written instructions of Engineer.
 - 20.3.4 Authorized changes which require additional time to complete shall entitle Contractor to proportionate extension of time to completion which shall be determined by Engineer.

21. EXTRA WORK

- 21.1 Required extra work not specified under this contract shall be done at an agreed price satisfactory to Contractor and Owner, or on basis of actual cost of work plus not more than fifteen percent (15%) for Contractor's overhead and profit. Actual cost shall include expense for equipment, materials, and labor and shall include no overhead items or profit. Where extra work is done by a subcontractor, with approval of Owner, there may be included in Contractor's actual cost, ten percent (10%) for subcontractor's profit.
- 21.2 The term "extra work" as used herein shall not be construed to apply to changes described in "20. CHANGES".

21.3 No compensation shall be allowed Contractor for extra work unless such work has been authorized in writing by Engineer and approved by Owner.

21.4 Contractor shall submit a statement of costs to Engineer for approval when extra work is performed on an actual cost plus basis. After such a statement is approved, Engineer shall certify its correctness to Owner.

22. OWNERSHIP OF MATERIALS

22.1 All materials and work covered by partial payments shall become sole property of Owner, but this provision shall not be construed as relieving Contractor from sole responsibility for all materials and work for which payments have been made, for restoration of damaged work, or as a waiver of rights of Owner to require fulfillment of all terms of contract.

23. OTHER CONTRACTS

23.1 Owner reserves right to let other contracts in connection with this work. Contractor shall afford other contractors reasonable opportunity for introduction and storage of their materials and execution of their work, and shall properly connect and coordinate its work with theirs.

23.2 When proper execution of Contractor's work depends upon work of another contractor, it shall inspect other work and report any defects to Engineer. Contractor's failure to inspect and report shall constitute an acceptance of other contractor's work except for defects which may develop in work after completion.

23.3 To ensure proper execution of its subsequent work, Contractor shall measure work already in place and shall at once report to the Engineer any discrepancy between the executed work and drawings.

24. OWNER'S RIGHT TO DO WORK

24.1 If Contractor neglects to prosecute work properly or fails to perform any provision of this contract, Owner, after three (3) days' written notice to Contractor, may, without prejudice to any other remedy it may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor, provided, however, that Engineer shall approve both such action and amount charged to Contractor.

25. OWNER'S RIGHT TO TERMINATE CONTRACT

- 25.1 Owner, upon certification of Engineer that there is sufficient cause to justify termination of contract, may, without prejudice to any other right or remedy, and after giving Contractor seven (7) days' notice may terminate employment of Contractor for any of following reasons:
- 25.1.1 Contractor makes a general assignment for benefit of its creditors, or if adjudged a bankrupt.
 - 25.1.2 Receiver is appointed on account of Contractor's insolvency.
 - 25.1.3 Contractor persistently or repeatedly fails or refuses, except when extension of time to complete is granted, to provide enough skilled workmen or proper materials.
 - 25.1.4 Contractor fails to make prompt payment to subcontractors for material or labor.
 - 25.1.5 Contractor persistently disregards laws and ordinances or instructions of Engineer.
 - 25.1.6 Contractor violates a provision of contract.
- 25.2 If Owner terminates employment of Contractor, it shall take possession of premises and all materials, tools and appliances thereon. It shall finish work by whatever method it may deem expedient. In such case Contractor shall not be entitled to receive any further payment until work is finished.
- 25.3 If unpaid balance of contract price exceeds expense of finishing the work including compensation for additional managerial and administrative services, excess shall be paid to Contractor. If expense exceeds unpaid balance, Contractor shall pay difference to Owner. Expense incurred by Owner as herein provided, and damage incurred through Contractor's default, shall be certified by Engineer.

26. CONTRACTOR'S RIGHT TO STOP WORK OR TERMINATE CONTRACT

26.1 If Engineer fails to issue any certificate for payment within fifteen (15) days after it is due, or if Owner fails to pay to Contractor within thirty (30) days of its maturity and presentation, any sum certified by Engineer, then Contractor may, upon seven (7) days simultaneous written notice to Owner and Engineer, stop work or terminate this contract. If Contractor elects to stop work by written notice, work shall be resumed promptly upon payment by Owner. If Contractor elects to terminate this contract by written notice it shall recover from Owner payment for all work executed to date of notice and any loss sustained upon any plant or materials plus a reasonable profit.

27. PAYMENTS WITHHELD

27.1 Engineer may withhold or nullify the whole or a part of payment certificate, on account of subsequently discovered evidence, to such extent as may be necessary to protect Owner from loss on account of:

27.1.1 Defective work not remedied.

27.1.2 Claims filed or reasonable evidence indicating probable filing of claims.

27.1.3 Failure of Contractor to make payments properly to subcontractors or for materials or labor.

27.1.4 A reasonable doubt that contract can be completed for balance then unpaid.

27.1.5 Damage to another contractor.

27.1.6 Claims of Owner for liquidated damages.

27.2 Payments shall be made for amounts withheld when above grounds are removed.

28. ACCEPTANCE AND FINAL PAYMENT

- 28.1 When work has been satisfactorily completed, Engineer will certify Contractor's final estimate stating that work has been completed in accordance with terms and conditions thereof with qualifications, if any, as stated. Balance found to be due Contractor according to the terms of payment shall be paid by Owner as provided in contract, provided, however, that any state laws which designate manner of final payment shall be followed in lieu of manner of final payment outlined above.
- 28.2 Making and acceptance of final payment shall constitute a waiver of all claims by Owner, except those arising from unsettled liens, from faulty work or materials appearing after final payment or from requirements of the specifications, and of all claims by Contractor, except those previously made and still unsettled.

29. SUSPENSION OF WORK

- 29.1 Owner may suspend the work, or any part thereof, at any time, by giving ten (10) days' written notice to Contractor. The work shall be resumed by Contractor within ten (10) days after date fixed in written notice from Owner to Contractor to do so.
- 29.2 If work, or any part thereof, shall be suspended and if Owner does not give written notice to Contractor to resume work within one (1) year of date of suspension, Contractor may abandon suspended portion of work. Contractor will be entitled to estimates and payments for all work done on the portions so abandoned, if any.

30. CLEANING UP

- 30.1 Contractor shall keep premises free from accumulations of waste material or rubbish caused by its employees or work. After completion of work it shall remove all its rubbish and all its tools, scaffolding and surplus materials from work site. It shall leave its work "broom clean" or its equivalent, unless more exactly specified. In case of dispute the Owner may remove rubbish and charge costs to Contractor as Engineer shall determine to be just.

31. HAZARDOUS MATERIALS

- 31.1 The use of Asbestos Construction Building Materials (ACBM) is specifically prohibited. The Contractor, suppliers, and subcontractors shall warrant that all products used are asbestos free. In the event that a specified product contains asbestos, it shall be the responsibility of the Contractor to notify the Owner so that an appropriate substitution can be made in a timely manner so as not to delay the project.
- 31.2 The Contractor shall provide the Owner a certificate that warrants that no materials, products, items or equipment contains any asbestos upon completion of the work of this Contract. If asbestos is found to exist in any of the materials, products, items or equipment provided as part of this Contract, the Contractor shall be financially responsible for all costs resulting from removal in accordance with an Owner approved method and replacement of an asbestos free condition to finished drawings and specifications. The financial responsibility of the Contractor shall not terminate with the end of the surety maintenance bond period, but shall continue through the life of the facility.

32. IOWA HAZARDOUS CHEMICAL RISKS RIGHT-TO-KNOW LAW

32.1 Owner's responsibility:

- 32.1.1 Owner shall provide to the Contractor a list of known hazardous chemicals within the project site to which their employees may be exposed and suggestions for appropriate protective measures.

32.2 Contractor's responsibility:

- 32.2.1 Contractor shall inform his/her employees of the Iowa Hazardous Chemical Risks Right-to-Know Law.
- 32.2.2 Contractor shall provide to the Owner a list of known hazardous chemicals that they anticipate will be used on site as well as all pertinent information relating to employee protection. Contractor's Material Safety Data Sheets (MSDS) shall be available to Owner upon request.

SPECIAL CONDITIONS

WATER TOWER REPAIR AND COATING 2011 WEST BRANCH, IOWA

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1. INTENT

1.1 To supplement provisions of the GENERAL CONDITIONS by outlining special conditions applicable to project.

1.2 To outline special procedures to be followed during construction.

2. LOCATION AND DESCRIPTION

2.1 The work is located in West Branch, Iowa as shown on Drawing No. 1 - Vicinity Map.

3. ORDER OF CONSTRUCTION

3.1 Provide Engineer with proposed schedule of construction showing dates of starting and completing various portions of work.

3.2 Coordinate work with Owner and Engineer to assure orderly and expeditious progress of work.

3.3 Establish schedule of working hours for construction; schedule subject to approval of Engineer and Owner.

3.4 Schedule construction to minimize use of street barricades and detours; clean up each portion of work as it is completed.

4. REGULATED AREA

- 4.1 The purpose of the regulated area is to assure that unprotected workers and other personnel are not inadvertently exposed to hazardous environment and prevent unauthorized personnel access to the site.
- 4.2 Contractor to construct temporary fencing around the work area to delineate the regulated area.
- 4.3 Provide signs on all 4 sides around regulated area to alert workers and other personnel.
 - 4.3.1 Recommend signs: "Authorized Personnel Only", "Respiratory Protection Clothing Required".

5. WORK HOURS

- 5.1 No work shall be done between the hours of 8:00 P.M. and 7:00 A.M. Monday through Saturday, all day Sunday and legal holidays without written approval of Engineer for extended work hours.

6. PRECONSTRUCTION CONFERENCE

- 6.1 Prior to commencement of work at the site, a preconstruction conference will be held at a mutually agreed to place and time.
- 6.2 The purpose of the preconstruction conference is to meet responsible personnel, establish the working relationship between Owner, Engineer and Contractor and discuss special conditions.
- 6.3 Contractor shall bring to the preconstruction conference as a minimum the preliminary construction schedules, partial payment breakdown and cleaning method for surface preparation, and Contractor worker protection plan.

7. INTERRUPTIONS TO SERVICE

- 7.1 Owner will drain the tank and remove from service as required.
- 7.2 Contractor responsible to clean any sediment in the tanks.

8. SERVICE FACILITIES

- 8.1 Contractor to provide all services, including compressed air, to meet requirements for construction.

9. STORAGE OF MATERIALS AND EQUIPMENT

- 9.1 Storage space for materials and equipment will be available at project site.
- 9.2 Store materials and equipment in manner which will preserve quality and fitness.

10. CONSTRUCTION FACILITIES BY CONTRACTOR

- 10.1 Provide suitable protection necessary for proper storage of materials and equipment.
- 10.2 Provide telephone attended at all times during working day; provide liaison between telephone personnel and construction personnel for expeditious handling of messages.
- 10.2.1 Provide Engineer with at least 2 telephone numbers where Contractor's representatives can be reached on weekends and holidays in event of emergency.
- 10.3 Location of all construction facilities including construction plant and yard subject to approval of Engineer; remove all construction facilities upon completion of work.
- 10.4 Provide fences, barricades, and/or guards to prevent access of unauthorized persons to locations where work is in progress.
- 10.5 Provide and maintain suitable sanitary facilities for construction personnel for duration of work; remove upon completion of work.

11. INSURANCE BY CONTRACTOR

11.1 General:

- 11.1.1 Purchase and maintain insurance to protect Owner and Contractor against all hazards enumerated herein. All policies shall be in the amounts, form and companies satisfactory to the Owner.

Special Conditions

- 11.1.2 All certificates of insurance required herein shall state that thirty (30) days written notice will be given to the Owner before the policy is canceled or changed. All certificates of insurance shall be delivered to the Owner and Engineer prior to the time that any operations under this contract are started.
- 11.1.3 All of said Contractor's certificates of insurance shall be written on an insurance company authorized to do business in the State of Iowa.
- 11.1.4 Name the City of West Branch and Veenstra & Kimm, Inc. as additional insured.

