

AMENDING AN AGREEMENT WITH ERA VALDIVIA FOR PAINTING AND REPAIR OF THE SOUTH WATER TOWER IN THE AMOUNT OF \$440,000.

WHEREAS, the City of DeKalb (the "City") is a home rule unit pursuant to Article VII, Section 6(a) of the 1970 Illinois Constitution and may exercise any power and perform any function pertaining to its government and affairs; and

WHEREAS, on March 22, 2021, the City's corporate authorities approved Resolution 2021-024, which awarded a bid to Era Valdivia for the painting of the City's South Water Tower located at 2851 Corporate Drive (the "South Water Tower Painting Contract"); and

WHEREAS, Era Valdivia and the City's consulting engineer recommend removing the existing overcoat to prevent the premature failure of any new paint application in accordance with the bid attached hereto and incorporated herein as Exhibit A (the "Bid"); and

WHEREAS, the City's corporate authorities find that it is in the City's best interests for the protection of public health, safety, morals and welfare to approve the Bid; and

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF DEKALB, ILLINOIS:

SECTION 1: The City's corporate authorities approve Option 2 of the Bid and authorize and direct the City Manager to enter into an amendment of the South Water Tower Painting Contract with Era Valdivia to perform the scope of services set forth in Option 2 of the Bid for an amount not to exceed \$440,000.

SECTION 2: This resolution and each of its terms shall be the effective legislative act of a home rule municipality without regard to whether such resolution should (a) contain terms contrary to the provision of current or subsequent non-preemptive state law, or (b) legislate in a manner or regarding a matter not delegated to municipalities by state law. It is the intent of the corporate authorities of the City of DeKalb that to the extent that the terms of this resolution should be inconsistent with any non-preemptive state law, that this resolution shall supersede state law in that regard within its jurisdiction.

SECTION 3: This resolution shall be in full force and effect from and after its passage and approval as provided by law.

PASSED BY THE CITY COUNCIL of the City of DeKalb, Illinois at a Regular meeting thereof held on the 26th day of July 2021 and approved by me as Mayor on the same day. Passed by a 6-0-2 roll call vote. Aye: Morris, Smith, Perkins, Verbic, Faivre, Barnes. Nay: None. Absent: Larson, McAdams.




COHEN BARNES, Mayor

ATTEST:


Ruth A. Scott, Executive Assistant



KLM ENGINEERING, INC.

1976 Wooddale Drive, Suite 4 | Woodbury, MN 55125
Phone (651) 773-5111 | Fax (651) 773-5222

July 27, 2021

Bryan Faivre
Water Division
1216 Market Street
DeKalb, Illinois 60115

By Email

KLM Project No: 4344-21

Description: 2MG Hydropillar (South Tower) Located in DeKalb, Illinois. KLM Project 4344-21 and Contract NO. 99-19-02-03-20.

Contractor: Era-Valdivia Contractors, Inc.

Change Order No. 1 – The following change order is in addition to the original contract.

- Provide a full containment system with negative air and top bonnet, perform a full removal of the coatings and an exterior surface prep to an SSPC SP-6, and apply the following exterior coating system:
 - Full Primer -Zinc- 2 K (2.5-3.5 Mils)
 - Full 1st Intermediate Epoxy 646 (4.0-6.0 Mils)
 - Full 2nd Intermediate Urethane- Acrolon 218 (3.0-5.0 Mils)
 - Full Finish- Fluoropolymer HS 100 (2.0-3.0 Mils)
 - Logos/Lettering- Fluoropolymer HS 100 (2.0-3.0 Mils)

Total Additional Authorized Work: \$ 440,000.00

Original Contract Amount	\$ 1,011,056.00
Change Order No. 1	\$ <u>440,000.00</u>
New Contract Balance	\$ 1,451,056.00



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APPROVALS:

City of: DeKalb

By: [Signature] Title: City Manager Date: 7/29/2021

Contractor: Era-Valdivia Contractors, Inc.

By: [Signature] Title: President Date: July 28th 2021

KLM Engineering, Inc.:

By: [Signature] Title: Project Field Supervisor Date: July 27, 2021

Exhibit A

RESOLUTION 2021-024

PASSED: MARCH 22, 2021

AUTHORIZING THE AWARD OF A BID TO ERA VALDIVIA IN THE AMOUNT OF \$1,011,056 FOR PAINTING AND REPAIR OF THE SOUTH WATER TOWER.

WHEREAS, the City of DeKalb (the "City") is a home rule unit of local government pursuant to Article VII, Section 6, of the Illinois Constitution of 1970; and

WHEREAS, the City negotiated a bid price with Era Valdivia Contractors, Inc. (the Contractor") in an amount not to exceed \$1,011,056 for the painting and repair of the City's south water tower located at 2851 Corporate Drive (the "South Water Tower Project"); and

WHEREAS, the City's corporate authorities find that it is in the best interests of the City's welfare, public health, and safety to reject all bids for the South Water Tower Project and approve a contract with the Contractor for the South Water Tower Project in an amount not to exceed \$1,011,058; and

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF DEKALB, ILLINOIS:

SECTION 1: The City's corporate authorities reject any and all bids responsive to the City's request for bids for the South Water Tower Project released on December 11, 2020 and waive any and all competitive bid requirements for the South Water Tower Project. The City's corporate authorities also approve, authorize, and ratify a contract with the Contractor for the South Water Tower Project in an amount not to exceed \$1,011,056, subject to the terms and conditions of the contract contained in the City's request for bids for the South Water Tower Project. The City's corporate authorities further authorize and direct the City Manager or his designee to perform all acts and execute all agreements which may be necessary to effectuate the contract approved pursuant to this Section.

SECTION 2: This resolution and each of its terms shall be the effective legislative act of a home rule municipality without regard to whether such resolution should (a) contain terms contrary to the provisions of current or subsequent non-preemptive state law, or (b) legislate in a manner or regarding a matter not delegated to municipalities by state law. It is the intent of the corporate authorities of the City of DeKalb that to the extent that the terms of this resolution should be inconsistent with any non-preemptive state law, that this resolution shall supersede state law in that regard within its jurisdiction.

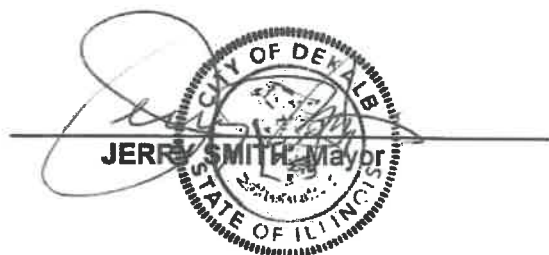
SECTION 3: This resolution shall be in full force and effect from and after its passage and approval as provided by law.

PASSED BY THE CITY COUNCIL of the City of DeKalb, Illinois at a Regular meeting thereof held on the 22nd day of March 2021 and approved by me as Mayor on the same day. Passed by a 7-0-1 roll call vote. Aye: Morris, Smith, Perkins, McAdams, Verbic, Faivre, Mayor Smith. Nay: None. Absent: Finucane.

ATTEST:



RUTH A. SCOTT, Executive Assistant



JERRY SMITH, Mayor

Exhibit B

Dixon Engineering, Inc.

Maintenance Inspection

2,000,000 Gallon Hydropillar
(South)

DeKalb, Illinois

Inspection Performed: April 8, 2020
Reviewed by Joseph T. Hoban P.E.: May 2, 2020

Dixon Engineering, Inc.
4811 S. 76th St. Ste. 109, Greenfield, WI 53220

Phone (414) 529-1859
Fax (414) 282-7830
<http://www.dixonengineering.net>
Wisconsin@dixonengineering.net

CONCLUSIONS:

1. The exterior coating is an acrylic overcoat system. The coating is in fair to poor condition overall. Coating deterioration includes spot failures to the substrate with rust undercutting, topcoat delamination, and rust bleedthrough. There are numerous coating failures on the column and roof.
2. The dry interior coating is an epoxy system. The coating is in good condition on the column, fair condition on the platforms and bowl, and poor condition in the access tube. Coating deterioration includes spot failures to the substrate, topcoat delamination, and rust bleedthrough.
3. The wet interior coating is an epoxy system. Below the high-water level coating deterioration includes blistering on the sidewall. Above the high-water level coating is deteriorating at the open lap seams, at the gaps between the roof stiffeners and roof plate, and on the roof stiffeners.

