

UTILITY SERVICE co., inc.

Omaha NE. 68144 (402) 639-3428 Fax (478) 987-2991

Lexington Water Department 1,000,000 North Tank 400,000 South Tank Condition Assessment Report

City of Lexington, Nebraska

Prepared By:

John Snodgrass N.A.C.E. Certified Coatings Inspector Level 3 #17369 May 1, 2010

City of Lexington, Nebraska 1,000,000 Gallon "North" Water Tank



General Information

Introduction

On April 15, 2010 the 1,000,000 gallon elevated tank was inspected by Utility Service Co., Inc. The purpose of the inspection was to determine and document **coatings**, **structure**, **sanitation**, **and safety and security** conditions of the tank.

The information gained from this inspection will be used to compile recommendations for ongoing maintenance and to offer a contractual agreement to provide this service. In this report, you will find a description of the condition of this tank along with photographs to support the recommendations.

TANK DETAILS

CAPACITY:	1,000,000 Gallons	DESIGN:	TE Elevated	
INSPECTION DATE:	April 15, 2010	INSPECTOR:	John Snodgrass	
CONSTRUCTION STYLE:	Welded Steel	CONSTRUCTION DATE:	1970's	
BUILDER:	PDM	HEIGHT/ DIMENSION:	80 ft. to bottom of bowl	
EXTERIOR COATING:	Urethane	EXTERIOR LEAD PRESENCE:	Tested -Negative	
INTERIOR COATING:	Ероху	INTERIOR LEAD PRESENCE:	Tested -Negative	

ESTIMATED REPLACEMENT VALUE

The replacement cost of this tank is estimated at \$ 2,200,000.00.

SUMMARY AND RECOMMENDATIONS

SUMMARY

This tank is showing normal signs of deterioration. The exterior is in poor condition and needs to be renovated. The interior wet is in fair condition and should be maintained for the balance of its service life. Approximate service life remaining is 3-5 years. There are safety and sanitary concerns on this tank that need to be addressed at time of next renovation. With continual attention this tank will perform its designed function for many more years.

RECOMMENDATIONS

- Renovate exterior coating system with a compatible system in year 1.
- Blast and recoat interior coating system with an epoxy system in next 3-5 years.
- Remove existing vent and replace with an AWWA approved sanitary vent.
- Install a mid-rail to catwalk railing.
- Retrofit antennas with 6- inch standoffs before exterior renovation.
- Maintain cleanliness with bi-annual cleanings.



<u>Photo #1</u>



Photo #2





Photo #4



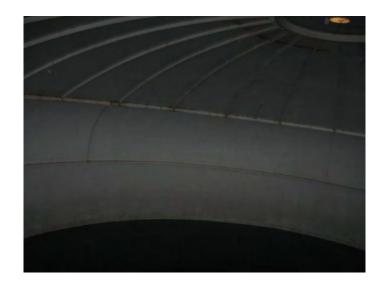


Photo #6





Photo #8



<u>Photo #9</u>

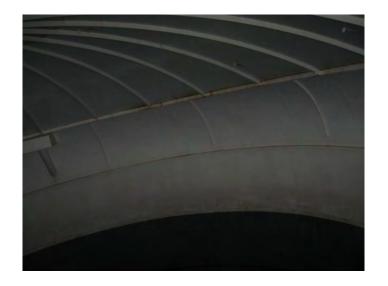


Photo #10

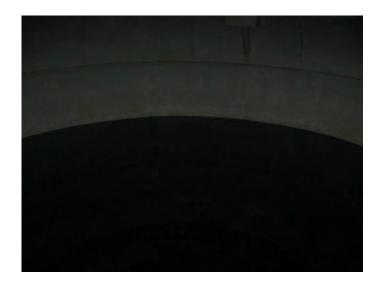




Photo #12

City of Lexington, Nebraska 400,000 Gallon "South" Water Tank



General Information

Introduction

On April 15, 2010 the 400,000 gallon elevated tank was inspected by Utility Service Co., Inc. The purpose of the inspection was to determine and document **coatings**, **structure**, **sanitation**, **and safety and security** conditions of the tank.