11.2 Insurance requirements:

- 11.2.1 Purchase and maintain such insurance as will protect it from claims set forth below which may arise out of or result from the Contractor's operations under the contract, whether such operations be by itself or by any subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:
 - 11.2.1.1 Claims under workers compensation, disability benefit and other similar employee benefits acts.
 - 11.2.1.2 Claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees.
 - 11.2.1.3 Claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees.
 - 11.2.1.4 Claims for damages insured by personal injury liability coverage which are sustained (a) by any person as a result of an offense directly or indirectly related to the employment of such person by the Contractor, or (b) by any other person.
 - 11.2.1.5 Claims for damages, other than to the work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom.
 - 11.2.1.6 Claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

Special Conditions

11.3 Liability limits: the insurance required by paragraph 11.2 shall be written for not less than any limits of liability specified herein, or required by law, whichever is greater:

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|--------|---|--|
| 11.3.1 | General Liability; (including contractually; independent contractors, Broad form Property Damage, Personal Injury, Underground Explosion and Collapse Hazards). | \$1,000,000 single limit per occurrence.
\$2,000,000 Aggregate. |
| 11.3.2 | Automobile Liability; (including all owned, non-owned and hired autos). | \$500,000 combined limit. |
| 11.3.3 | Worker's Compensation | Statutory Benefits
Coverage B Employers Liability
\$100,000 each person per accident.
\$500,000 policy limit for disease.
\$100,000 each person for disease. |
| 11.3.4 | Umbrella Liability; (applying directly directly excess of above liability coverages). | \$1,000,000 combined single limit.
\$1,000,000 Aggregate |

11.4 Contractual liability insurance: the insurance required by paragraph 11.2 shall include contractual liability insurance applicable to the Contractor's obligations as follows:

- 11.4.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless Owner and Engineer and their agents, officers and employees from and against all claims, damages, losses and expenses, including, but not limited to attorney's fees, arising out of or resulting from performance of the work, provided that any such claim, damage, loss or expense (a) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) including loss of use resulting therefrom, and (b) is caused in whole or in part by any negligent act or omission of Contractor any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder;

Special Conditions

such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described herein.

11.4.2 In any and all claims against the Owner or the Engineer or any of their agents, officers or employees by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 11.2 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workers compensation acts, disability benefit acts or other employee benefit acts.

11.4.3 The obligations of the Contractor under paragraph 11.2 shall not extend to the liability of the Engineer, its agents or employees, arising out of (a) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications, or (b) the giving of or the failure to give directions or instructions by the Engineer, its agents or employees providing such giving or failure to give is the primary cause of the injury or damage.

11.5 Contractor's insurance for other losses:

11.5.1 For the consideration in this agreement hereinbefore stated, in addition to Contractor's other obligations, the Contractor assumes full responsibility for all loss or damage from any cause whatsoever to any tools owned by the mechanics, any tool machinery, equipment, or motor vehicles owned or rented by the Contractor, its agents, subcontractors or employees: to sheds or other temporary structures, scaffolding and stagings, protective fences, bridges and sidewalk hooks. The Contractor shall also assume responsibility for all loss or damage caused by, arising out of or incident to larceny, theft or any cause whatsoever (except as hereinbefore provided) to the structure on which the work of this contract, and any modifications, alterations, enlargement thereto, is to be done, and to the following items and labor connected or to be used as a part of the permanent materials, and supplies necessary to the work.

11.5.2 Furnish certificates of insurance to Engineer made in favor of Owner showing compliance with foregoing requirements.

Special Conditions

- 11.6 Notification in event of liability or damage: upon the occurrence of any event, the liability for which is herein assumed, the Contractor agrees to forthwith notify the Owner, in writing, such happening, which notice shall forthwith give the details as to the happening, the cause as far as can be ascertained, the estimate of loss or damage done, the names of witnesses, if any, and stating the amount of any claim.
- 11.7 Provide addendum language attached to the Certificate of Insurance which preserves the Owner's immunities. The addendum language is as follows:
- 11.7.1 "The Companies affording coverage and the Additional Insured, City of West Branch, Cedar County, Iowa expressly agree and state that the purchase of this policy of insurance by the insured and the listing of the City of West Branch as an Additional Insured hereunder to not waive any of the defenses of governmental immunity available to the Additional Insured under Iowa Code Section 670.4 as it now exists and as it may be amended from time to time.
- 11.7.2 The Companies and the Additional Insured further agree that this policy of insurance shall cover only those claims not subject to the defense of governmental immunity under Iowa Code Section 670.4 as it now exists and as it may be amended from time to time.
- 11.7.3 The Additional Insured shall be responsible for asserting any defense of governmental immunity, and may do so at any time and shall do so upon the timely written request of the Companies.
- 11.7.4 The Companies shall not deny coverage under this policy and the Companies shall not deny any of the rights and benefits accruing to the Insured or the Additional Insured under this policy for reasons of governmental immunity unless and until a court of competent jurisdiction has ruled in favor of the defense(s) of governmental immunity asserted by the Additional Insured."

12. CONSTRUCTION LIMITS

- 12.1 Confine movements of equipment and personnel, storage of materials, and all other construction operations to lines defined by Owner.

13. EMPLOYMENT PRACTICES

- 13.1 Contractors, or subcontractors, shall not employ any person whose physical or

Special Conditions

mental condition is such that said employment will endanger the health and safety of himself or others employed on the project.

14. RESIDENT REVIEW

14.1 Provide reviewer with use of riggings for inspection of surfaces and monitoring of repair, preparation and coating operation.

15. NOISE CONTROL

15.1 Contractor shall take measures for normal ambient sound level in work area.

15.2 All construction machinery and vehicles shall be equipped with sound muffling devices.

16. INSPECTION AFTER ONE YEAR

16.1 Successful contractor will be required, by contract, to participate in a 1 year inspection of all repaired and coated surfaces of the Linden Avenue Water Tower approximately 1 year after acceptance of the work set forth in these specifications. Any deficiencies shall be corrected at no cost to Owner.

16.2 Notice of 1 year inspection will be provided.

PLANS LIST

WATER TOWER REPAIR AND COATING 2011
WEST BRANCH, IOWA

1. Plans

1.1 The work shall conform to the following plans (bound herewith), all of which constitute the "Plans" and are an integral part of the Contract Documents:

<u>Title</u>	<u>Drawing No.</u>
Vicinity Map	
West Branch Logo, Elevated Storage Tank	

DETAILED SPECIFICATIONS

WATER TOWER REPAIR AND COATING 2011
WEST BRANCH, IOWA

PART 1 - GENERAL REQUIREMENTS

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| 3. INTERPRETATION | 10. FIELD TESTS |
| 4. WORK INCLUDED | 11. RESPONSIBILITY OF CONTRACTOR |
| 5. STARTING AND COMPLETION TIME | 12. TEMPORARY AND PROTECTIVE WORK |
| 6. INFORMATION FOR ENGINEER | 13. BARRICADES AND LIGHTS |
| 7. SHOP DRAWINGS | 14. FINAL REVIEW AND ACCEPTANCE |

1. FORM

- 1.1 Detailed specifications are in outline form and include incomplete sentences. Omission of words or phrases is intentional. Supply omitted words or phrases by inference.

2. INTENT

- 2.1 To set forth requirements of performance, type of construction desired, and standards of materials and construction.
- 2.2 To describe work set out in contract documents, unless otherwise specifically indicated.
- 2.3 To require performance of complete work in spite of omission of specific reference to any minor component parts.
- 2.4 To provide for new materials and equipment, unless otherwise indicated.

3. INTERPRETATION

- 3.1 Report any errors or ambiguities in specifications to Engineer as soon as detected; Engineer will answer questions regarding and interpret intended meaning of specifications; its interpretation shall be accepted as final.

4. WORK INCLUDED

- 4.1 Furnish all materials, labor and equipment for Water Tower Repair And Coating 2011 as set out in Notice of Hearing and Letting.

5. STARTING AND COMPLETION TIME

- 5.1 The work under the contract shall commence within ten (10) days after date set forth in the written Notice to Proceed and the work shall be completed by October 1, 2011.

6. INFORMATION FOR ENGINEER

- 6.1 After award of contract submit following information and drawings for Engineer's approval; total number of approved copies required for distribution: 4 plus copies required by Contractor.
- 6.1.1 Certified outline, general arrangement, assembly and installation, detail drawings for various repair items specified hereinafter.
- 6.1.2 Manufacturer's specifications and catalog data for miscellaneous equipment.
- 6.1.3 Shop drawings for structural steel and accessories.
- 6.1.4 Written procedures for surface preparation and manufacturer's catalog data and instructions for painting system.
- 6.1.5 Such other information as Engineer may request.
- 6.2 Within 15 days after award of contract, provide construction schedule, showing dates of starting and completing various portions of work and value of each portion of work.
- 6.3 Provide 2 copies of following information:
- 6.3.1 Contract price breakdown of lump sum bid for use in preparation of periodic payment estimates.
- 6.3.2 Purchase orders and subcontracts without prices.

7. SHOP DRAWINGS

- 7.1 Intent of Engineer's review: to assist Contractor in interpreting plans and specifications.
- 7.2 Contractor's responsibility: to check drawings prior to submission of coordination and conformance with contract; do not submit without checking.
- 7.3 Engineer's review is only for general conformance with design concept of project and general compliance with information given in contract documents. Any action shown is subject to requirements of specifications. Contractor is responsible for dimensions which must be confirmed and correlated at job site; fabrication processes and techniques of construction; and satisfactory performance of work.
- 7.4 Prior to submission of shop drawings and catalog data to Engineer: affix Contractor's stamp with signature of responsible person to show that material submitted has been checked and approved by Contractor; shop drawings submitted without appropriate stamp and signature will be returned without Engineer's review.

8. SPECIFICATIONS

- 8.1 Engineer will furnish up to 5 sets of specifications after award of contract. Contractor shall compensate Engineer for printing costs for additional copies required.
- 8.2 Provide 1 set of specifications for each foreman or superintendent in charge of each crew on job.

9. STANDARDS AND CODES

- 9.1 Do work in accordance with best present day construction practices.
- 9.2 Unless specifically noted to contrary, comply and test in accordance with applicable sections of latest revisions of codes and standards of following:
 - 9.2.1 American Institute of Steel Construction (AISC).
 - 9.2.2 American National Standards Institute (ANSI).
 - 9.2.3 American Society for Testing and Materials (ASTM).

General Requirements

- 9.2.4 American Water Works Association (AWWA).
- 9.2.5 American Welding Society (AWS).
- 9.2.6 Federal Aviation Administration (FAA).
- 9.2.7 Federal Communications Commission (FCC).
- 9.2.8 Federal Specifications (FS).
- 9.2.9 Manual of Accident Prevention in Construction by Associated General Contractors of America, Inc., (AGC).
- 9.2.10 National Electrical Manufacturers Association (NEMA).
- 9.2.11 National Electrical Safety Code (NESC).
- 9.2.12 National Fire Protection Associations' National Electrical Code (NEC).
- 9.2.13 Occupational Safety and Health Act of 1970 (Public Law 91-596) (OSHA).
- 9.2.14 Iowa Occupational Safety and Health Act of 1972 (Chapter 88, Code of Iowa 2011) (IOSHA).
- 9.2.15 Steel Structures Painting Council (SSPC).
- 9.2.16 Standards and codes of the State of Iowa and the ordinances of the City of Coralville, Iowa.
- 9.2.17 Other standards and codes which may be applicable to acceptable standards of the industry for equipment, materials and installation under the contract.

10. FIELD TESTS

- 10.1 Engineer will conduct tests he deems necessary to determine that work is done correctly and guarantees are met.
- 10.2 Engineer will supervise tests on surface preparation and coatings.

General Requirements

- 10.3 If performance guarantees or requirements are not met during tests, make necessary corrections, repairs or replacements; demonstrate to Engineer that work meets performance guarantees or requirements.

11. RESPONSIBILITY OF CONTRACTOR

- 11.1 Protection of his work.
- 11.2 Protection of Owner's property and adjacent property from injury or loss resulting from his operations.
- 11.3 Replace or repair objects sustaining any damage, injury or loss to satisfaction of Owner and Engineer.

12. TEMPORARY AND PROTECTIVE WORK

- 12.1 Make all temporary service connections necessary for maintaining utility service during the course of the work; do work as specified hereinafter.

13. BARRICADES AND LIGHTS

- 13.1 Erect and maintain barricades and lights and/or provide watchmen for protection and warning of pedestrians and vehicles; prevent access of unauthorized persons to portion of site where work is in progress; all barricades and lights at expense of Contractor.

14. FINAL REVIEW AND ACCEPTANCE

- 14.1 Notify Owner when work is considered complete and ready for final review.
- 14.2 After determining that the work is ready for final review and giving notice to Contractor, Engineer will make final review and tests he deems necessary to determine that provisions of specifications are satisfied.
- 14.3 Owner will accept work and make final payment to Contractor:
 - 14.3.1 When Engineer has certified that work of Contractor is complete and in conformance with specifications.
 - 14.3.2 When Contractor has filed with Owner or Engineer documents called for in specifications.

PART 2 - STRUCTURAL AND RELATED WORK

INDEX

1. GENERAL
 2. VENTS
 3. PAYMENT
-
1. GENERAL
 - 1.1 Complete items listed in this section.
 - 1.2 Appendix A contains photographs for use by Contractor and may not completely show all areas requiring repair.
 2. VENTS
 - 2.1 Furnish and install a new stainless steel screen and new bolts on the vent as shown in Photographs xx and xx.
 3. PAYMENT
 - 3.1 No separate payment will be made for work covered under this part of the specifications. Include all costs in unit and lump sum bid for Water Tower Repair and Coating 2011.