RECOMMENDATIONS:

Annually inspect the roof vent, hatches, and any other health or security items on the structure. The work could be performed by in-house personnel or contracted as part of a regular maintenance program.

Complete the recommended work in one to two years. The repairs and upgrades should be completed during the next major tank rehabilitation project when coating repairs are made.

1. High pressure water clean and overcoat the exterior with a urethane system. The estimated cost is \$350,000.
2. Spot abrasive blast clean the topside of the platforms, the entire access tube, and other spot coating failures in the dry interior. Spot repaint all prepared surfaces with an epoxy coating system. The estimated cost is \$40,000.
3. Abrasive blast clean the wet interior roof and repaint with an epoxy system. The estimated cost is \$150,000.
4. As an alternate, abrasive blast clean the entire wet interior and repaint with an epoxy system. The estimated cost is \$350,000.
5. Install a suspended ring, impressed current cathodic protection system in the wet interior. The estimated cost is \$30,000.
6. Abrasive blast clean the pit piping and repaint with an epoxy system. The estimated cost is \$4,000.

7. Coat the foundation to help prevent further deterioration. The cost would be incidental to exterior painting.
8. Repair areas of missing or damaged grout between the steel baseplate and the concrete foundation. The cost would be incidental to the next painting project.
9. Install a handrail on the roof to meet current Illinois EPA requirements. Install a painter's railing on the roof around the new handrail. The estimated cost is \$15,000.
10. Install additional rigging couplings on the roof for temporary fall prevention of workers in the wet interior. The cost would be incidental to the next painting project.
11. Modify the overflow pipe discharge so it points downward to bring it into compliance with current Illinois EPA requirements. Install a flap gate at the discharge. The estimated cost is \$3,000.
12. Replace the wet interior roof hatch with a 30 inch diameter hatch. Install a gasket on the wet interior roof hatch to meet current Illinois EPA requirements. The estimated cost is \$4,000.
13. Replace the access tube roof hatch with a 30 inch diameter hatch. The estimated cost is \$4,000.
14. Install a hinged cover over the ladder opening at the top platform. The estimated cost is \$4,000.
15. Replace the roof vent with a pressure vacuum vent to meet current Illinois EPA requirements. The estimated cost is \$6,000.
16. Adjust the fall prevention device on the wet interior ladder. The cost would be incidental to the next painting project.
17. Replace the deteriorated wet interior ladder rungs above the high-water level. The estimated cost is \$1,000.

A DISCUSSION ON RESCUE AND RETRIEVAL OPERATIONS FROM ELEVATED PEDESTAL STORAGE TANKS

Working on elevated water storage tanks is inherently dangerous. OSHA regulations give guidelines for the climbing on elevated structures. Contractors and Engineers/Consultants are responsible for their own employees, but even with safety training and proper equipment, accidents can occur. Most rescue squads are local or neighboring fire departments, with some departments having more experience than others. Water storage tanks are designed to store water and are not suited for rescue or retrieval convenience. We recommend that you meet with your local rescue personnel and draft a rescue plan. A copy of the plan should be kept at the tank and with the rescue crew.

OSHA does not require 30 inch manways or hatches, but for rescue purposes 30 inch openings would allow enough room for a rescue basket with an injured person on it to pass through. Smaller openings may not be sufficient for retrieval.

Rescue personnel would access the injured person using the existing ladders while attached to fall prevention devices. If possible, the basket would be lowered through the opening in the bottom. If needed, the rescue crew would work from the roof inside a handrail. A tripod would be used to attach a winch to the rescue basket. The basket would be raised to the roof then back down the access tube and riser to ground level.

From the roof it is possible to lower the rescue basket over the side to ground level, but that would require a very large winch and increased loading on the attachment point. On a rainy, windy, or snowy day, the objective would be to get rescue personnel off the roof as soon as possible, so lowering through the dry interior is preferred. A helicopter rescue would need to be performed if it is not possible to lower the rescue basket down the dry interior.

Upgrades intended to make a rescue easier are included in this report. Dixon recommends 30 inch manways where possible and fall prevention devices on all ladders.

COST SUMMARY:

Exterior overcoat	\$350,000
Dry interior partial repaint	40,000
Wet interior roof repaint	150,000
Pit piping repaint	4,000
Cathodic protection system	30,000
Roof handrail and painter's rail	15,000
Modify overflow pipe	3,000
Wet interior roof hatch	4,000
Access tube roof hatch	4,000
Top platform opening cover	4,000
Pressure vacuum vent	6,000
Wet interior ladder rungs	<u>1,000</u>
Sub Total	\$611,000
Engineering and Contingencies	<u>\$89,000</u>
Total	\$700,000

Notes: For convenience, it may be desirable to repaint the entire wet interior instead of just the roof. The estimated cost is \$350,000.

If only union labor can be used on coating projects in Illinois, we recommend budgeting 30% above the cost estimate provided.

Safety improvements are optional and can be delayed. Best price for safety improvements would be obtained by including them with the next painting project.

INSPECTION:

On April 8, 2020 Dixon Engineering Inc. performed a maintenance inspection on the 2,000,000 gallon fluted column (South) elevated water storage tank owned by the City of DeKalb. Purposes of the inspection were to evaluate the interior and exterior coating's performance and life expectancy, assess the condition of metal surfaces and appurtenances, review safety and health aspects, and make budgetary recommendations for continued maintenance of the tank. All recommendations with budgeting estimates for repairs are incorporated in this report.

The inspection was performed by Josh Grover, Engineering Technician. The inspector was assisted by Kyle Lay, ROV Operator, and Nathan Evans, Staff Technician.

The wet interior inspection was completed with a remotely operated vehicle (ROV). Video of the inspection and still photos are included with this report. No cleaning was performed in the wet interior during the ROV inspection.

GENERAL INFORMATION:

The tank was built in 1986 by Pitt-Des Moines with a height to low-water level of 108 feet and a diameter of 100 feet.

CONDITIONS AND RECOMMENDATIONS:

EXTERIOR COATING CONDITIONS:

Information on file with DIXON indicates that the exterior was last painted in 2003. The exterior was spot power tool cleaned to SSPC-SP11 condition. The coating applied was an acrylic system.

The coating is in fair to poor condition overall. The coating is beginning to chalk and fade and there is loss of gloss. Surfaces have faded due to exposure to ultraviolet light which is a normal occurrence for an exterior coating system.

The column coating is in poor condition with numerous failures. Primary methods of deterioration are spot failures to the substrate with rust undercutting, rust bleedthrough, and delaminated topcoat.

The bowl coating is in fair condition with a few failures. Primary method of deterioration is spot failures to the substrate.

The sidewall coating is in fair condition with a few failures. Primary method of deterioration is delaminated topcoat. There is lettering that states "DEKALB" on the sidewall in two locations. There is a wolf logo on the sidewall with the letters NIU below in one location.

The bowl and sidewall are covered with mildew growth.

The roof coating is in poor condition with numerous failures. Primary methods of deterioration are spot failures to the substrate with rust undercutting and delaminated topcoat.

Fair adhesion was noted on the ASTM X-cut test areas. If overcoating is not performed within the next two years, additional adhesion testing should be performed.

EXTERIOR COATING RECOMMENDATIONS:

Budget for overcoating in one to two years. The typical overcoat frequency for modern acrylic systems is twelve years. There is always a risk in overcoating the exterior, but we have had several successful projects when performed in the timeframe noted. The risk of poor adhesion of the overcoat system gets higher as the existing system gets older. Current adhesion showed the existing coating would support an additional coating system.

The recommended procedure is to high pressure water clean (5,000-10,000 psi) the exterior to remove any poorly adhered coating and any contaminants. Coating failures to the substrate would be spot power tool cleaned to bare metal (SSPC-SP11) condition. All sharp edges would be feathered into the surrounding coating.

The coating system would consist of a spot prime coat on the bare metal, a full coat of epoxy, followed by two full coats of urethane. The urethane system offers excellent abrasion resistance with high gloss and sheen retention. The expected life of this system is fifteen years. The tank would be removed from service during the coating project. This is necessary to reduce condensation on the tank's surface. Urethane coatings have a minimum temperature requirement for application and are sensitive to moisture during the curing process. If moisture is present during the curing process, the appearance will become cloudy with little or no gloss. The estimated cost is \$350,000.

DRY INTERIOR COATING CONDITIONS:

The dry interior on this structure is defined as the non-water contact surfaces, consisting of the column, bowl, and access tube.