The information gained from this inspection will be used to compile recommendations for ongoing maintenance and to offer a contractual agreement to provide this service. In this report, you will find a description of the condition of this tank along with photographs to support the recommendations.

TANK DETAILS

CAPACITY:	400,000 Gallons	DESIGN:	Single Pedestal	
INSPECTION DATE:	April 15, 2010	INSPECTOR:	John Snodgrass	
CONSTRUCTION STYLE:	Welded Steel	CONSTRUCTION DATE:	1990	
BUILDER:		HEIGHT/ DIMENSION:	148 ft. to bottom of bowl	
EXTERIOR COATING:	Urethane	EXTERIOR LEAD PRESENCE:	Tested -Negative	
INTERIOR COATING:	Ероху	INTERIOR LEAD PRESENCE:	Tested -Negative	

ESTIMATED REPLACEMENT VALUE

The replacement cost of this tank is estimated at \$1,200,000.00.

SUMMARY AND RECOMMENDATIONS

SUMMARY

This tank is showing normal signs of deterioration. The exterior coating system should be renovated with a overcoat system before removal becomes necessary. The interior is in the middle of its service life and should be maintained and monitored for next 3-5 years when removal becomes necessary. There is also a sanitary concern on this tank that needs to be addressed. With continual attention this tank will perform its designed function for many more years.

RECOMMENDATIONS

- Overcoat exterior coating system with a compatible system before removal becomes necessary in year 1-2.
- Blast and recoat interior with an epoxy system in next 3-5 years.
- Replace 150 ft of riser pipe with an expansion joint below tank bowl.
- Install a new AWWA compliant roof vent due to sanitary concerns.
- Maintain cleanliness with bi-annual cleanings.



<u>Photo #1</u>



Photo #2





Photo #4





Photo #6



Photo #7



Photo #8



Photo #9



Photo #10



<u>Photo #11</u>



Photo #12



<u>Photo #13</u>



Photo #14





11624 Cedar Street Omaha, NE 68144 (402) 639-3428 Fax (478) 987-2991

CITY OF LEXINGTON, NEBRASKA

WATER STORAGE TANK MAINTENANCE PROGRAM

For

1,000,000 GALLON NORTH TANK 400,000 GALLON SOUTH TANK

PREPARED BY:
John Snodgrass
WATER TANK CONSULTANT

MAY 1, 2010

MAINTENANCE PROGRAM SUMMARY

The maintenance requirements of steel water storage tanks as well as concrete tanks in the state of Nebraska have become even more important over the past several years. These regulations come from both the state and federal levels of government. Controls over inspections and cleaning of tanks, materials used to recoat tanks, disposal of materials taken from tanks, and qualifications of workers performing maintenance have all come into play to cause the frequency of maintenance to increase as well as the cost. Our ongoing program of care provides full coverage for all aspects of tank maintenance. Under the maintenance program, annual inspections are conducted to determine what repairs are needed and at what interval these renovations will be required.

These annual inspections in accordance with AWWA recommendations evaluate the following:

- STRUCTURAL The condition of the tanks foundation and structure.
- COATINGS The condition of the exterior and interior coatings.
- SANITARY The condition of the screens, vents, and overflow.
- SAFETY The condition of all safety related items.
- SECURITY The condition of security related items.

Each of the tanks is biennially scheduled to be drained, pressure washed (to remove any debris or sediment), disinfected, and fully inspected. The program provides for <u>all</u> future renovations. This includes surface preparation, coating application, inspection, and waste removal. Also provided in the program are repairs, correction of vandalism, and regular maintenance. The repairs range from painting out graffiti to more complex repairs such as welding punctures and recoating to ensure the preservation of steel and the watertight condition of the tanks. All engineering services needed are also provided as part of the maintenance program at no added cost.