PART 3 - UNFORESEEN WELDING AND GRINDING

INDEX

- | | |
|------------------|---------------------|
| 1. GENERAL | 3. WORK EXCLUDED |
| 2. WORK INCLUDED | 4. QUALITY STANDARD |
| | 5. PAYMENT |

1. GENERAL

- 1.1 Welding and Grinding in this section is to repair areas that are found during the cleaning operation to remove the existing coating.
- 1.2 Welding would typically include pit welding, seam welding and repair welding.
- 1.3 Grinding would typically include removing weld spatter, erection scab marks, and rough areas.
- 1.4 Engineer must approve all areas to be welded and ground.

2. WORK INCLUDED

- 2.1 Miscellaneous welding including pit welding or repair welding not discovered until surface preparation.
- 2.2 Remove spatter and erection bracket scab marks by grinding.
- 2.3 Provide complete set of welding equipment including welder and all materials necessary to perform welding.
- 2.4 Provide complete set of grinding equipment including one person and all materials necessary to perform grinding.

3. WORK EXCLUDED

- 3.1 Welding required to complete work specified under STRUCTURAL AND RELATED WORK.

4. QUALITY STANDARD

- 4.1 Perform welding in conformance with Section 8, AWWA D100-84 and ASME Section VIII, Division 1.
- 4.2 Do not weld over coated surfaces.

Unforeseen Welding and Grinding

- 4.3 Weld only when surface has been thoroughly cleaned with near white blasting (SSPC-SP10).
- 4.4 All repair welds to be ground smooth.
- 4.5 Welders shall be certified in conformance with ASTM Section 9; submit copies of welder's certification.

5. PAYMENT

- 5.1 No separate payment will be made for the work covered under this part of the specifications except as set forth below.
 - 5.1.1 Welding, Hour: Unit price includes furnishing one welder, one welding machine, one set of leads, welding rods, and miscellaneous equipment to perform welding.
 - 5.1.1.1 Welding under this section is for areas that are found during the cleaning operation to remove the existing coating. Time calculated based on actual hours of welding rounded to nearest hour.
 - 5.1.2 Grinding, Hour: Unit price includes furnishing one person, grinder and miscellaneous equipment to perform grinding.
 - 5.1.2.1 Grinding under this section is for areas that are found during the cleaning operation to remove the existing coating. Time calculated based on actual hours of grinding rounded to nearest hour.

PART 4 - SURFACE PREPARATION

INDEX

1. WORK INCLUDED
 2. DESCRIPTION
 3. SURFACE PREPARATION
 4. SAFETY
 5. PAYMENT
1. WORK INCLUDED
 - 1.1 Furnish all material, labor and equipment to prepare surfaces of all of the exterior surfaces including roof and hatches; all surfaces of the dry interior; including floor, bell, platforms, tube, and hatches; all surfaces of the interior wet area roof, including riser and overflow piping above the HWL; and miscellaneous surfaces of the Water Tower Repair And Coating 2011.
 - 1.2 Furnish all material, labor, and equipment to spot repair damaged areas below the HWL in the interior wet area.
 - 1.2.1 The wet interior may contain areas in need of spot repair. The contractor and Engineer shall inspect the interior wet area after the tower has been drained and identify the areas in need of repair. All welding and grinding on the interior shall be completed prior to applying exterior primer or coatings.
 - 1.3 The dry interior is shown in Photographs xx thru xx.
 - 1.4 The vent is shown in Photographs xx and xx.
 2. DESCRIPTION
 - 2.1 Water Tower Repair and Coating 2011:
 - 2.1.1 Welded steel elevated spheroid tank built by Universal Tank & Iron Works, 1979.
 - 2.1.2 Dimension: 8' to 45' in diameter; 111' in height.
 - 2.1.3 See tower manufacturer's drawings in Appendix B.

3. SURFACE PREPARATION

3.1 Cleaning method:

3.1.1 Contractor can elect to complete surface preparation by dry or wet open abrasive air blast cleaning with expendable abrasives, dry or wet open abrasive air blast cleaning with recyclable abrasive; vacuum closed blasting with expendable or recyclable abrasive; chemical stripping.

3.1.1.1 Contractor must submit plan for other cleaning methods and obtain Engineer's approval prior to implementation of method.

3.2 Abrasives:

3.2.1 Non-metallic abrasive material such as silica sand, garnet and quartz shall be graded to proper size, shape and hardness; abrasion shall be washed, dried, free from oils, grease and other contaminants.

3.2.2.1 Submit proposed abrasive material specifications to Engineer for review.

3.2.2.2 Select abrasive material to provide coating manufacturer's recommended anchor pattern for selected coating system.

3.2.2 Recirculated abrasive materials such as shot and grit shall be free from oils and greases and other contaminants.

3.2.2.1 Submit proposed material specifications to Engineer for review.

3.2.2.2 Selected abrasive material to provide coating manufacturer's recommended anchor pattern for selected coating system.

3.2.3 Additives:

3.2.3.1 Additives can be utilized, such as Blastox, for removal of the lead/chromium containing coating.

3.2.3.2 Contractor must submit plan for an additive and obtain Engineer's approval.

Surface Preparation

- 3.2.4 Selected abrasive must provide anchor pattern ASTM D4417-93 on substrate recommended by coating manufacturer; report results of test on daily log.
- 3.3 Compressed air supply:
 - 3.3.1 Compressed air supply shall have suitable coolers, oil and moisture separator to prevent contamination of abrasives and substrate.
 - 3.3.1.1 Air pressure at nozzle: 95-100 psi; provide gauges and equipment to verify pressure at nozzle.
 - 3.3.1.2 Perform daily blotter test ASTM D4285-83 to check compressed air supply for contamination; utilize a white absorbent material and test air supply at outlet end that is downstream from oil and moisture traps; report results of tests on daily log.
 - 3.3.2 After blast cleaning and prior to coating: allow sufficient time to remove all dust and abrasive material from blasted area by compressed air and for atmosphere to clear.
- 3.4 Following abrasive air blast cleaning apply first application of coating, leave 5" border uncoated; following day abrasive air blast 5" border plus 2" into previous day's coating.
- 3.5 Reference standard for surface preparation is SSPC-VIS 1-89 visual standard for abrasive blast cleaned steel.
- 3.6 Exterior area including roof, handrail, and hatches:
 - 3.6.1 Commercial blast clean in accordance with SSPC-SP6 free of all visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products and stains.
 - 3.6.2 Roughen surface profile to a degree suitable for specified coating system.
 - 3.6.3 Before surface preparation, remove visible deposits of oil and grease by methods specified in SSPC-SP1.

Surface Preparation

- 3.6.4 After surface preparation prior to coating, remove rust, visible deposits of oil and grease, dust and residue from dry abrasive air blast cleaning by compressed air.
- 3.6.5 Abrasive air blast: abrasion shall be free of corrosion producing contaminants, oil, grease and other debris contaminants.
- 3.6.6 Maximum interval between blasting and coating: 24 hours with no rust.
- 3.7 Interior dry including floor, bell, platform, tube and hatches:
 - 3.7.1 Commercial blast clean in accordance with SSPC-SP6 free of all visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products and stains.
 - 3.7.2 Roughen surface profile to a degree suitable for specified coating system.
 - 3.7.3 Before surface preparation, remove visible deposits of oil and grease by methods specified in SSPC-SP1.
 - 3.7.4 After surface preparation prior to coating, remove rust, visible deposits of oil and grease, dust and residue from dry abrasive air blast cleaning by compressed air.
 - 3.7.5 Abrasive air blast: abrasion shall be free of corrosion producing contaminants, oil, grease and other debris contaminants.
 - 3.7.6 Maximum interval between blasting and coating: 24 hours with no rust.
- 3.8 Interior wet area roof, interior riser and overflow pipe above HWL. Includes spot repairs on the interior wet area.
 - 3.8.1 Brush blast clean in accordance with SSPC-SP7; clean surface free of all visible oil, grease, dirt, dust, loose mill scale, loose rust, and loose coating. Tightly adhered coating may remain on the surface.
 - 3.8.2 Clean area where the coating totally separates from the substrata by brush blasting to near white in accordance with SSPC-SP10.

Surface Preparation

- 3.8.3 Roughen surface profile to provide anchor pattern for specified coating system.
- 3.8.4 After surface preparation prior to coating, remove rust, visible deposits of oil and grease, dust and residue from dry abrasive air blast cleaning by compressed air.
- 3.8.5 Abrasive air blast abrasion shall be free of corrosion producing contamination, oil, grease and other debris contaminants.
- 3.8.6 Maximum interval between blasting and coating: 24 hours with no rust.

4. SAFETY

- 4.1 Comply with Paint Application Guide No. 3 of SSPC.

5. PAYMENT

- 5.1 No separate payment will be made for work covered under this part of the specifications except as specified below. Include all costs in unit and lump sum bid for coating and repair of Water Tower Repair and Coating 2011.
- 5.2 Interior Spot Repairs, SF.: Unit price includes all materials, labor and equipment required to coat interior wet area per specification in locations below HWL identified for spot repair.
 - 5.2.1 Welding and grinding required for spot repair will be paid for at the unit price bid for those items.

PART 5 - COATING

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- | | |
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| 1. WORK INCLUDED | 4. APPLICATION |
| 2. COATINGS IN GENERAL | 5. COATINGS |
| 3. QUALITY CONTROL | 6. LOGO |
| | 7. PAYMENT |

1. WORK INCLUDED

- 1.1 Furnish all materials, labor and equipment to apply coating to prepared surface as specified hereinbefore in SURFACE PREPARATION on all of the exterior surfaces including roof and hatches; dry interior including floor, bell, platforms tube and hatches; interior wet area roof, interior riser and overflow piping, and miscellaneous surfaces of the Water Tower Repair And Coating 2011.
- 1.2 Furnish all material, labor and equipment to apply coating to prepared surface area as specified hereinbefore in SURFACE PREPARATION on interior wet area spot repairs.

2. COATINGS IN GENERAL

- 2.1 Use coatings manufactured by Tnemec Company, Inc., or approved equal.
 - 2.1.2 Submit manufacturer's specifications for Engineer's review.
- 2.2 Prior to application of any coating a conference will be held between representatives of coating manufacturer, Contractor and Engineer to discuss coating specifications and application.
- 2.3 Deliver paint to job site in original, unopened containers with labels intact; clearly marked or labeled to show paint identification, date of manufacture, batch number, analysis of contents, identification of all toxic substances and special instructions.
- 2.4 Store paint in well ventilated place, away from heat, sparks, flame or direct rays of sunshine; protect from freezing; provide safeguards to prevent fire.
- 2.5 Use exterior coatings from same batch of paint for each color; advise manufacturer of this requirement.

2.6 Exterior coating:

- 2.6.1 Chemical and corrosion resistant for protection against abrasion, moisture and corrosive fumes; Hi-build epoxy for a steel water storage facility intended for exterior surface.
- 2.6.2 Abrasion: ASTM D4060 no more than 115 MG loss after 1,000 cycles.
- 2.6.3 Adhesion: ASTM D4561 not less than 1,000 psi pull.
- 2.6.4 Exterior exposure facing south: no blistering, cracking or delamination of film, no more than 1/32" rust creepage at scribe, no more than 2% rusting at edges after 6 years.
- 2.6.5 Top coating: high solids, high build, fast drying polyurethane coating resistant to abrasion, corrosion, fumes and chemical contact; applied over epoxy on exterior to reduce caulking.

2.7 Exterior area coating:

- 2.7.1 Exterior coating shall be applied by roller, no spraying.

2.8 Interior dry area coating:

- 2.8.1 Chemical and corrosion resistant for protection against abrasion, moisture and corrosive fumes; Hi-build epoxy for a steel water storage facility intended for exterior surface.
- 2.8.2 Abrasion: ASTM D4060 no more than 115 MG loss after 1,000 cycles.
- 2.8.3 Adhesion: ASTM D4561 not less than 1,000 psi pull.
- 2.8.4 Exterior exposure facing south: no blistering, cracking or delamination of film, no more than 1/32" rust creepage at scribe, no more than 2% rusting at edges after 6 years.

2.9 Interior wet area coating:

- 2.9.1 Corrosion resistant epoxy with high build properties for steel water storage facility intended for immersion service.

Coating

- 2.9.2 Certified in accordance with ANSI/NSF Standard 61 for potable water storage tanks.
- 2.9.3 Conform to AWWA D102 Inside System No. 1 and AWWA C210.
- 2.9.4 Abrasion: ASTM D4060; no more than 115 MG loss after 1,000 cycles.
- 2.9.5 Adhesion: ASTM D4541 not less than 1,000 psi pull.
- 2.9.6 Dielectric strength: ASTM D149 not less than 1,050 volts/mil.
- 2.9.7 Coating applied to SSPC-10 steel cured and immersed in aerated tap water 77° with no blistering, delamination or loss of film integrity after 4 years.
- 2.9.8 After surface preparation steel surface will have pits of 1/8" and smaller that the coating will bridge.