Information on file with DIXON indicated the dry interior was last painted in 2003. The dry interior was spot power tool cleaned to a SSPC-SP11 condition. The coating applied was a spot epoxy system.

The column below the condensate platform is in good condition with only a few failures. Primary method of deterioration is spot failures to the substrate with rust undercutting. Most of the coating failures are on the baseplate.

The column coating is in good condition with a few failures. Primary methods of deterioration are spot failures to the substrate and delaminated topcoat.

The coating on the topside of the platforms is in fair condition with numerous failures. Primary method of deterioration is spot failures to the substrate with rust undercutting.

The bowl coating is in fair condition with a few failures. Primary method of deterioration is spot failures to the substrate with rust undercutting.

The access tube coating is in poor condition with numerous failures. Primary methods of deterioration are spot failures to the substrate and rust bleedthrough.

DRY INTERIOR COATING RECOMMENDATIONS:

Spot abrasive blast clean the dry interior to a commercial (SSPC-SP6) condition including the topside of the platforms, the entire access tube, and other areas of failed coating. The prepared surfaces would be coated with an epoxy system. The work should be performed with an exterior/wet interior painting project. The estimated cost is \$40,000.

WET INTERIOR COATING CONDITIONS:

Information on file with DIXON indicated the wet interior was last painted in 2003. The wet interior was abrasive blast cleaned to SSPC-SP10 near-white condition. The coating applied was an epoxy system.

The roof coating is in poor condition with extensive failures. Primary methods of deterioration are spot failures to the substrate with rust undercutting and rust bleedthrough. There are minor coating failures on the roof panels but most of deterioration is along the open lap seams, at the gap between the roof stiffeners and roof plate, and on the stiffeners. The roof contains open lap seams that have started to rust and streak. Rusting is typical for a roof where the lap seams are open and not seal welded. The presence of rust in the lap seams is not a concern but should be monitored during future inspections for additional corrosion growth. Corrosion on the roof stiffeners is typical but should be corrected before structural loss of steel occurs.

The sidewall coating is in good condition with only a few failures. Primary method of deterioration is blisters. There is no significant coating damage at the high-water level which would be the area most affected by ice movement.

The access tube coating is in good condition with a few failures above the high water level. Primary method of deterioration is spot failures to the substrate. There is no significant damage at the high-water level.

The bowl was covered with approximately 2 inches of sediment that limited the amount of surface visible with the ROV. The coating on the visible surface is in good condition with no significant deterioration.

The surfaces below the normal operating water level are covered with mineral staining which does not affect the integrity of the coating system.

WET INTERIOR COATING RECOMMENDATIONS:

Abrasive blast clean the wet interior roof to a near-white metal (SSPC-SP10) condition and apply a three-coat epoxy system. The estimated cost is \$150,000.

As an alternate, abrasive blast clean the entire wet interior to a near-white metal (SSPC-SP10) condition. The estimated cost is \$350,000.

Wet interior coating systems must be approved for potable water storage tanks contingent upon meeting requirements of NSF/ANSI 61. Apply a three-coat epoxy system to the prepared surfaces. Epoxy coating systems are recommended in most applications because they have good adhesion and abrasion resistant qualities.

CATHODIC PROTECTION CONDITIONS:

There is no cathodic protection system in the wet interior. The tank does not have attachment clips or a pressure fitting installed for a future cathodic protection installation.

CATHODIC PROTECTION RECOMMENDATIONS:

Install an impressed current cathodic protection system with the next paint project. The system is designed with a horizontal ring configuration suspended into the lower one third of the tank connected to the sidewall or access tube. This design is considered ice-free as formation of ice normally occurs at the high-water level and some along the sidewall. As long as the tank is operated in the upper one half of its capacity, the probability of ice damage is very low. The anode used is a platinized niobium or titanium wire with a design life of approximately ten years. The system also incorporates copper/copper sulfate reference anodes.

The system is automatically controlled by monitoring the water-to-tank potential. It provides protection to the exposed steel surfaces. Cathodic protection operates by inhibiting galvanic cell corrosion where steel is exposed. The system creates an equipotential across the tank and drives the tank potential down to a point (-850 millivolts) where corrosion is essentially nonexistent. Only surfaces that are in contact with water are protected because water acts as the electrolyte for the circuit. Therefore, areas of the roof and upper sidewall are not protected by the system. The estimated cost is \$30,000.

PIT/BUILDING PIPING CONDITIONS:

There is a pit the base of the column that contains piping. The pit has a metal hatch that is in fair condition. The piping is in good condition. The coating on the piping is in poor condition with extensive coating failure.

There is a building in the base of the column that contains piping and valves. The piping is above the floor. The piping is in good condition. The coating on the piping is in good condition.

PIT/BUILDING PIPING RECOMMENDATIONS:

Abrasive blast clean the pit piping to a commercial (SSPC-SP6) condition and repaint with an epoxy system. The estimated cost is \$4,000.

FOUNDATION AND ANCHOR BOLT CONDITIONS:

The exposed concrete foundation is in good condition. There is minor deterioration with some cracking. The cracks are not significant enough to create a structural problem. The top of the exposed foundation is coated.

There are anchor bolts evenly spaced on the baseplate around the column in the dry interior. The anchor bolts are in good condition with no deterioration.

FOUNDATION AND ANCHOR BOLT RECOMMENDATIONS:

Recoat the exposed concrete with an epoxy coating system to help prevent further deterioration. The cost would be incidental to exterior painting.

GROUT CONDITIONS:

The grout between the baseplate and the foundation is in good condition with approximately 6 total lineal feet missing.

GROUT RECOMMENDATIONS:

The purpose of the grout is to evenly distribute the load onto the foundation and to prevent water from getting between the foundation and the tank. Repair areas of missing or damaged grout between the steel baseplate and the concrete foundation. The cost would be incidental to the next painting project.

ROOF HANDRAIL, PAINTER'S RAILING, AND ROOF RIGGING CONDITIONS:

The tank does not have a roof handrail or a painter's railing.

There are not enough roof rigging couplings for safety and staging lines during wet interior coating work.

ROOF HANDRAIL, PAINTER'S RAILING, AND ROOF RIGGING RECOMMENDATIONS:

Install a handrail on the roof to meet current Illinois EPA requirements. Install a painter's railing on the roof around the new handrail. The estimated cost is \$15,000.

Install additional rigging couplings on the roof for temporary fall prevention of workers in the wet interior. The cost would be incidental to the next painting project.

LIGHTING CONDITIONS:

The tank has a double aviation light on the roof that is in good condition. There is a photocell that will switch the lights on when it's dark outside. It could not be determined if the lights are operational. The photo cell was covered by the inspector, but the light did not turn on. Sometimes the photo cell will not switch the light on until it has been dark for several minutes.

There are light fixtures located in the dry interior. All of the lights were operational.

LIGHTING RECOMMENDATIONS:

Verify operation of the aviation lights. If operational, the lights should be on after it's dark outside. The work can be performed by in-house personnel from the ground.

ANTENNA CONDITIONS:

There are two roof antennas attached to tripod frames. The antenna cable routing is in good condition and does not interfere with climbing or tank operations. The cable penetrations through the roof are sealed with caulk.

OVERFLOW PIPE CONDITIONS:

The overflow pipe extends along the access tube in the wet interior down through the dry riser and exits near the bottom of the column. The discharge end of the overflow pipe is screened. The screen is in good condition but is oversized. The pipe discharges to a concrete trough. There is a crack in the concrete trough. The air gap meets the required 12-24 inches. The discharge area is in good condition.

OVERFLOW PIPE RECOMMENDATIONS:

Modify the overflow pipe discharge so it points downward to bring it into compliance with current Illinois EPA requirements. Install a flap gate at the discharge. The estimated cost is \$3,000.

HATCH AND MANWAY CONDITIONS:

There is a 24 inch roof hatch to the wet interior that is in good condition. The hinged cover is in good condition. There is a handhold next to the hatch to aid the climber while entering and exiting the opening. The hatch was not secured. There was no gasket on the hatch.

There is a bolted painter's hatch on the roof that is in good condition. The hatch can be used for ventilation and lighting during maintenance work.

There is a 24 inch roof hatch into the dry interior that is in good condition. The hinged cover is in good condition. There is a handhold next to the hatch to aid the climber while entering and exiting the opening.

There is a 24 inch manway to the wet interior in the bowl that is in good condition. The manway gasket showed no signs of leakage and the bolt is in good condition.