The program assures the owner that the tanks are always in compliance with state and federal regulations and that the tanks are attractive and provides a safe and healthy environment to store processed water. If the tanks are initially in poor condition, they are renovated so that they may be accepted in the program. The initial cost for renovations can be spread over several years to soften the financial impact and to make the program more affordable to the tank owner. Once this up front cost is taken care of, the annual fee

dramatically drops to a level of which it will remain constant for a three-year period. At the end of this three-year period, the fee may be adjusted to reflect inflation. There is a 5% per year cap, or maximum increase, which assures the customer that the program cost will be contained according to the inflationary rate of the period. This three-year adjustment increment also gives the customer a three-year level budget and enables future fees to be calculated.

A contract for a customized maintenance program designed for the City of Lexington will be presented to you for consideration. This contract will capitalize on the existing strengths of the condition of the water storage tank and remedy the deficiencies identified. All renovation and recommended repairs identified in the inspection report will be included in the contract.

WHAT THE MAINTENANCE PROGRAM COVERS

- 1) All costs associated with the maintenance and upkeep of the tank.
- 2) All costs associated with the planning and evaluation for the short-term and long-term maintenance needs.
- 3) All costs associated with the exterior cleaning and painting.
- 4) All costs associated with the interior cleaning and painting.
- 5) All costs needed for exterior repairs.
- 6) All costs needed for interior repairs.
- 7) All costs associated with logo and artwork. Finish colors selected by the owner.
- 8) All costs to ensure the tank is sound, watertight and in good working order.
- 9) All costs associated with locking and securing the tank, including the installation of anti-climbing devices.
- 10) All costs associated for annual inspection of the tank.
- 11) All costs associated with the biennial washout and disinfection of the tank.
- 12) All costs associated with the handling of any emergency service requirements.
- 13) All costs associated with ensuring the tank is in good working order, safe, sanitary, and appreciating in value.

STATEMENT OF QUALIFICATIONS

Since 1963, Utility Service Co., Inc. has worked hand in hand with Municipal, County, and Industrial tank owners to become the "Proven Leader of Tank Maintenance". In order to provide all aspects of maintenance included in our program to the City of Lexington, Nebraska the following qualifications and technical support are required.

MAJOR RENOVATION PROJECTS

Currently, we have over 95 maintenance crews at our disposal. Each crew of two to five men is equipped with a full range of equipment needed to complete both major and minor cleaning and painting projects. The majority of these crews have a crew foreman with over 10 years experience in water tank maintenance. All service crews operate in accordance with Company safety procedures.

SERVICE CENTERS

For the City of Lexington, the primary Service Center is located in Kansas. This Service Center will coordinate all major production activities.

All major renovation projects will be assigned to this Service Center and coordinated through that office. The Service Center's address and phone number are as follows:

> Utility Service Co., Inc. Randy Percy, Manager P.O. Box 362. Pittsburg, KS 66762 (800) 835-0145 Fax: (620) 232-1558

> Utility Service Co., Inc. Omaha Office John Snodgrass 11624 Cedar Street Omaha, NE 68144 (402) 639-3428

Fax: (478) 987-2991

MANAGEMENT OF PROGRAMS

Managing the programs for the City of Lexington will fall under the responsibility of the Corporate Office located in Perry, Georgia. Each tank and each major project will be assigned an engineer to examine the tanks and implement quality control. The engineers will be responsible for engineering inspections and quality control assurance programs.

Managing the job schedules, service schedules, and general financial concerns shall be completed at the Corporate Office. Officers of Utility Service Co., Inc. is listed as follows:

Chris Boyd President

Sheldon Shelton Vice President- Sales

Deborah Wilson Chief Financial Officer

The Corporate Office address and phone numbers are as follows:

Utility Service Co., Inc.
P. O. Box 1354,
535 Courtney Hodges Blvd.
Perry, GA 31069

(478) 987-0303 Watts: 800-223-3695 Fax: (478) 987-2991

www.utilityservice.com

Maintenance Program Proposal

MAINTENANCE PROGRAM LISTING

Currently, Utility Service Co., Inc. has over 5,000 tanks entrusted to our care under the identical program submitted to the City of Lexington. The following is a partial listing of systems presently under our program.