3. QUALITY CONTROL

- 3.1 Contractor to maintain daily log of location of activities, wet mil thickness coating, dry mil thickness from previous day, lot number, batch number, color, manufacturer, gallons of coating used, compressed air blotter test, surface profile ambient air temperature, dew point and humidity.
- 3.2 Submit copy of daily log to Engineer.

4. APPLICATION

- 4.1 Apply only when surface temperature and dew point are suitable for producing good results as recommended by manufacturer's data sheet.
- 4.2 Coating shall not be applied when surface temperature, or coating, is below 40°F.; coating shall not be applied when surface temperature is expected to drop to 40°F. before coating has cured; special coatings which can be applied below 40°F.; manufacturer's data sheets to be strictly followed.
- 4.3 Coating shall not be applied in rain, wind, snow, fog or mist or when steel temperature is less than 5°F. above dew point.
- 4.4 Percent humidity shall be in compliance with manufacturer's data sheets.

- 4.5 Use thinners and admixtures only as recommended by manufacturer and only of the same manufacturer and in specified amounts as noted on product data sheets.
- 4.6 Mixing:
 - 4.6.1 All ingredients in any container of coating shall be thoroughly mixed before use and shall be agitated often enough during application to keep coating uniform.
 - 4.6.2 Mix all catalysts, curing agents or hardeners in exact proportions of the parts as required by manufacturer.
 - 4.6.2.1 Provide calibrated measuring containers to mix any proportions that are less than full container.
 - 4.6.3 Mix with mechanical shaker or mixer only.
 - 4.6.4 Strain all pigmented paint after mixing, strainers shall be of type to remove only skin and undesirable matter.
 - 4.6.5 Mixture of coating shall be used within the pot life specified by manufacturer; discard unused portion of coating each day.
- 4.7 Each coat of coating shall be in proper state of cure or dryness before application of second coat; time interval between coating applications shall be in compliance with manufacturer's data sheet.
- 4.8 All runs and sags shall be brushed out immediately or remove coating and surface repaired.
- 4.9 Spray equipment shall be kept sufficiently clean so dirt, dried coating and other foreign materials are not deposited in the coating film; any solvents left in equipment shall be completely removed before using.
- 4.10 Coating shall be applied in uniform layers with overlapping at edge of spray pattern; during application gun shall be held perpendicular to surface and at a distance which will ensure a wet layer of coating is deposited on surface.

4.11 Interior wet area coating of the roof, structural roof members, and platforms:

4.11.1 Brush one coat of primer on all repaired areas prior to spraying final coat.

4.11.1.1 Work primer into all irregularities in the welding with a brush.

4.11.2 Apply coating in a fine even spray; thin according to manufacturer's recommendations.

4.11.3 Where necessary, follow by brushing to secure uniform coverage and to eliminate wrinkling, blistering and air holes.

4.11.4 If interior spraying becomes detrimental or objectionable to personnel, Owner reserves right to require brush or roller painting.

5. COATINGS

5.1 Coatings specified hereinafter are based on products manufactured by Tnemec Company, Inc.

5.2 Exterior surface areas:

5.2.1 Primer:

5.2.1.1 Tnemec Company 20-1255 Pota-Pox Beige; dry mill thickness 2-3 mils.

5.2.2 Second coat:

5.2.2.1 Tnemec Company Series 66 Hi-Build Epoxoline; dry mil thickness 2-3 mils.

5.2.3 Third coat:

5.2.3.1 Tnemec Company Series 1074U Endura Shield; dry mill thickness 2.5-3 mils.

5.3 Interior dry area:

5.3.1 Primer:

5.3.1.1 Tnemec Company 20-1255 Pota-Pox; dry mil thickness 2-3 mils.

5.3.2 Second coat:

5.3.2.1 Tnemec Company 20-1255 Pota-Pox; dry mil thickness 2-3 mils.

5.4 Wet area interior roof, riser, overflow piping and spot repair areas:

5.4.1 Spot Primer: Apply to areas where brush blasted cleaned to the substrata and cleaned to SSPC-SP-10:

5.4.1.1 Tnemec Company 20-21255 Pota-Pox Beige; dry mil thickness 4-5 mils.

5.4.2 First Coat: Apply to all of the interior roof, riser, overflow piping and spot repair areas:

5.4.2.1 Tnemec Company 20 AAF3 Pota-Pox Tank White; dry mil thickness 4-5 mils.

5.5 Recoat: following manufacturer's recommended time interval; if the maximum recoat time is exceeded, surface must be abraded by brush blasting prior to application of next coat.

5.6 Cure: follow manufacturer's recommended time for curing based on ambient air temperature and final cure time for immersion.

6. LOGO

6.1 See logo detail in appendix.

6.2 Submit layout and color samples for Owner's final selection of logo colors.

Coating

6.3 Coat logo on 2 sides of tank.

6.3.1 Apply 2 coats of exterior logo coating as specified; third coat shall be clear coat over logo as specified hereinbefore for the logo colors.

7. PAYMENT

7.1 No separate payment will be made for work covered under this part of the specifications. Include all costs in unit and lump sum bid except as set forth below for coating and repair of Water Tower Repair and Coating 2011.

PART 6 - WASTE DISPOSAL

INDEX

- | | |
|------------------|--------------------|
| 1. WORK INCLUDED | 3. HAZARDOUS WASTE |
| 2. WASTE | 4. PAYMENT |

1. WORK INCLUDED

1.1 Furnish all materials, labor and equipment to collect, contain and dispose of waste.

1.1.1 Includes removal and disposal of debris and settled material inside wet area of tower.

2. WASTE

2.1 Contractor shall clean up construction debris such as spent abrasive, coating chips, paper products, cans, and any other debris daily and provide containment for the debris; dispose of all debris at acceptable disposal site.

3. HAZARDOUS WASTE

3.1 Contractor shall protect surrounding ground in regulated area from contamination from blasting operation and other materials utilized in cleaning operation.

3.2 Contractor shall be fully responsible for cleanup, removal and disposal of used abrasives, coatings, solvents, coating containers and other wastes in accordance with Resource Conservation and Recovery Act (RCRA) and the Hazardous and Solid Waste Amendment (HSWA) to RCRA.

3.3 Contractor to collect hazardous waste and place in storage container; precaution must be taken to prevent release of lead removed waste into air, water or soil; collect hazardous waste periodically during project and stockpile storage containers in temporary holding area at work site.

3.4 Contractor to provide documentation for the transportation and disposal of hazardous waste.

4. PAYMENT

- 4.1 No separate payment will be made for work covered under this part of the specifications. Include all costs in unit and lump sum bid for coating and repair of Water Tower Repair and Coating 2011.

PART 7 - DISINFECTION

INDEX

1. WORK INCLUDED
2. DESCRIPTION
3. TESTING
4. PAYMENT

1. WORK INCLUDED

- 1.1 Disinfect interior surfaces of coating of Water Tower Repair And Coating 2011 after painting prior to placing units in service.
- 1.2 Install all NEW gaskets on hatches prior to closing hatches to place units in service.

2. DESCRIPTION

- 2.1 Power spray entire interior of tank with 200 ppm Cl₂ solution; use hypochlorite solution; start with underside of tank roof and work downward; be sure that wet riser is adequately disinfected with pills and filling or other means; separate disinfection of wet riser may be required.
- 2.2 Fill tank to capacity and isolate for 24 hour period.
- 2.3 No work permitted inside tank after disinfection.

3. TESTING

- 3.1 After completion of disinfection Owner will collect bacteriological samples from tank and analyze samples; sample must test "SAFE"; if sample tests "UNSATISFACTORY" or "UNSAFE", repeat disinfection procedure.
- 3.2 Owner will furnish water for one fill; Contractor to pay cost of water for additional fills for failed bacteriological samples.

4. PAYMENT

- 4.1 No separate payment will be made for work covered under this part of the specifications except as set forth below. Include all costs in unit and lump sum bid for coating and repair of Water Tower Repair and Coating 2011.

PART 8 - SURFACE RESTORATION

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| 1. WORK INCLUDED | 2. DESCRIPTION |
| | 3. PAYMENT |

1. WORK INCLUDED

- 1.1 Furnish all materials, labor and equipment to seed all grass areas disturbed by construction.

2. DESCRIPTION

- 2.1 Prepare site for seeding by discing, harrowing and hand raking or other means following site grading; work soil to depth of 3".
- 2.2 Precede seeding with uniform application of commercial grade fertilizer at rate per acre of 20 lbs. of nitrogen, 40 lbs. of phosphorous and 20 lbs. of potassium (400 lbs. of fertilizer grade 5-10-5 per acre, or equal); cultivate area 3" deep and work with harrow within 24 hours before seeding; smooth surface to eliminate clods and lumps before seeding.
- 2.3 Seeding in urban street parkings, lawns and developed areas, (Type 1):
- 2.3.1 Seed at rate of 2 lbs. per 1,000 SF with following mixture proportioned by weight:

<u>Seed</u>	<u>Percent</u>
Kentucky Bluegrass	35
Annual Rye	25
Perennial Rye	20
Creeping Red Fescue	10
Chewing Fescue	10

- 2.4 Seed between dates of August 15 and October 15 or between dates of April 1 and May 30.
- 2.5 Cover seed by rolling with cultipacker, or by dragging or hand raking.

Surface Restoration

2.6 Mulch all seeded areas; mulch: dry oat straw at rate of 4,000 lbs. per acre; stabilize mulch with tiller designed to anchor mulch to soil.

2.7 Water seeded area sufficiently to saturate seed bed.

3. PAYMENT

3.1 No separate payment will be made for work covered under this part of the specifications. Include all costs in the lump sum bid for coating and repair of Water Tower Repair and Coating 2011.