There is a service door in the column that is in good condition. The door operated properly during the inspection. There is a retractable overhead door in the column that is in good condition. The door operated properly during the inspection.

There is a painter's hatch (bird hatch) at the top of the column that is in good condition. There is no safety handhold above the hatch.

The condensate platform ladder opening is 30 x 30 inch tombstone shaped. The opening is not equipped with a hinged cover. There is a safety handhold next to the opening.

The top platform ladder opening is 30 x 30 inch tombstone shaped. The opening is not equipped with a hinged cover. There is a safety handhold next to the opening.

The intermediate stiffener ladder openings are 30 x 30 inch tombstone shaped. The openings are not equipped with hinged covers. There are safety handholds next to the openings.

There is a rigging attachment point on the bowl for rescue retrieval line attachment.

HATCH AND MANWAY RECOMMENDATIONS:

Replace the wet interior roof hatch with a 30 inch hatch. Install a gasket on the wet interior roof hatch to meet current Illinois EPA requirements. The estimated cost is \$4,000.

Replace the access tube roof hatch with a 30 inch hatch. The estimated cost is \$4,000.

Install a hinged cover over the ladder opening at the top platform. The estimated cost is \$4,000.

VENT CONDITIONS:

The roof vent is flow through design that is in fair condition. The screen is in good condition but the mesh size is larger than the recommended 24 mesh. This is a possible entry point for insects, though none were observed inside the tank.

VENT RECOMMENDATIONS:

Replace the roof vent with a screened pressure vacuum vent to meet current Illinois EPA requirements. The new vent would have a movable plate that would allow air to flow in and out of the tank even if the screens become plugged or frosted over. The vent would have a rain shield to prevent rainwater from entering the storage tank during high winds. The estimated cost is \$6,000.

LADDER CONDITIONS:

The dry interior ladders are located in the column and access tube. The ladders are in good condition. All of the ladders are equipped with rail-type fall prevention devices that are in good condition.

There is a wet interior ladder from the roof to the bowl that is in fair condition. The rungs above the high-water level are corroded with steel loss. The ladder is equipped with a rail-type fall prevention device that is in fair condition. The fall prevention rail is loose above the high-water level.

LADDER RECOMMENDATIONS:

Adjust the fall prevention device on the wet interior ladder. The cost would be incidental to the next painting project.

Replace the deteriorated wet interior ladder rungs above the high-water level. The estimated cost is \$1,000.

FILL/DRAW PIPE CONDITIONS:

There is a 5 foot diameter riser that extends up to just below the top platform. There is a smaller pipe from the riser that fill/draws water from the tank.

The tank fills and draws from a single pipe. The extends approximately 24 inches into the wet interior. There are deflector bars over top of the pipe in the wet interior.

There is a sample tap on the fill/draw pipe located in the building. The tap has a smooth end, faces downward, and is inside a heated room.

INSULATION CONDITIONS:

The smaller portion of the fill/draw pipe is covered with rigid foam insulation that is in good condition. The insulation is covered with a plastic cover.

CONDENSATE DRAIN CONDITIONS:

The condensate drain line routes from the center of the condensate platform, down the inside of the column, and penetrates near the bottom of the column. The line is in good condition.

WET INTERIOR METAL CONDITIONS:

The steel structure is in good condition overall. There is no active pitting at the coating failures.

The interior roof is supported by radial stiffeners that are in good condition with minor corrosion in the crevices and at the edges.

There is a stiffener located at the lower section of the sidewall. The stiffener is in good condition.

DIXON ENGINEERING, INC.
STEEL TANK FIELD INSPECTION REPORT
PEDESTAL TANK

DATE: April 8, 2020

OWNER: City of De Kalb
CLIENT CODE: 99-19-02-03
TANK NAME: South Tank
LOCATION: Address: 2851 Corporate Drive
City: De Kalb
State: Illinois
TANK SIZE: Capacity: 2,000,000 gallons
Tank diameter: 100 feet (from nameplate)
Bottom (LWL): 108 feet (from nameplate)
CONSTRUCTION:
Type: Fluted column
YEAR CONSTRUCTED: 1986
MANUFACTURER: Pitt-Des Moines
CONTRACT NUMBER: 56524
Exterior coating sample taken for type: No

COATING HISTORY	EXTERIOR	WET INTERIOR	DRY INTERIOR
YEAR LAST COATED	<u>2003</u>	<u>2003</u>	<u>2003</u>
CONTRACTOR	<u>Neumann</u>	<u>Neumann</u>	<u>Neumann</u>
COATING SYSTEM	<u>Acrylic</u>	<u>Epoxy</u>	<u>Epoxy</u>
SURFACE PREPARATION	<u>SSPC-SP11</u>	<u>SSPC-SP10</u>	<u>SSPC-SP11</u>
COATING MANUFACTURER	<u>Tnemec</u>	<u>Tnemec</u>	<u>Tnemec</u>
HEAVY METAL COATING SAMPLES	<u>No</u>	<u>No</u>	<u>No</u>
HEAVY METAL BEARING	<u>Unknown</u>	<u>No</u>	<u>Unknown</u>

PERSONNEL: Inspector Josh Grover, Top person Nathan Evans,
ROV operator Kyle Lay
TYPE OF INSPECTION: Maintenance
METHOD OF INSPECTION: ROV

SITE CONDITIONS

Fenced: **No**

Site large enough for contractor's equipment: **Yes**

Control building: **No**

Antenna control site: **No**

Neighborhood: **Industrial**

Power lines within 50 feet: **No**

Are power lines attached to the structure: **No**

Would power lines interfere with containment: **No**

Site drainage: **Away from tank**

Indications of underground leakage: **No**

Shrub, tree, etc. encroachment: **No**

EXPOSED PIPING

Location: **Tank base (in pit)**

Condition of structure: **Good**

Structure is: **Dry**

Pump present: **No**

Drain line present: **No**

Cover condition: **Fair**

Pipe coating condition: **Poor**

Describe coating: **Spot coating failures**

Condition of metal: **Good**

Piping comments: **The cover is cracked on one side. The cover dimensions are 44 x 38 inches and each side is 22 x 38 inches**

Location: **Tank base (above floor in a building)**

Condition of structure: **Good**

Structure is: **Dry**

Pump present: **No**

Drain line present: **Yes**

Pipe coating condition: **Good**

Describe coating: **No significant coating deterioration**

Condition of metal: **Good**

FOUNDATION

Foundation exposed: **Yes**

Exposed height: **0-11 inches**

Exposed foundation condition: **Good**

Damage or deterioration: **Yes**

Type of damage: **Cracks**

Severity: **Minor**

FOUNDATION

Crack location: **Random**
Total cracking: **6 feet (0 feet need repair)**
Foundation coated: **Top only**
Coating condition: **Poor**
Grout condition: **Fair**
Amount missing: **6 feet**
Undermining of foundation: **No**

EXTERIOR COATING

Column:

Topcoat condition: **Poor**
Previous coat condition: **Fair**
Describe coating: **Fading, delaminating, spot coating failures to substrate, rust undercutting, rust bleedthrough**
Dry film thickness: **8-12 mils**
Adhesion: **3A**
Mildew growth: **Yes - moderate**
Metal condition: **Good**
Column comments: **There is moderate mildew growth at the top of the column. There are 150+ spots of delamination 1-10 inch diameter and 50+ spot coating failures that are the size of a dime or smaller. There are three small 1 foot areas of rust bleedthrough**

Bowl:

Topcoat condition: **Fair**
Previous coat condition: **Fair**
Describe coating: **Fading, spot coating failures to substrate**
Mildew growth: **Yes - heavy**
Metal condition: **Good**
Bowl comments: **The bowl is coated black with mildew. Hard to define all spot coating failures, approximately 20+ small dime size**

Sidewall:

Lettering: **Yes**
Number: **2**
Lettering content: **DEKALB**
Logo: **Yes**
Number: **1**
Describe logo: **Wolf with NIU under it**
Topcoat condition: **Fair**
Previous coat condition: **Fair**

EXTERIOR COATING

Describe coating: **Fading, delaminating**

Metal condition: **Good**

Sidewall comments: **There are approximately twenty spots of delamination**

Roof:

Topcoat condition: **Poor**

Previous coat condition: **Fair**

Describe coating: **Delaminating, spot coating failures to substrate, rust undercutting**