City of Sidney, NE Village of Farnam, NE

5 Tanks 1 Tank

Mr. Gary Person Mr. Rod Kline 308-254-5300 308-569-2367

Date of Contract(s): 9-10-98 Date of Contract(s): 6-15-93

Village of Adams, NE Village of Brady, NE

1 Tank 1 Tank

Darwin Buss Mr. Keith Wagnitz 402-988-8049 308-584-2216

Date of Contract(s): 6-22-05 Date of Contract(s): 6-2-04

City of Holdrege, NE Nemaha Co #2 RWD

1 Tank Johnson, NE Mr. Mark Schultz 3 Tanks

308-995-6547 Ms. Pam Alexander Date of Contract(s): 7-9-07 402-274-7375

Date of Contract(s): 4-12-06

Village of Trenton, NE Village of Dubois, NE

1 Tank 1 Tanks

Harlan Williams Mr. Carl Smith 308-334-5474 402-859-4504

Date of Contracts: 1-5-89 Date of Contracts: 8-27-96

Village of Phillips, NE Village of Shubert, NE

1 Tank 1 Tank

Mr. Scott Hooley George Kettner 402-631-9540 402-883-2428

Date of Contracts: 12-16-03 Date of Contracts: 7-22-05

Village of Palmyra, NE

1 Tank

Mr. Thad Thompson

402-780-5531

Date of Contract(s): 8-1-2005

Village of Gresham, NE

1 Tank

Mr. Larry Rhodes

402-735-7385

Date of Contract(s): 11-1-05

City of Alma, NE

1 Tank

Mr. Jerry Dietz 308-928-2242

Date of Contract(s): 1-12-98

City of Geneva, NE

1 Tank

Mr. Gerald Kerl 402-759-3109

Date of Contract(s): 7-19-07

Village of Gurley, NE

1 Tank

Mr. Mark Lind 308-884-2213

Date of Contract(s): 12-20-05

Village of Hayes Springs, Ne

1 Tank

Mr. John Horracks 308-638-7275

Date of Contract(s): 8-3-07

City of Humboldt, NE

1 Tank

Mr. Ken Kuhlman 402-862-2171

Date of Contract(s): 11-4-05

Village of Lodgepole, NE

1 Tank

Mr. Preston Richards

308-483-5353

Date of Contract(s): 2-12-09

Village of Dalton, NE

1 Tank

Mr. Lloyd Searles 308-377-2413

Date of Contract: 5-10-2010

Village of Gresham, NE

1 Tank

Mr. Larry Rhodes 402-735-7385

Date of Contract: 11-1-2005

TANK INSPECTION SCHEDULE

Under Utility Service Company's long-term maintenance program, each tank is inspected yearly in accordance with AWWA guidelines. There are two types of inspections.

- 1. Engineering Inspections
- 2. Washout/Inspections

These inspections alternate from one year to the next. In other words, one year the tank will receive an engineering inspection and the next year, it will receive a washout inspection.

ENGINEERING INSPECTIONS

An experienced tank inspector conducts the engineering inspection, and a qualified tank engineer prepares the photos and report. The inspection is to determine:

- The condition of the exterior and interior coatings
- That the tank is in compliance with all safety and sanitary regulations
- That the tank's structural integrity is intact
- What repairs/touchups may be needed

Once this inspection is completed, a report of the findings is made and given to the tank owner. This report can serve as a yearly report on the condition of the tank, which the owner may wish to forward to the Nebraska Department of Health and Human Services.

Any repairs/touchups caused by vandalism or normal deterioration will be noted by the inspector and scheduled and completed as soon as possible.