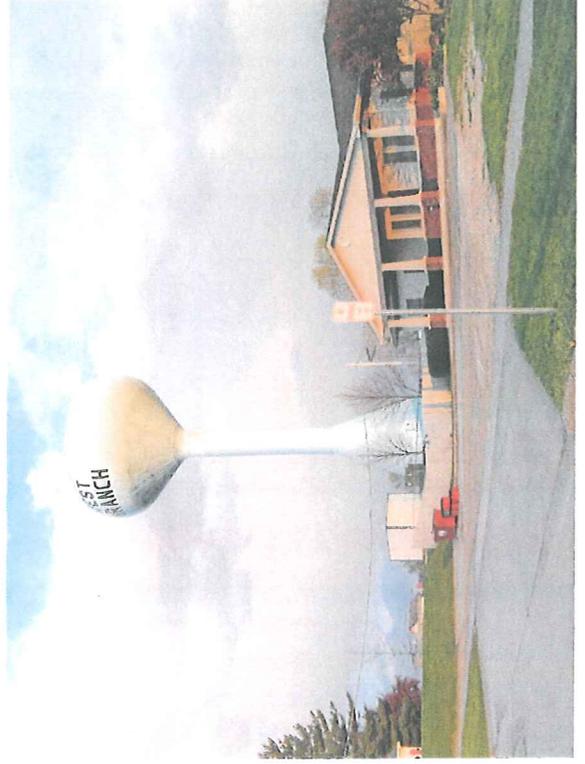
APPENDIX A
PHOTOGRAPHS
WATER TOWER REPAIR AND COATING 2011

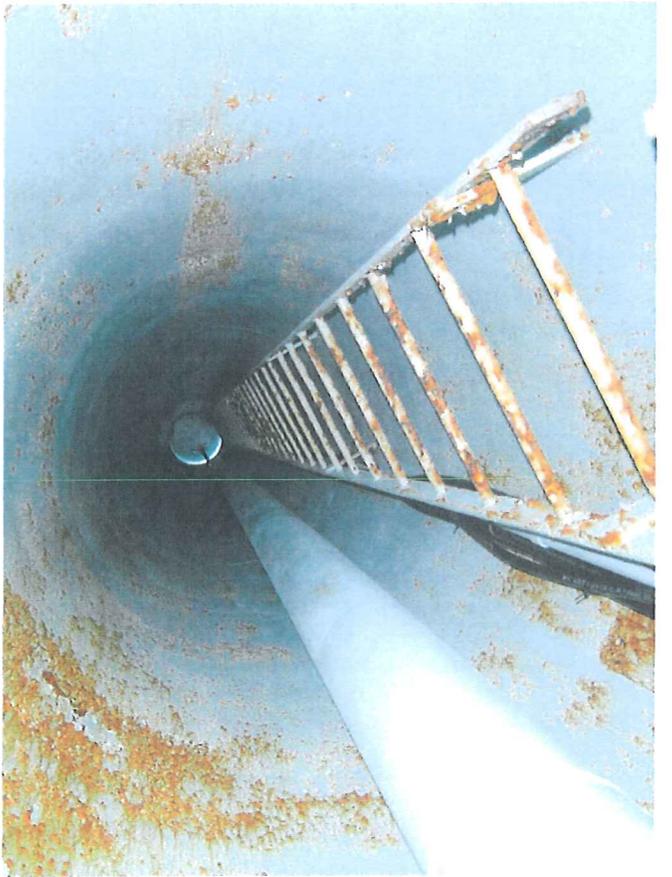
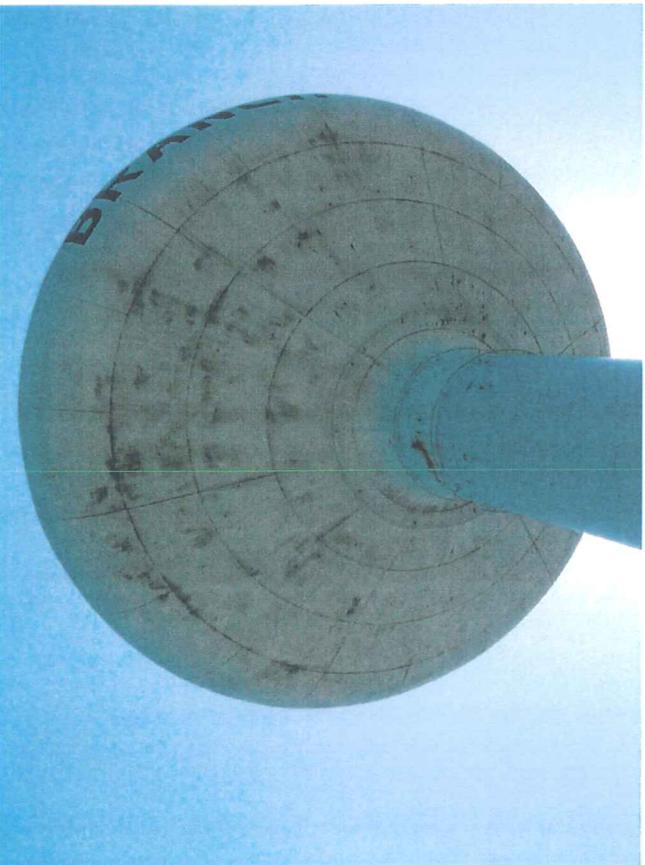
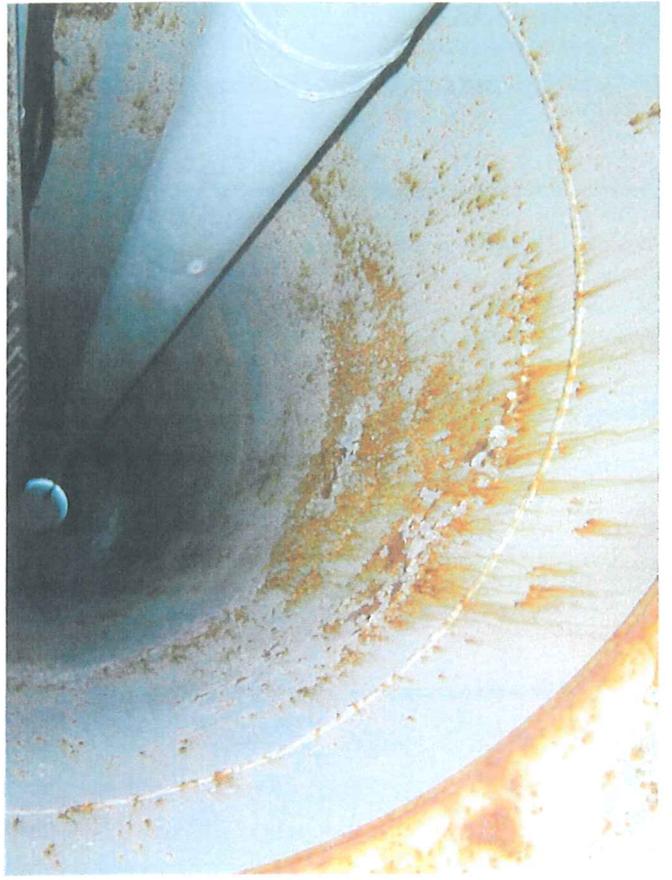
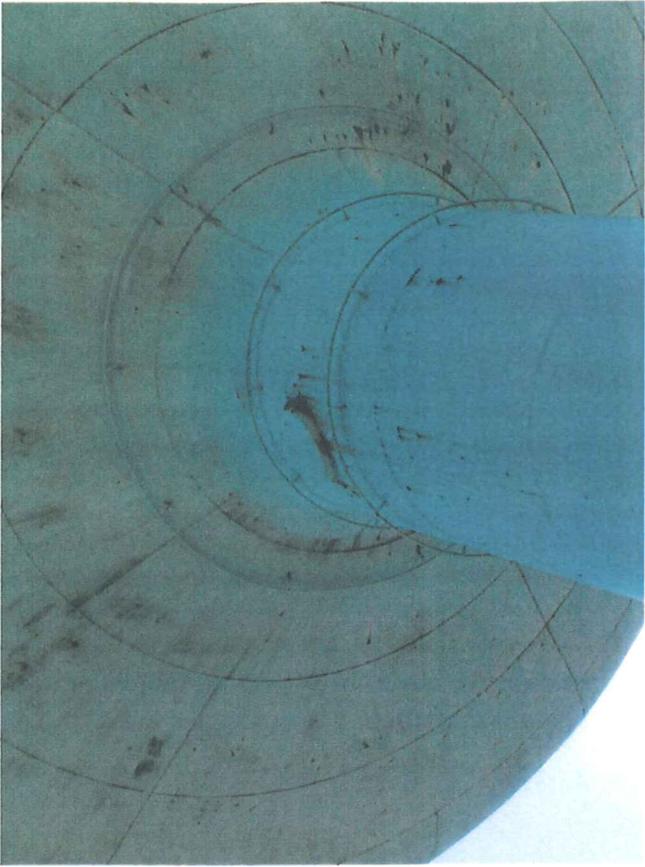


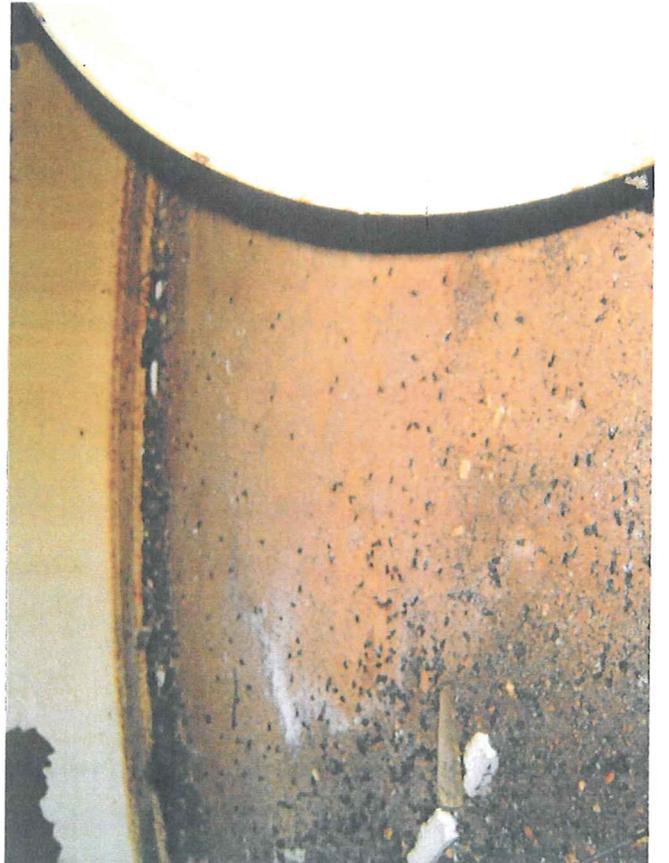
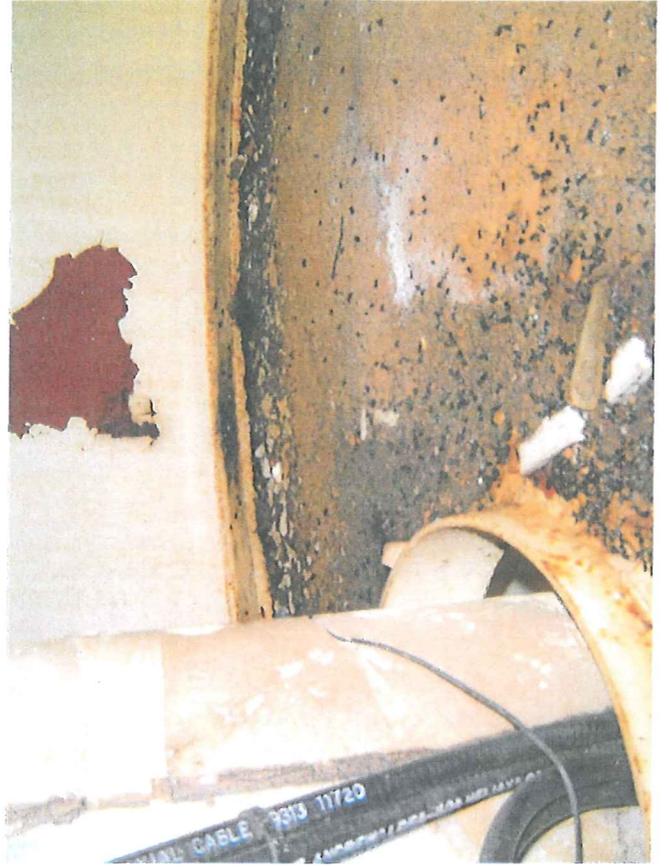
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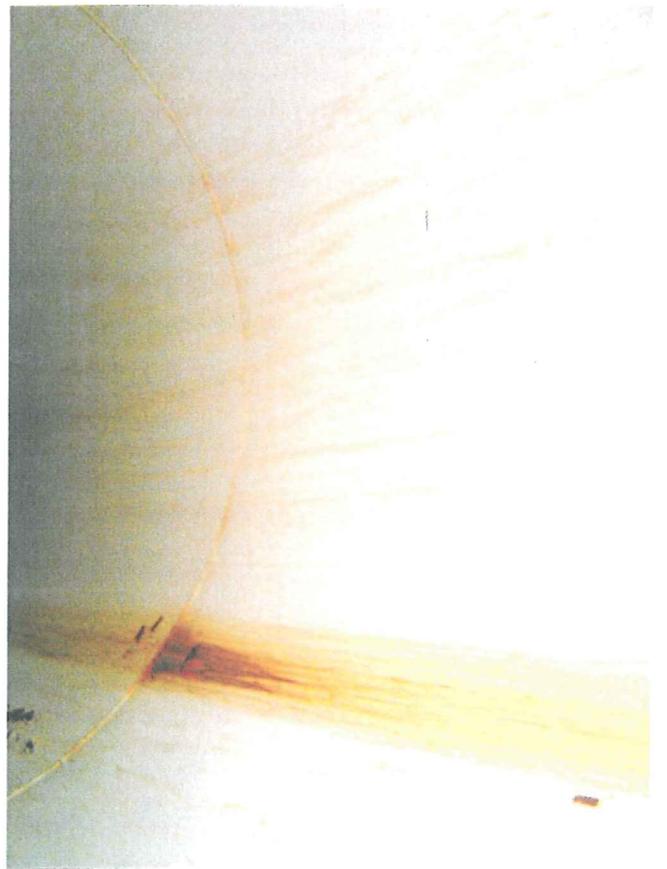
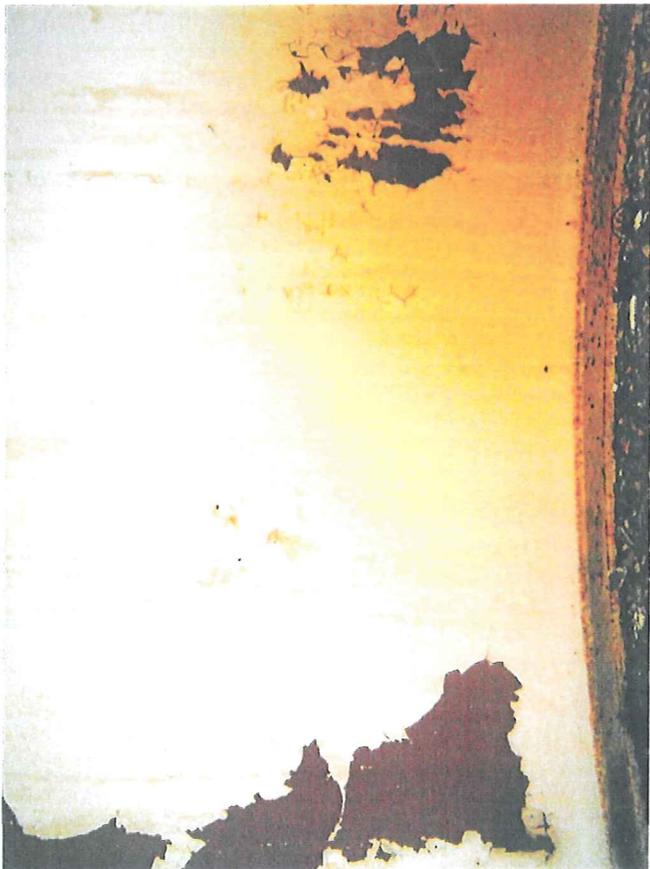
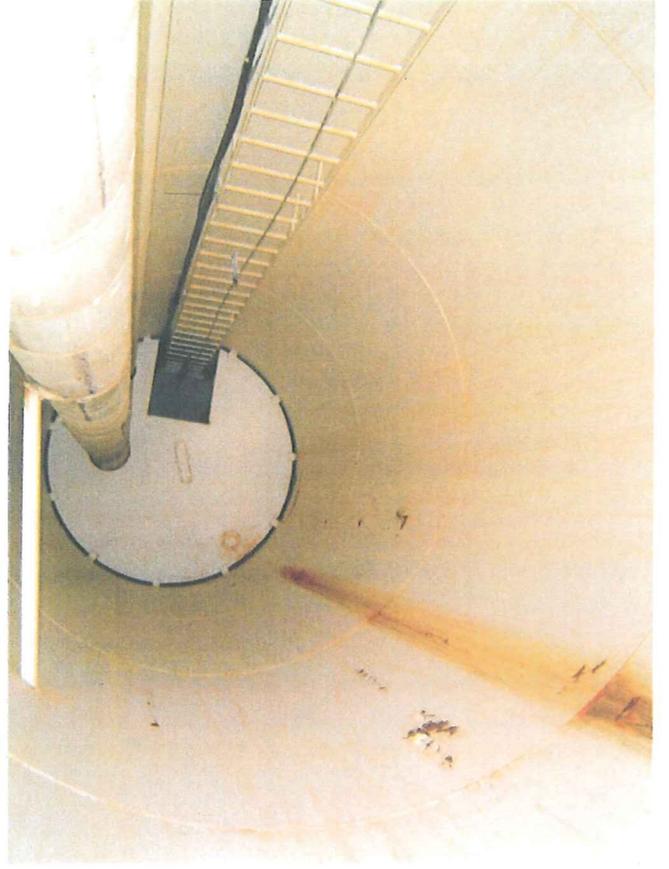
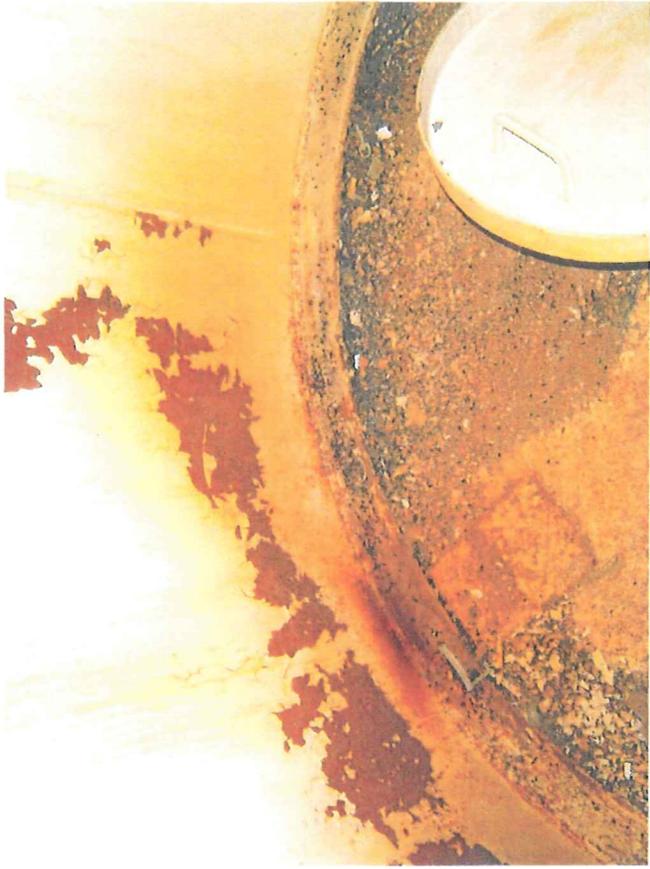
VICINITY MAP