Dry film thickness: **11-17 mils**

Adhesion: **3A**

Metal condition: **Good**

Roof comments: **There is extensive delamination throughout the roof, approximately 1,000+ areas that are ½ x 6 inches (intermediate and prime coat exposed) and twenty small spot coating failures**

EXTERIOR APPURTENANCES

Column Door:

Size: **36 x 80 inches**

Metal condition: **Good**

Overhead Door:

Size: **14 x 14 feet**

Metal condition: **Good**

Anchor Bolts (Column):

Number: **20**

Diameter: **1 ½ inches**

Location: **Dry interior**

Metal condition: **Good**

Anchor Bolts (Wet Riser):

Number: **4**

Diameter: **1 inch**

Location: **Dry interior**

Metal condition: **Good**

Overflow Pipe:

Diameter: **12 inches**

Metal condition: **Good**

EXTERIOR APPURTENANCES

Discharge orientation: **Angled**

Screen condition: **Good**

Percent of screen open: **99**

Mesh size: **12**

Flap gate: **No**

Air gap: **Yes**

Lowest part of discharge to the ground distance: **21 inches**

Height to column penetration: **29 inches**

Overflow discharges to: **Concrete trough to riprap**

Condition: **Good**

Overflow comments: **There are cracks down the center of the trough and at the edges**

Roof Handrail:

N/A [Proposed diameter 20 feet]

Painter's Rail:

N/A

Roof Rigging Points:

Number: **8**

Couplings covered: **Yes**

Covered with: **Plugs**

Metal condition: **Good**

Removable Cathodic Caps:

N/A

Wet Interior Roof Hatch:

Neck size: **24 inches**

Distance from center of the tank (to outer edge): **5 feet**

Shape: **Round**

Handhold at opening: **Yes**

Curb height: **6 inches**

Cover overlap: **2 ½ inches**

Gasket on cover/neck cover: **No**

Hatch security: **None**

Metal condition: **Good**

Hatch comments: **Shares the handhold with the dry interior hatch**

EXTERIOR APPURTENANCES

Secondary Wet Interior Roof Hatch:

N/A

Dry Interior Roof Hatch:

Neck size: 24 inches

Shape: Round

Handhold at opening: Yes

Hatch security: None

Metal condition: Good

Hatch comments: Shares the handhold with the wet interior hatch

Bolted Ventilation Hatch:

Neck diameter: 24 inches

Metal condition: Good

Access Tube Air Gap:

N/A

Roof Vent:

Number: 1

Distance from center of the tank (to outer edge): 6 feet

Type: Flow-through

Neck diameter: 30 inches

Vertical screen condition: Good

Mesh size: 12

Metal condition: Good

Aviation Lights:

Design: Double red

Location: Free-standing mount

Functioning: Unknown

Globe condition: Good

Photoelectric cell: Yes

Aviation light comments: Covered photo cell and the lights did not come on

Antennas:

Roof number: 2

Attached to: Tripod

Roof cable penetrations sealed: Yes

Sealed with: Caulk

EXTERIOR APPURTENANCES

Antenna or cables interference: **No**

Electrical:

Electrical conduit condition: **Good**

Exposed wiring: **No**

DRY INTERIOR COATING

Column below the condensate Platform:

Coating condition: **Good**

Describe coating: **Spot coating failures to substrate, rust undercutting**

Dry film thickness: **9-14 mils**

Metal condition: **Good**

Floor: **Concrete**

Riser:

Type: **Wet**

Diameter: **5 feet**

Topcoat condition: **Poor**

Previous coat/system condition: **Fair**

Describe coating: **Spot coating failures to substrate, rust undercutting, rust bleedthrough**

Mildew growth: **Yes - heavy**

Dry film thickness: **6-10 mils**

Metal condition: **Good**

Condensate Platform:

Platform design: **Full**

Coating condition: **Fair**

Describe coating: **Spot coating failures to substrate, rust undercutting**

Metal condition: **Good**

Ladder opening size: **30 x 30 inches**

Shape: **Tombstone**

Opening covered: **Yes**

Handhold at opening: **Yes**

Drain: **Yes**

Size: **1 ½ inches**

Type: **Out column**

Check valve: **No**

DRY INTERIOR COATING

Column above the Condensate Platform:

Coating condition: **Good**

Describe coating: **Delaminating, spot coating failures to substrate**

Dry film thickness: **10-14 mils**

Metal condition: **Good**

Comments: **The column is 74 feet diameter with approximately twenty minor spot coating failures and approximately ten small areas of minor delamination**

Intermediate Stiffeners:

Number: **4**

Platform design: **Partial**

Material: **Steel plate**

Coating condition: **Fair**

Describe coating: **Spot coating failures to substrate**

Metal condition: **Good**

Ladder opening size: **30 x 30 inches**

Shape: **Tombstone**

Opening covered: **No**

Handhold at opening: **Yes**

Top Platform:

Platform design: **Catwalk**

Material: **Steel plate**

Coating condition: **Fair**

Describe coating: **Spot coating failures to substrate, rust undercutting**

Metal condition: **Good**

Ladder opening size: **30 x 30 inches**

Shape: **Tombstone**

Opening covered: **No**

Handhold at opening: **Yes**

Column above the Top Platform:

Coating condition: **Fair**

Describe coating: **Delaminating, spot coating failures to substrate**

Dry film thickness: **10-14 mils**

Metal condition: **Good**

Riser comments: **There are a few small areas of delamination and a few areas of spot coating failures**

DRY INTERIOR COATING

Bowl:

Coating condition: **Fair**

Describe coating: **Spot coating failures to substrate, rust undercutting**

Metal condition: **Good**

Rigging lug above opening: **Yes**

Access Tube:

Diameter: **60 inches**

Topcoat condition: **Poor**

Prime coat condition: **Fair**

Describe coating: **Spot coating failures to substrate, rust bleedthrough**

Dry film thickness: **8-15 mils**

Metal condition: **Good**

Access tube comments: **The rust bleedthrough is along the weld seams**

DRY INTERIOR APPURTENANCES

Electrical:

Lights functioning: **Yes**

Additional lights needed: **No**

Electrical outlet/conduit condition: **Good**

Used during inspection: **No**

Sample Tap:

Location: **In building**

Pipe diameter greater than ¼ inch: **Yes**

12 inches or more above the floor: **Yes**

Down turned: **Yes**

Smooth end: **Yes**

In heated room: **Yes**

Condition: **Good**

Threaded Coupling (for chemical feed on the fill/draw pipe):

N/A

Expansion Joint:

N/A

Fill Pipe Insulation:

Type: **Styrofoam**

Condition: **Good**

Seams loose: **No**

DRY INTERIOR APPURTENANCES

Insulation cover: **Yes**

Type: **Plastic**

Condition: **Good**

Insulation comments: **This is a 24 inch diameter pipe (estimated) that elbows out of the wet riser under the top platform into the bowl**

Column Section Ladders Below the Condensate Platform:

Toe clearance: **7 inches or greater**

Width of rungs: **16 inches**

Thickness of rungs: **¾ inch**

Shape of rungs: **Round**

Metal condition: **Good**

Fall prevention device: **Yes**

Type: **Rail**

Function properly: **Yes**

Cage: **No**

Column Ladders Above the Condensate Platform:

Toe clearance: **7 inches or greater**

Width of rungs: **16 inches**

Thickness of rungs: **¾ inch**

Shape of rungs: **Round**

Metal condition: **Good**

Fall prevention device: **Yes**

Type: **Rail**

Function properly: **Yes**

Cage: **No**

Painter's (bird) Hatch:

Size: **24 inches**

Handhold above hatch: **No**

Metal condition: **Good**

Hatch security: **Rope, chain**

Manway to Wet Interior:

Number: **2**

Size: **24 inches**

Location: **In bowl & wet riser**

Coating condition: **Fair**

Metal condition: **Good**

DRY INTERIOR APPURTENANCES

Mud Valve:

N/A

Access Tube Ladder:

Toe clearance: 7 inches or greater

Width of rungs: 16 inches

Thickness of rungs: ¾ inch

Shape of rungs: Round

Metal condition: Good

Fall prevention device: Yes

Type: Rail

Function properly: Yes

WET INTERIOR COATING

Roof:

Topcoat condition: Poor

Primer coating condition: Poor

Describe coating: Spot coating failures to substrate, rust undercutting, rust bleedthrough

Metal condition: Good

Lap seams: Open

Condition of laps: Good

Roof comments: There are failures randomly throughout, at stiffener junctions, and along the weld seams