WASHOUT INSPECTIONS

A service crew conducts the washout inspection when the tank is fully drained. The crew removes any sediment/sludge that has collected in the storage tank. Then the bowl and lower sidewall are thoroughly cleaned with the use of a pressure washer. Once the tank has been cleaned, any needed repairs/touch-ups are made. Then photographs documenting the condition of the interior are taken. The final stage of the process is to replace the manway gasket and to disinfect the interior per A.W.W.A. Spray Method #2. Now the tank is ready to be put back into service.

A report of the findings and photographs are given to the tank owner. This report can be used as documentation for the condition of the tank and proof of compliance for the Nebraska Department of Natural Resources.

During the washout/inspection, any needed repairs or touch-ups due to vandalism or normal deterioration will be completed. If the repairs can't be made at this time, the corrections will be scheduled and completed as soon as possible.

MAINTENANCE CONTRACT - GENERAL INFORMATION

CONTRACT DOCUMENTS

Each tank in the program will have a separate contract document. Each tank's contract document will be submitted in a cover binder and labeled on the exterior. Each binder will include two executed contract documents.

CONTRACT TIME

The maintenance program is a one-year contract, which can be extended indefinitely. The contract will be automatically renewed unless officials of the City of Lexington notify Utility Service Co., Inc. in writing of intent to cancel the contract.

PAYMENT AND PAYMENT TERMS

Each tank under the program has a set annual fee. This fee is outlined on Page 2 of each document. When major up front renovation work is required (which would adjust the base fee), the fee changes will be clearly stated in the Addendum on Page 3 of each document.

City Officials shall determine payment terms on each tank. Annual fees may be paid either on a semi-annual or lump sum basis. City Officials shall notify the Company of selected payment schedule.

ANNUAL FEE ADJUSTMENTS

Tanks entering the maintenance program have an established base fee stated on Page 2 of each document. The base fee may be adjusted as a result of inflation or deflation. The maximum increase or decrease is limited to 5%.

MAINTENANCE PROGRAM QUESTIONS

During the course of review of the Utility Service Co., Inc.'s maintenance program for the City of Lexington, any questions or clarification regarding the maintenance program submitted may be addressed to any of the following Company Representatives.

Chris Boyd Phone: 478-988-5231 President Watts: 800-223-3695

Sheldon Shelton Phone: 800-223-3695 Vice President Sales Fax: 478-987-2991

E-mail: sshelton@utilityservice.com

John Snodgrass Phone: 402-639-3428 Nebraska Representative Fax: 478-987-2991

E-mail: jsnodgrass@utilityservice.com

CITY OF LEXINGTON, NE

WATER TANK MAINTENANCE PROGRAM

HOLD HARMLESS AGREEMENT

The Company agrees to indemnify the Owner and hold the Owner harmless from any and all claims, demands, actions, damages, liability, and expense in connection with loss of life, personal injury, and/or damage to property by reason of any act, omission, or representation of the Company or its' subcontractors, agents, or employees in the execution of this Contract.

John Snodgrass	
Utility Service Company, In	c.
Witness	
Withess	
Dated:	

City of Lexington, Nebraska MAINTENACE PROGRAM SCHEDULE OF WORK & FEEs

TANK	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
1,000,000 Gallon North Tank	Complete Exterior Renovation and Repairs	Engineering Inspection and Report	Washout Inspection and Report	Complete Interior Renovation and any necessary repairs	Washout Inspection and Report	Engineering Inspection and Report
	\$ 66,196 Years - 1-5 -					\$21,597
400,000 Gallon South Tank	All Recommended Repairs per Inspection Report.	Complete Exterior Renovation	Washout Inspection and Report	Engineering Inspection and Report	Complete Interior Renovation and any necessary Repairs	Washout Inspection and Report
	\$ 38,649 Years - 1-5 -					\$ 14,310
Annual Cost:	\$104,845	\$104,845	\$104,845	\$104,845	\$104,845	\$35,907