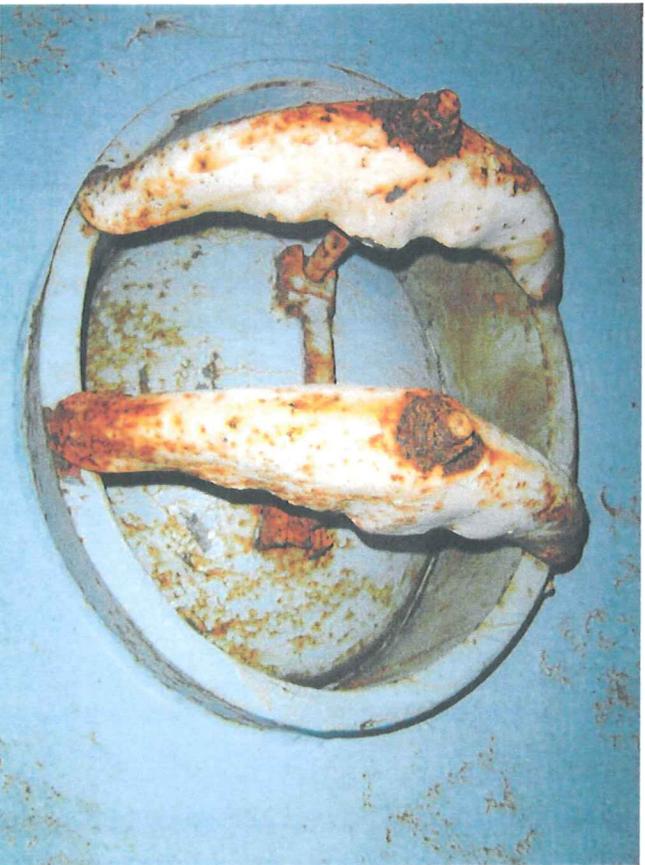


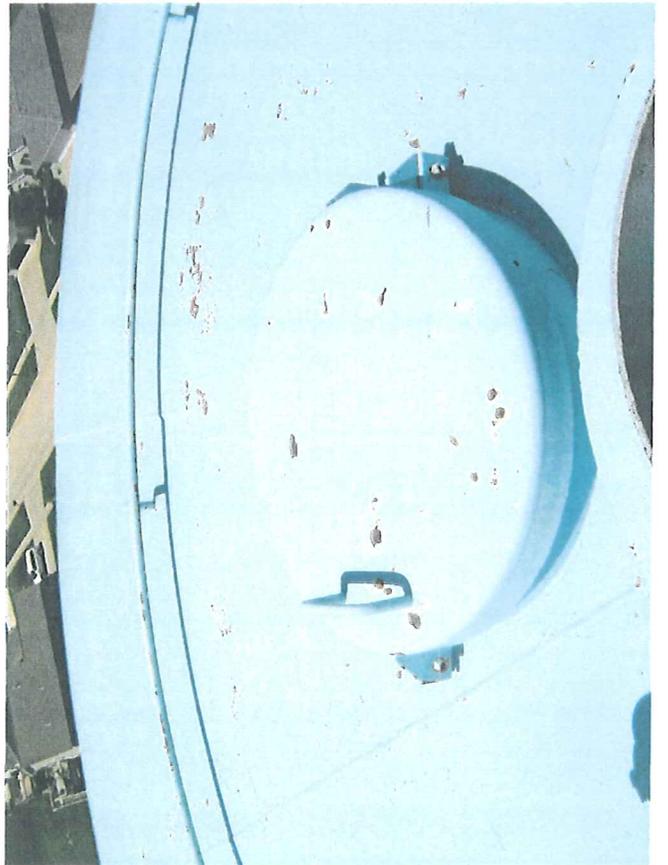
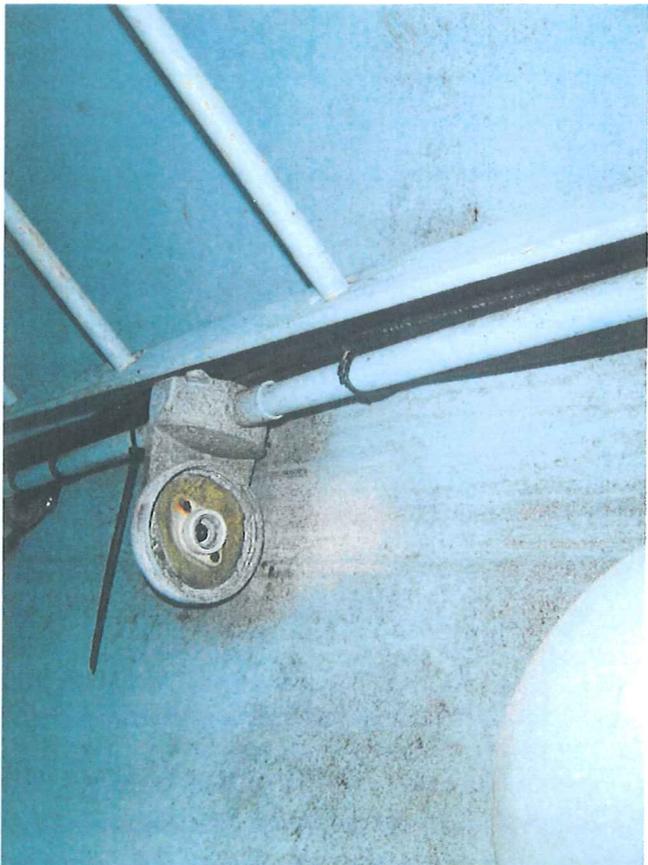
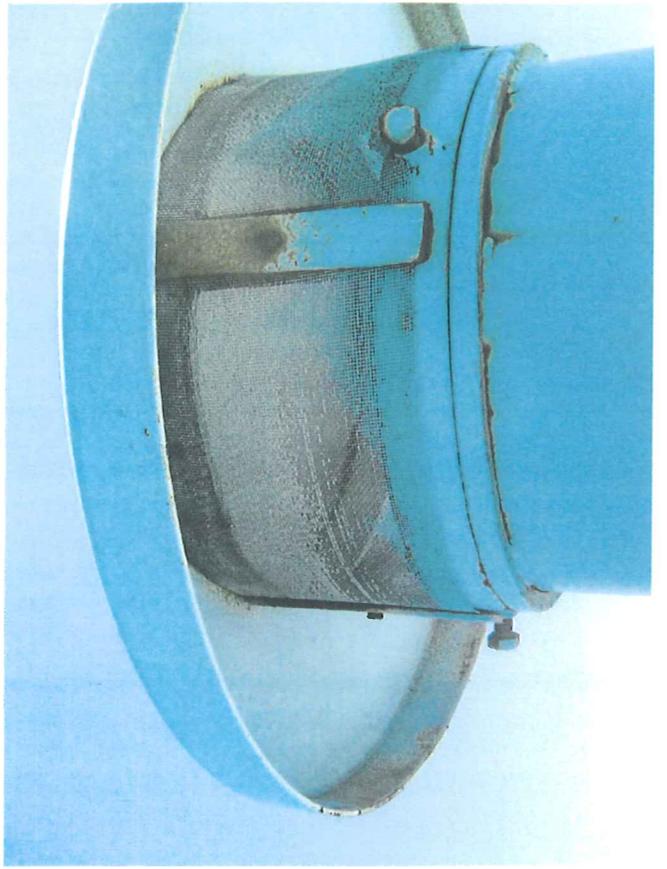
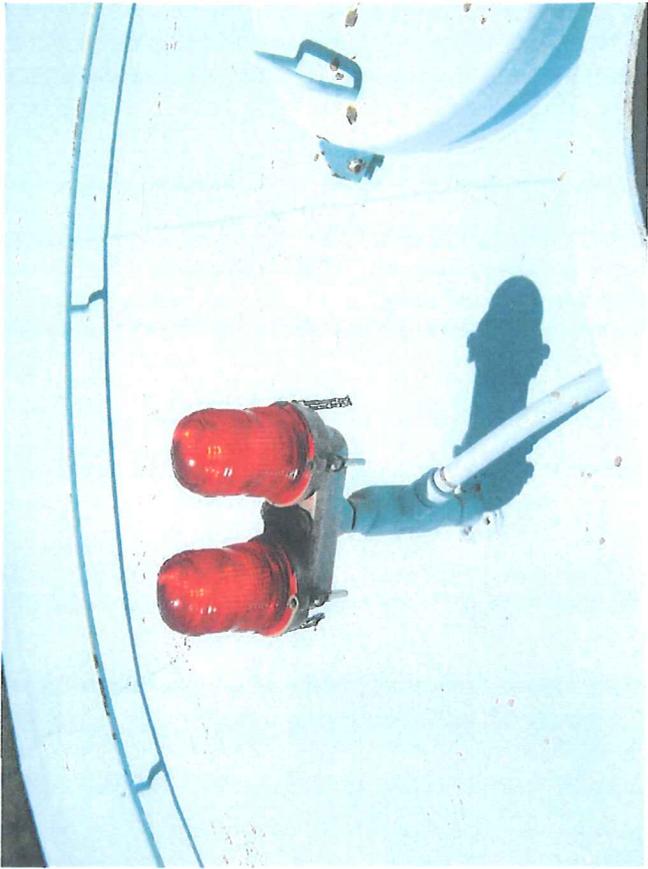