Sidewall:

Topcoat condition: Good

Primer coating condition: Good

Describe coating: Blisters

Mineral deposits: Light

Metal condition: Good

Active pitting: No

Previous pitting: No

Sidewall comments: There are blisters or overspray noted just above the horizontal stiffener at the lower section of the sidewall . Extensive rust streaking from the roof beams on the upper sidewall

Access Tube:

Topcoat condition: Good

Primer coating condition: Good

Describe coating: Spot coating failures to substrate, rust bleedthrough

WET INTERIOR COATING

Mineral deposits: **Moderate**

Metal condition: **Good**

Active pitting: **No**

Previous pitting: **No**

Access tube comments: **There are approximately twenty-five spot coating failures above the high water level. Below the high-water level there are no significant failures**

Tank Bottom:

Covered in sediment could not inspect completely with ROV

Type: **Cone**

Topcoat condition: **Good**

Primer coating condition: **Good**

Describe coating: **No significant coating deterioration**

Metal condition: **Good**

Active pitting: **Yes**

Sediment depth: **2 inches**

Bottom comments: **The sediment covered majority of the cone, the areas visible were in good condition**

WET INTERIOR APPURTENANCES

Ladder:

Toe clearance: **7 inches or greater**

Width of rungs: **16 inches**

Thickness of rungs: **¾ inch**

Shape of rungs: **Round**

Shape of side rails: **Flat**

Metal condition: **Good to poor – steel loss on top 10 rungs**

Fall prevention device: **Yes**

Type: **Rail**

Functional: **No**

Ladder comments: **The fall prevention device is loose and moves back and forth. There is steel loss at the rung to side rail connections from corrosion above the high-water level**

Cathodic Protection:

N/A

Clips: **No**

Pressure fitting: **No**

WET INTERIOR APPURTENANCES

Roof Stiffeners:

Radial:

Number: **46**

Dimensions: **4 x 6 inches**

Shape: **Angle**

Connections: **Welded**

Ring:

Number: **1**

Dimensions: **4 x 8 inches**

Shape: **Channel**

Connections: **Welded**

Coating condition: **Poor**

Metal condition: **Good**

Roof stiffener comments: **Pack rust in the crevices and at the edges might indicate steel loss from corrosion**

Sidewall Stiffeners:

Number: **1**

Location: **Bottom of sidewall**

Coating condition: **Good**

Metal condition: **Good**

Overflow Pipe Inlet:

Type: **Funnel**

Metal condition: **Good**

Overflow comments: **There are some spot coating failures near the high-water level**

Comments: **The pipe is located in the wet interior**

Fill Pipe:

Diameter: **24 inches**

Height above bowl: **24 inches**

Deflector over end: **Yes**

Type: **Bars**

Metal condition: **Good**

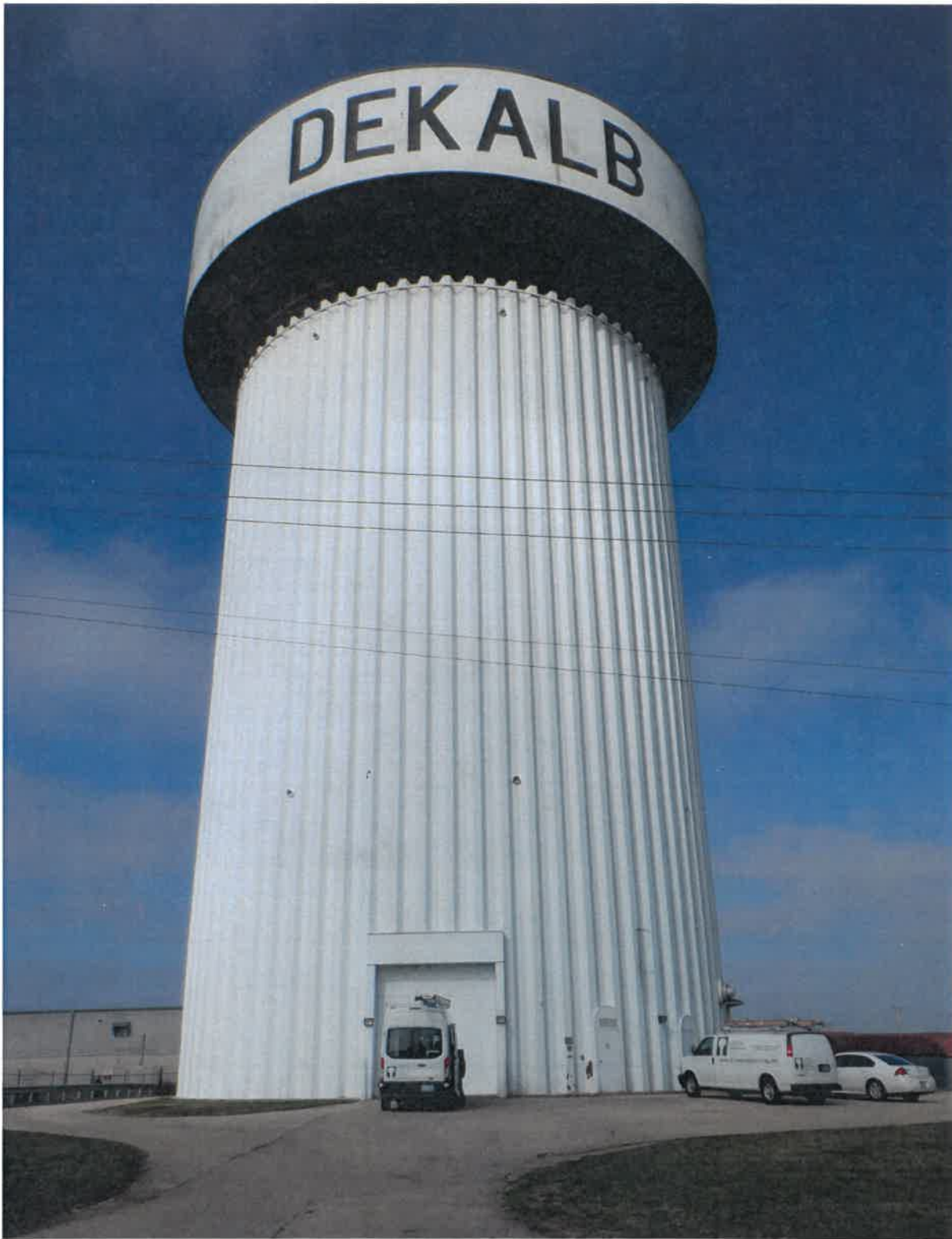
Separate Draw Pipe:

N/A

Mixer:

N/A

Field Inspection Report is prepared from the contractor's viewpoint. It contains information the contractor needs to prepare his bid for any repair or recoating. The engineer uses it to prepare the engineering report. Cost estimates are more accurate if the contractor's problems can be anticipated. While prepared from the contractor's viewpoint, the only intended beneficiary is the owner. These reports are completed with diligence, but the accuracy is not guaranteed. The contractor is still advised to visit the site.



2,000,000 gallon fluted column water storage tank (South) located in DeKalb, Illinois.



1) Minor crack in the concrete foundation.

2) Same.



3) Missing grout between the tank baseplate and foundation.



4) Coating delamination on the column.

5) Same.

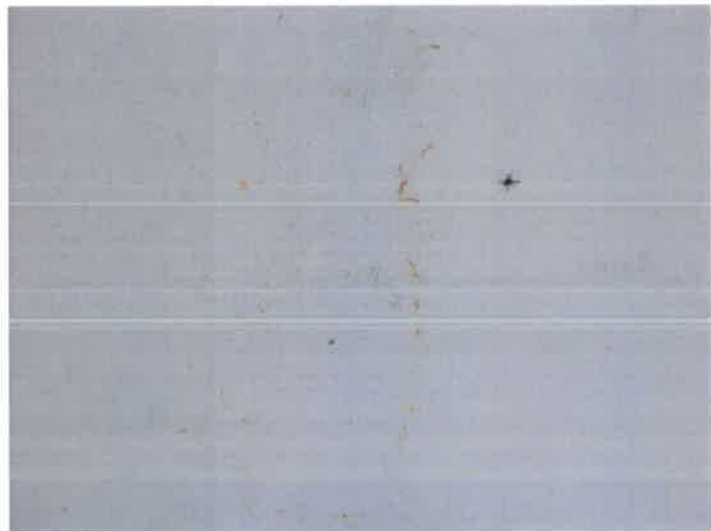


6) Same.



7) Spot coating failure on the column.

8) Rust bleedthrough on the column.



9) The overflow discharge area is in good condition.



10) Coating failures on the overflow pipe.

11) The screen on the overflow discharge is in good condition but is oversized.



12) The column service door is in good condition.



13) The column overhead door is in good condition and operated properly during the inspection.

14) There are spot coating failures on the bowl. The bowl is covered with mildew.



15) Same.



16) Coating delamination on the sidewall.

17) The sidewall coating has faded



18) Coating delamination and spot coating failures on the roof.



19) Spot coating failures on the roof.



20) The roof coating is in fair condition overall.



21) There are two antennas on the roof.



22) Topcoat delamination on the roof.

23) Rust undercutting on the roof coating near the vent.

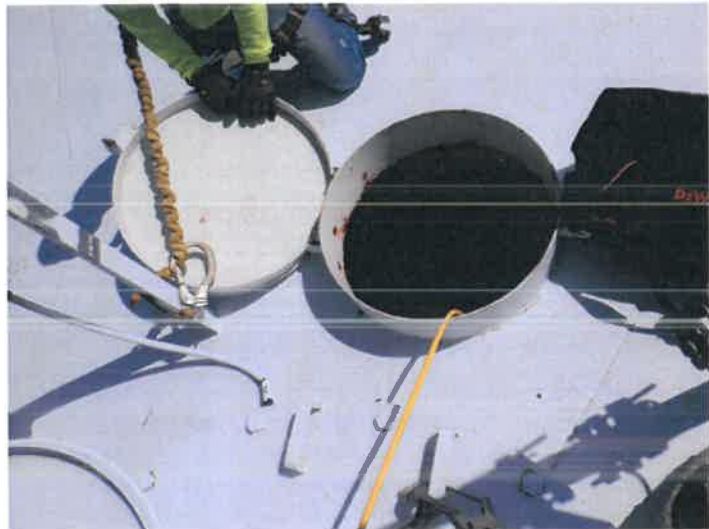


24) The roof vent is in fair condition.



25) The roof vent screen is in good condition but is oversized.

26) The wet interior roof hatch is in good condition.



27) The bolted ventilation hatch is in good condition.



28) The access tube hatch is in fair condition.

29) The double aviation light appears to be in good condition but did not operate during the inspection.



30) The anchor bolts in the dry interior are in good condition.



31) Spot coating failure on the baseplate in the dry interior.

32) The dry interior column coating below the condensate platform is in good condition.



33) The manway in the wet riser is in good condition. The coating is in fair condition.



34) The dry interior column ladders below the top platform are in good condition.

35) Spot coating failures on the condensate platform.

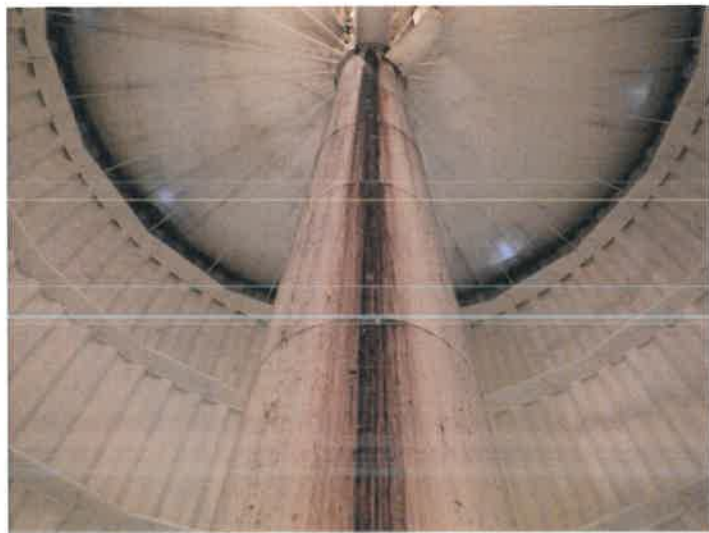


36) Coating failures around the condensate drain.



37) The column coating above the condensate platform is in good condition overall.

38) Spot coating failures on the wet riser.



39) The 5 foot wet riser ends below the top platform and there is a separate pipe from it that fills/draws from the tank.



40) The dry interior column ladders above the condensate platform are in good condition.

41) There is no cover over the hatch in the top platform.



42) Spot coating failures on the top platform.



43) Same.

44) The painter's hatch is in good condition.



45) Spot coating failure with rust undercutting on the bowl.



46) Same.

47) The access tube coating is in poor condition overall.

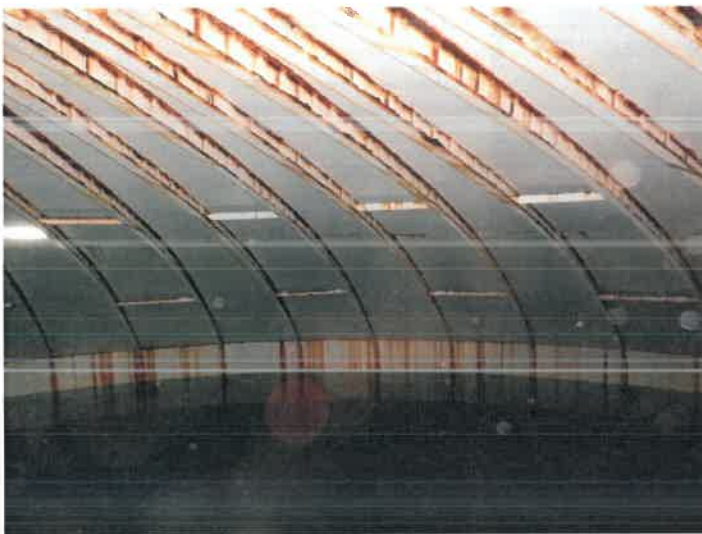


48) Spot coating failures and rust bleedthrough in the access tube.



49) Spot coating failures on the access tube ladder.

50) Coating failures on the wet interior roof.



51) Same.



52) Spot coating failures and minor corrosion on the wet interior roof.

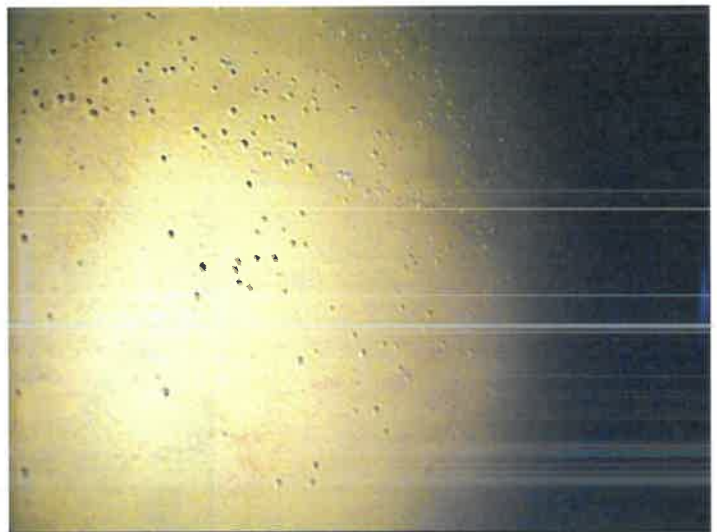
53) Weld burn on the wet interior roof.



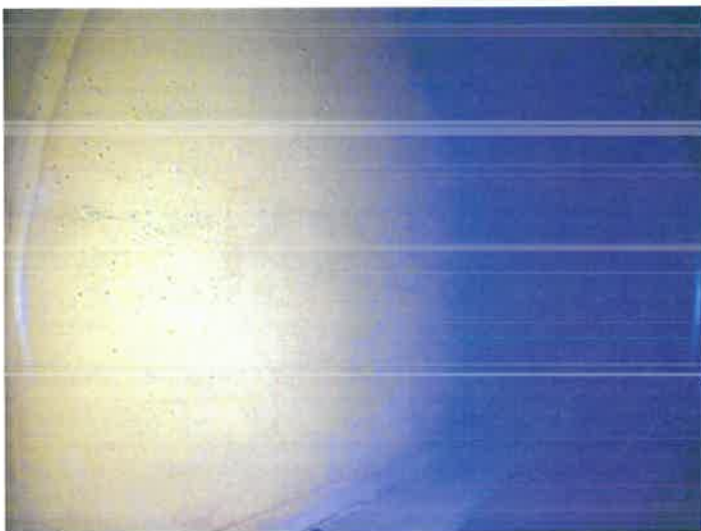
54) There is steel loss from corrosion on the wet interior ladder above the high-water level.