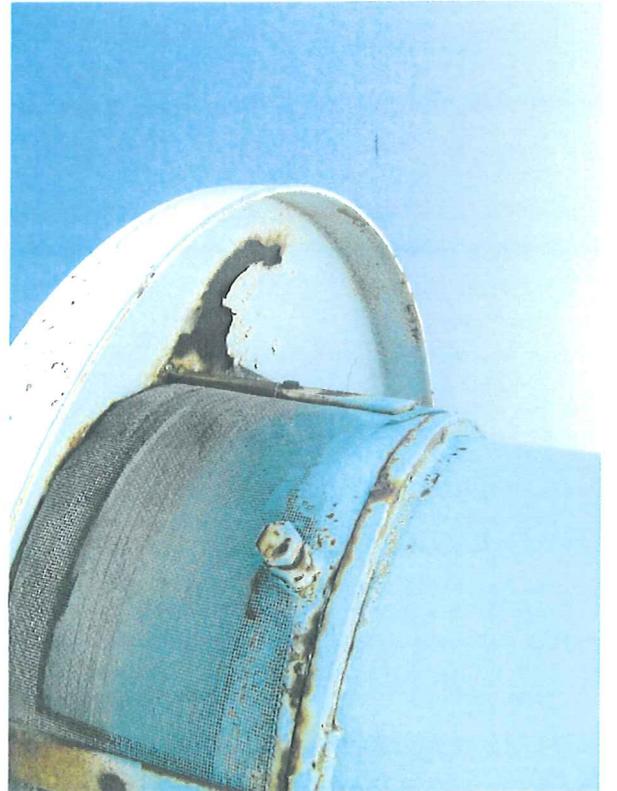


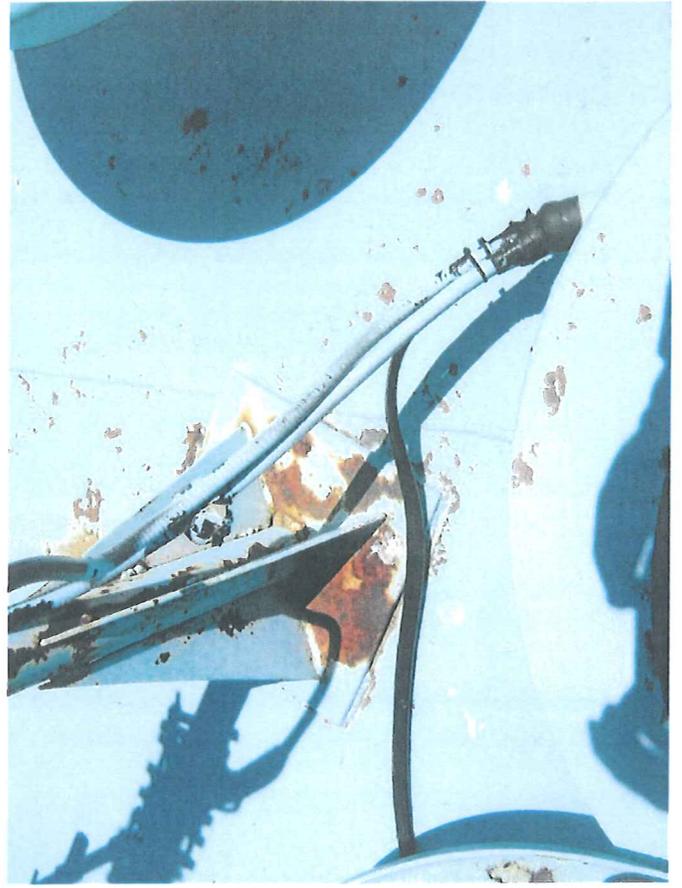


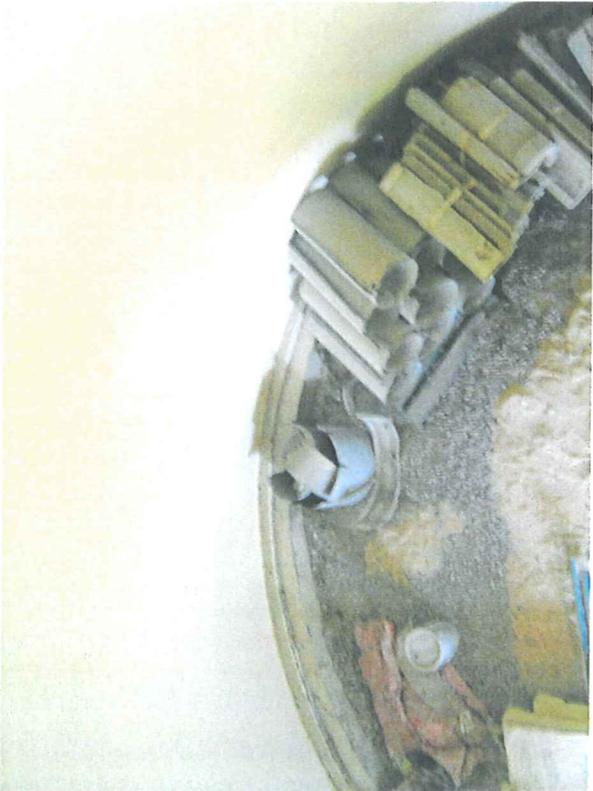
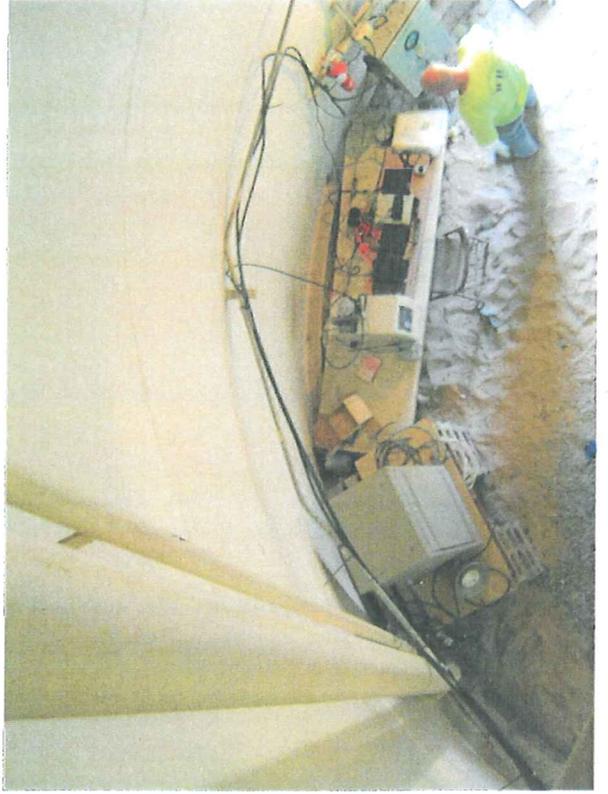
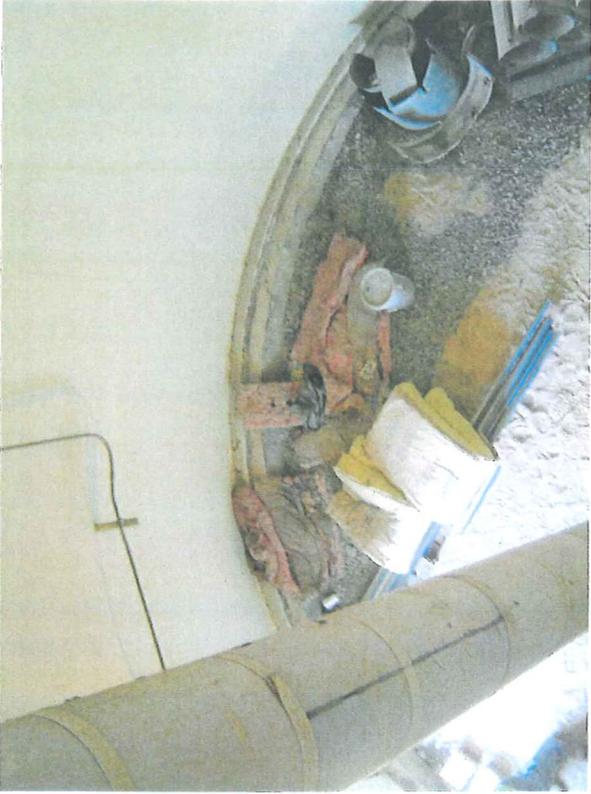






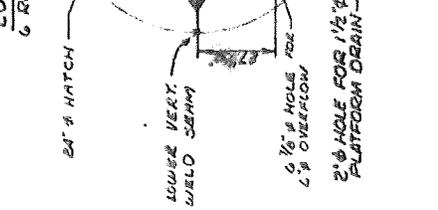
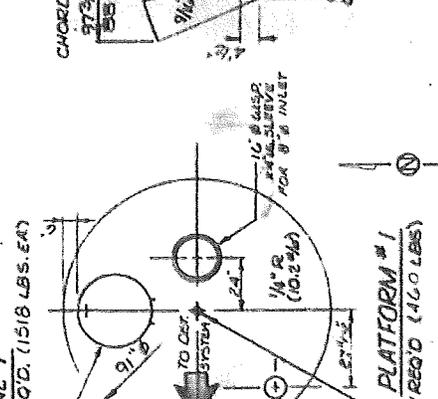
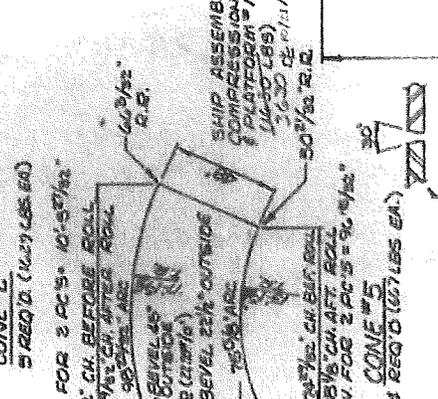
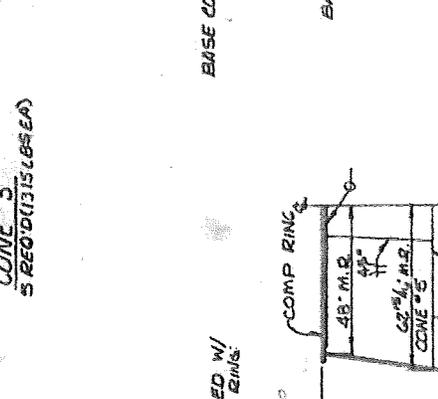
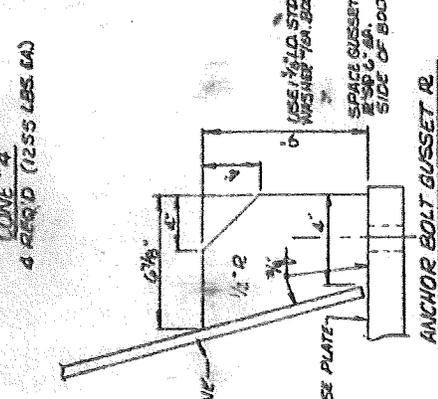
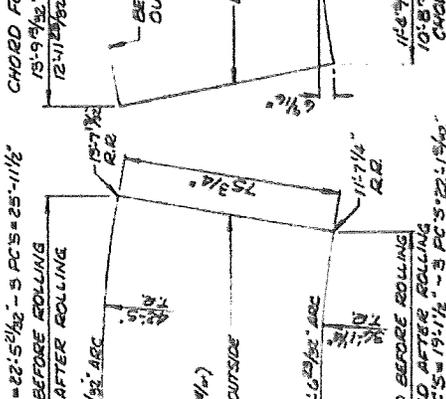
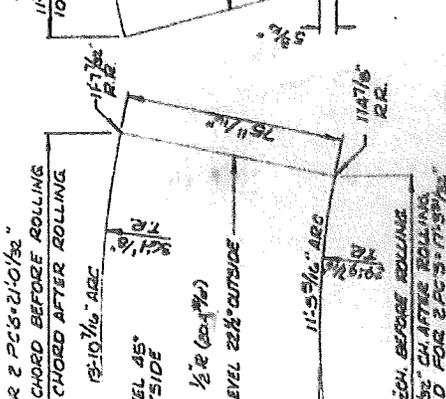
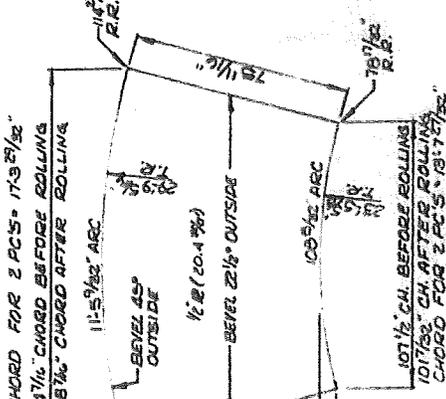
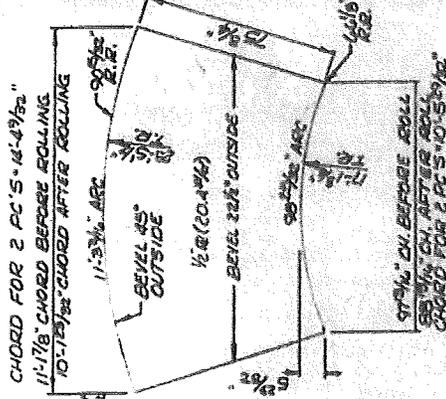