55) Coating blisters above the sidewall stiffener ring.



56) Same.

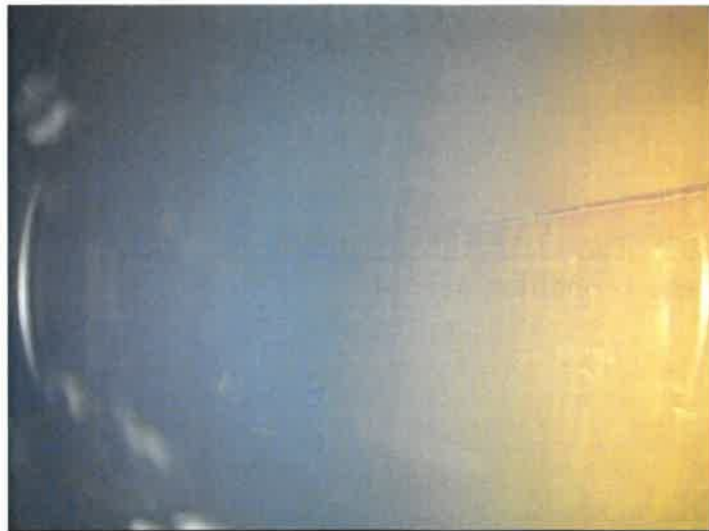


57) Same.



58) The sidewall coating is in good condition overall.

59) Same.



60) Spot coating failures on the upper access tube and overflow pipe.



61) Same.



62) The access tube coating is in good condition overall.



63) The wet interior ladder is in fair condition.



64) The bowl is covered with sediment.

65) Same.



66) The wet interior manway cover is in good condition.



67) The fill/draw pipe is in good condition.



68) There is a metal cover to the pit that is in fair condition.



69) Coating on the pit piping is in poor condition.



67) Coating on the piping in the building is in good condition.

68) Same.



69) There is a sample tap on the fill/draw pipe in the building.

Exhibit C





Era-Valdivia Contractors, Inc.

11909 South Avenue O

Chicago, IL 60617

Office: 773-721-9350

Fax: 773-721-8027

E-mail: gbairaktaris@eravaldivia.com

Exhibit D

July 10, 2021

City of DeKalb

164 East Lincoln Hwy

DeKalb IL 60115

Re: 2.0 MGL Hydropillar (South Tank) – Additional Work/Exterior Coating

Attn: Mr. Scott Kriese – KLM Engineering, Inc.

Via e-mail: Skriese@klmengineering.com

Dear Mr. Kriese:

Progress on Dekalb South Water Tank is on-going and as of July 9th, Era-Valdivia Contractors, Inc. (EVC) has finished water cleaning exterior side tank as cleaning wet side of mud residuals, rigging interior wet/dry areas for abrasive cleaning and finishing up all steel repairs. Per email request received on Friday, July 9th, EVC has stopped exterior side coating operations and will proceed with interior wet and dry area as specified. We are presenting the following pricing options for your review and discussions with City of DeKalb:

Option 1 Overcoat – Vapor blast the exterior to fully remove the delaminating coating down to the dark red coating (profile of 2.0 mils minimum on remaining coating); Spot repair failed/rusted areas, apply a tie coat, and final coat as specified.

- Spot Pre-prime (1.0-2.0 mils)
- Full 1st Intermediate - Pre-Prime (1.0-2.0 mils)
- Full 2nd Intermediate Urethane - Acrolon Ultra (2.0-3.0 mils)
- Full Finish - Acrolon Ultra (2.0-3.0 mils)
- Underside Tank Bowl & Logos/lettering – Fluoropolymer (2.0-3.0 mils)

For the Lump sum additive.....\$394,000.00

Option 2 Full Removal– Provide a full containment system with negative air and top bonnet, perform a full removal of the coatings and an exterior surface prep to an SSPC SP - 6, and apply the following exterior coating system:

- Full Primer - Zinc - 2 K (2.5-3.5 mils)
- Full 1st Intermediate Epoxy 646 (4.0-6.0 mils)
- Full 2nd Intermediate Urethane – Acrolon 218 (3.0-5.0 mils)
- Full Finish - Fluoropolymer HS 100 (2.0-3.0 mils)
- Logos/lettering – Fluoropolymer HS 100 (2.0-3.0 mils)

For the Lump sum additive.....\$440,000.00

Please review with City of DeKalb and let us know if there any additional clarifications in scope and/or coatings as related to the two-option pricing presented by EVC. In addition, Era-Valdivia Contractors, Inc. is requesting that we mutually agree to complete all work in a timely manner and as per mutually agreed contract approved schedule with additional completion time for either this year and/or by May 31, 2022. Time is of the essence, and we are continuing with the scope work as specified. Let us know if anything else is needed.

Sincerely,
Era Valdivia Contractors Inc,



Gregory D. Bairaktaris
Senior Project Manager/Estimator

CC: EVC / File



KLM ENGINEERING, INC.

1976 Wooddale Drive, Suite 4 | Woodbury, MN 55125
Phone (651) 773-5111 | Fax (651) 773-5222

July 14, 2021

Exhibit E

Bryan Faivre
Director of Utilities and Transportation
City of DeKalb, Illinois
bfaivre@cityofdekalb.com

By Email Only:

RE: Exterior Coating Condition and Recommendation for the 2.0 Million Gallon Elevated Water Tower (South Tank) Located at 1216 Market Street, DeKalb, IL. KLM Project 4344-21 and Contract NO. 99-19-02-03-20.

Mr. Faivre,

KLM Engineering was onsite on July 14, 2021 to further inspect the exterior top coat delamination's and the intercoat adhesion properties in random locations. This request came from ERA Valdivia after they witnessed poor adhesion characteristics during the beginning of the exterior power washing. We determined that the adhesion is poor in multiple areas tested and we do not have confidence that the current scope of work for the exterior will result in a long-term fix.

It is currently understood that these delamination's began only a couple of years after the last reconditioning that also included a power washing and overcoat. It is currently believed that this will be the case if the current scope of work is followed.

KLM Engineering has requested and has received a change order cost from Era Valdivia to fully contain and replace the exterior coatings. Era has submitted the change order price for this work of \$440,000.00 and estimate that if approved by late July they will be able to complete the work during the 2021 season.

It is KLM Engineering's recommendations that the City of DeKalb, IL accept this change to the scope of work, or amend the current agreement to eliminate any exterior coatings work and perform the full replacement later.

If you have any questions regarding the above information, please contact myself at 651-755-8664.

Best Regards,

Scott Kriese
Project Supervisor
KLM Engineering, Inc.
skriese@klmengineering.com



Great Lakes Regional Office

338 Alana Drive
New Lenox, IL 60451
651-238-4905 Cell

July 30, 2021

SENT EMAIL ONLY

Mr. Bryan Faivre
Director of Utilities
City of Dekalb
200 S Fourth Street
Dekalb, Illinois 60115

RE: Proposal to Perform Additional Inspection Services on the 2,000,000-Gallon Hydropillar Located in Dekalb, Illinois



KLM Project #: 4344-21

Dear Mr. Faivre:


KLM is pleased to submit this proposal for additional inspection and testing services on the 2,000,000-gallon Hydropillar located in Dekalb, Illinois. KLM will send **one** **inspector** to:

- Continue to monitor surface preparation as to adhere to specification standards.
- Continue to monitor the environmental conditions during coating application.
- Continue to provide daily reporting to appropriate personnel.
- We estimate that the addition work will add an additional three (3) weeks to the project.

The fixed fee for these services is **\$19,500.00**. **KLM will disinfect when completed and testing shall be done by the City**. This agreement, between the City of Dekalb, Illinois and KLM Engineering, Inc. of Woodbury, Minnesota is accepted by:

  City of Dekalb,
(Name) (Title) Illinois

8/6/2021
(Date)

 Regional Manager KLM Engineering, Inc.
(Name) (Title) Woodbury, Minnesota

July 30, 2021
(Date)

We look forward to working with you.

Sincerely,

KLM ENGINEERING, INC.

James Creed
Regional Manager
Cell: 651-238-4905
Fax: 651-773-5222
Email: jcreed@klmengineering.com