APPENDIX B

**TANK MANUFACTURER'S DRAWINGS
WATER TOWER REPAIR AND COATING 2011**



NO.	DATE	BY	REVISION

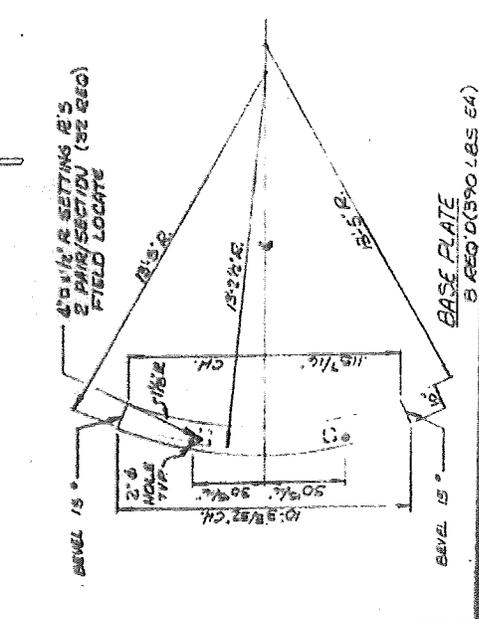
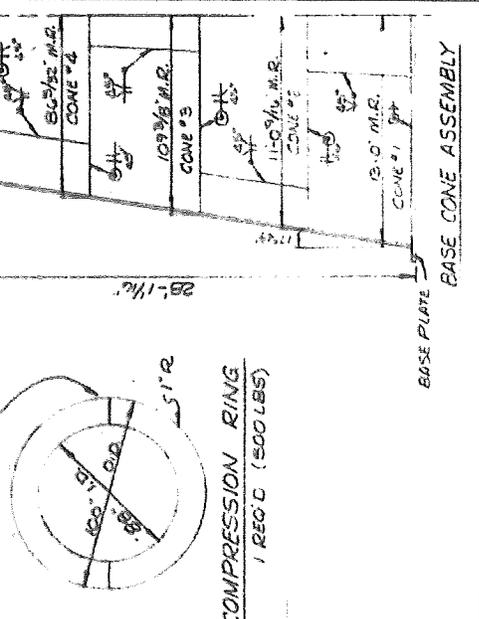
UNIVERSAL TANK & IRON WORKS, INC.
INDIANAPOLIS, INDIANA

ENGINEER APPROVAL

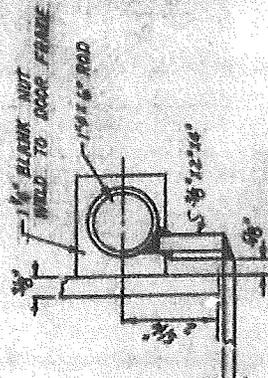
FOR: WEST BRANCH, IA.

BASE CONE DETAILS
250,000 GAL. SPHEROID

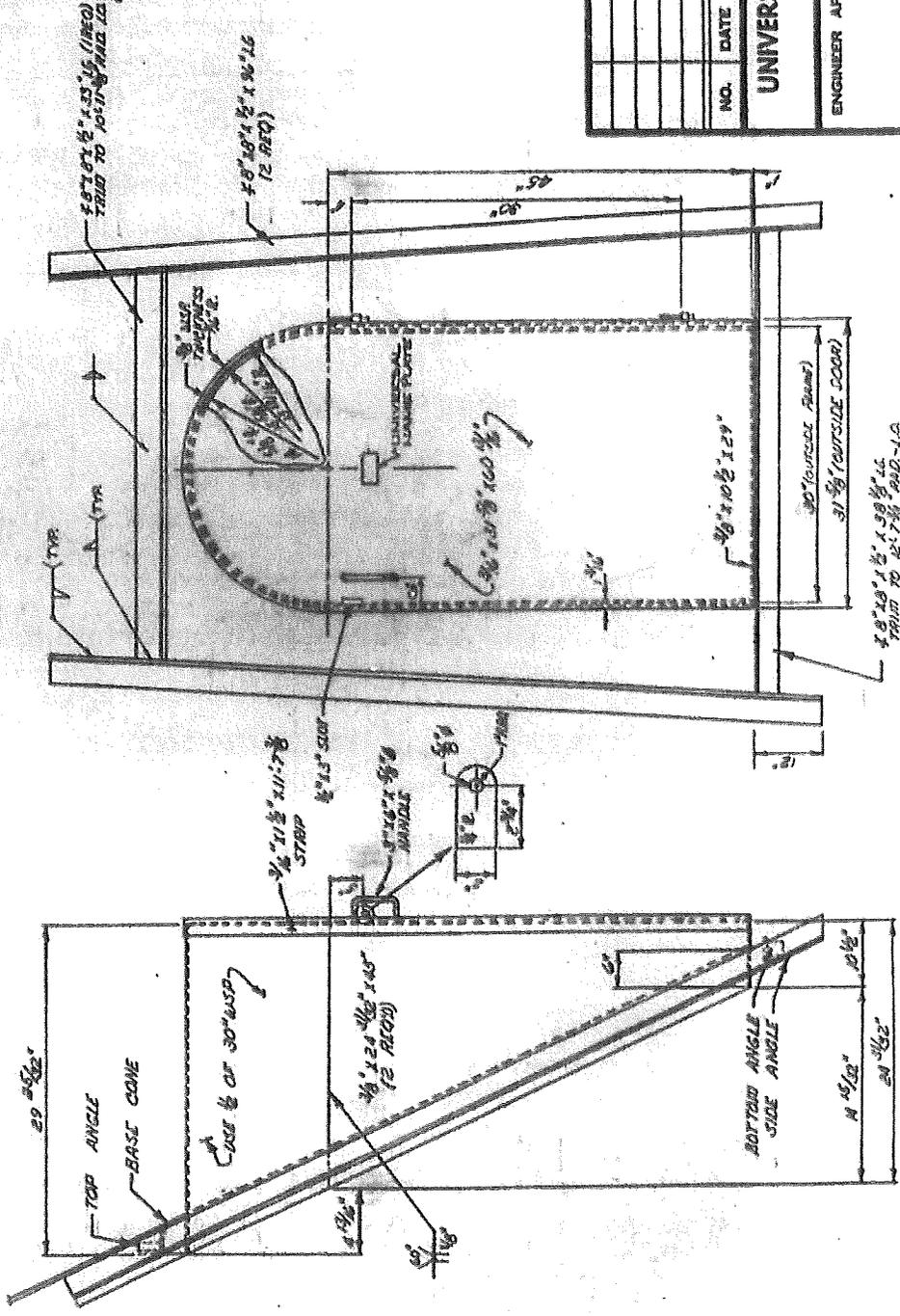
DATE: MAR 21 1978 SCALE: NONE
DRAWN BY: C.V.N. CHECKED:
JOB NO: 6655 SHEET 2 OF 8



ANCHOR BOLT GUSSET R
BASE CONE
BASE PLATE
SHIP ASSEMBLED W/
COMPRESSION RING
(PLATFORM #1)
48" M.R.
42" M.R.
36" M.R.
30" M.R.
24" M.R.
18" M.R.
12" M.R.
6" M.R.
COMP RING
BASE CONE ASSEMBLY
BASE PLATE
COMPRESSION RING
PLATFORM #1
FIELD LOCATE
BASE PLATE



PLAN VIEW OF HINGE
(2 REQ)



NO.	DATE	BY	REVISION

UNIVERSAL TANK & IRON WORKS, INC.
INDIANAPOLIS IN. ★

ENGINEER APPROVAL

30"X60" DOORWAY
250,000 GAL SPHEROID

FORM

WEST BRANCH, IA.

SCALE: NONE

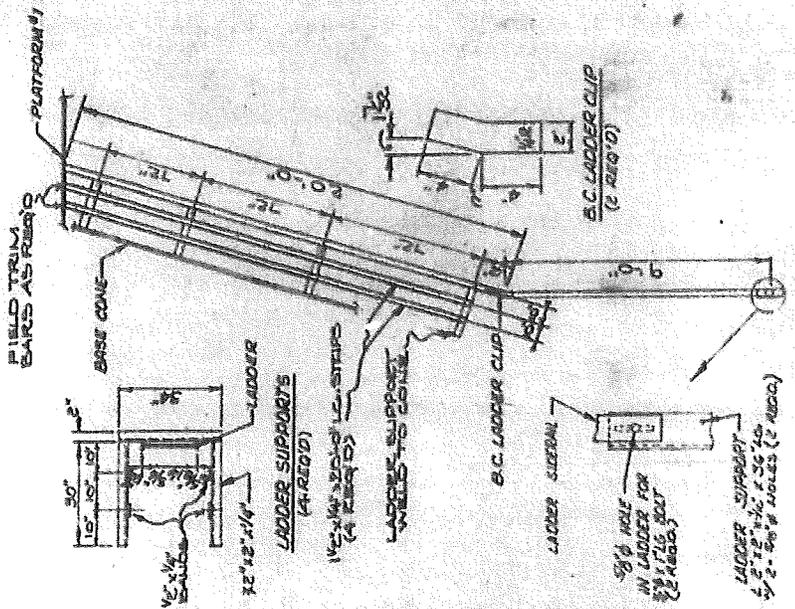
DATE: MAR 21 1978

DRAWN BY: KLM/DT

CHECKED: C.P.C.

JOB NO: 6655

SHEET 3 OF 8



BASE CONE LADDER
(1-20'-0\"/>

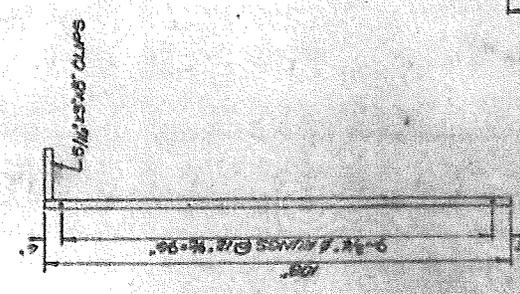
NO.	DATE	BY	REVISION

UNIVERSAL TANK & IRON WORKS, INC.
INDIANAPOLIS, IN.

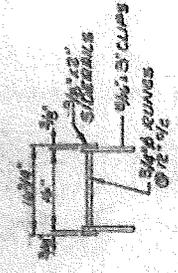
ENGINEER APPROVAL

LADDER DETAILS
250000 GALLON SPHEROID

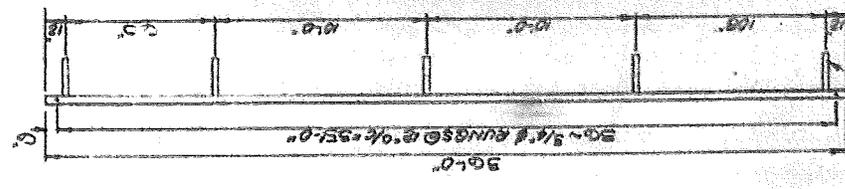
FOR: WEST BRANCH, IA
DATE: MAR 21 1973 SCALE: NONE
DRWN BY: G.D.N.L. CHECKED: C.O.L.
JOB NO: 6655 SHEET 8 OF 8



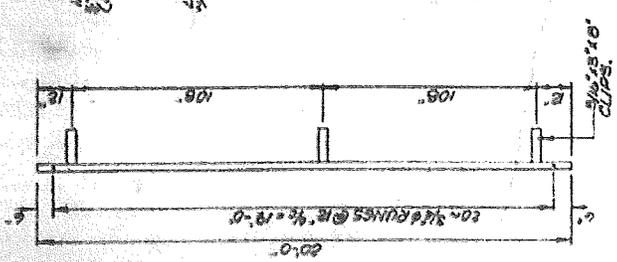
STEM TO ACCESS TUBE
LADDER
(1 REQ'D)



LADDER CROSS SECT
5/16\"/>



TANK LADDER &
ACCESS TUBE LADDER
BOTH LADDERS
2'-20'-0\"/>



STEM LADDER W/ 2 RAILS
(2-20'-0\"/>

EXTEND LADDER 36\"/>

INCLUDES SAFETY LINE
SLEEVE

