

August 29, 2013

**Town of Deep River**  
**Public Works Department**  
100 Deep River Road  
Deep River, ON  
K0J 1P0

Att: **Ms. Krista Cadoreth**

Phone: 613.584.2000 Ext. 107

**LMS Job # LM3102: Inspection and Repair:**  
**Deep River Multi-Legged Elevated Tank; Potable Water Storage Facility**

Krista;

On May 13 / 14, 2013, Landmark Municipal Services repaired an active leak in the lower bowl portion at the above mentioned potable water storage facility. A thorough inspection of the structure including ladders, landings, handrails and appurtenances was completed.

Please find a comprehensive report enclosed as follows;


- 1) Multi-Legged Tank Inspection Report
- 2) Photographic Record of Report
  - Photographs are numbered in accordance with the corresponding numbers throughout the report.
- 3) Budget Quotation # 13092 for all recommended upgrades & repairs.

Pages 1 – 5

Pages 6 - 15

Should you have any questions or comments regarding the content of this report, please contact us at 905 319 7700. We look forward to the opportunity of further interaction with the Town of Deep River, and we thank you for your business.

Yours sincerely,  
**LANDMARK MUNICIPAL SERVICES**



**Brent Marini**  
**Project Manager**

Encl

**MULTI - LEGGED INSPECTION REPORT**

<b>Landmark Contract No.</b> LM 3102	<b>Inspection Date</b> Aug 14, 2013	<b>Last Inspection Date</b> Unknown
<b>Inspector</b> Carlos Aguiar	<b>Report Date</b> Aug 29, 2013	<b>Inspected By</b> --

**OWNER / CONTACT**

<b>Owner</b>	Town of Deep River	<b>Contact</b>	Ms. Krista Cadoreth
<b>Project Location</b>	Deep River Multi-Legged Tank - Potable Water Storage Facility	<b>Title</b>	
<b>Address</b>	45 Rutherford Avenue Deep River, ON	<b>Phone</b>	613-584-2000 ext 107
		<b>Cell</b>	
		<b>Email</b>	

**TANK DESCRIPTION**

<b>Constructor</b>	Horton / CBI	<b>Tank Capacity</b>	330,000 Imp. Gallons	<b>See Photo # for Documentation</b>
<b>Year Built</b>	Approx 1945 - 1950	<b>Roof Type</b>	Welded Steel Dome	
<b>Tank Type</b>	Multi-Legged Tank	<b>Tank Diameter</b>	54' - 0"	
<b>Dwg's Available</b>	No	<b>Riser Diameter</b>	8' - 0"	
<b>Dwg's Reviewed</b>	No	<b>HWL</b>	Unknown	
<b>Coating System</b>	Alkyd	<b>LWL</b>	Unknown	
<b>Lining System</b>	Epoxy	<b>No. of Columns</b>	6	

**Note**

The attached report has been prepared in order to provide the tower owner with a detailed description of the following: The present condition of interior and exterior coatings, any pitting and/or corrosion on the interior of the water retaining vessel, the apparent condition of exposed foundations and the status of and recommendations for upgrades on safety equipment and other appurtenances.

Landmark Municipal Services has not performed a design review, an ultrasonic x-ray, or destructive and/or non-destructive testing. Comments and recommendations are based on visual inspection only.

## REPORT SUMMARY

<b>Legend:</b>	URGENT! Immediate attention required	Separate report Available
	Repairs strongly recommended	Repairs Completed During Inspection

Repairs Made During Inspection	Photo No.	Photo No.
Repaired active leak in lower bowl	2 - 8	--
Painted top of 'T' rail safety yellow	75	--

### Recommended Repairs

Category	Photo No.	Description	Cost
<b>Siteworks</b>			
	--	All ladders are non-compliant. Remove and replace	25,43,46
	--	S&I 2pc - Aluminum rest seats on vertical ladder	28
	--	Re & Re roof hatch with watertight aluminum	57
<b>Security</b>	23	Roof handrail system required	47, 48
	--	Upgrade vent system to S.S. Frost proof combo vent / vacuum relief unit	55
	--	Wet riser guardrail required	59
<b>Valve Pit / Chamber</b>	--	Wet riser manway required	19
	--	Shell manway w/ ladder rungs to tank floor required	37
	--	Secure loose cabling	75, 77
	--	Mixing System Recommended	--
	--	--	--
<b>Foundations</b>			
	--	Remove and replace fall arrest system	25,43,46
	--	Entry/exit gates req'd on proposed fall arrest system	--
<b>Support Structure</b>	31	S&I 4pc - 'D' ring transfer stations	24,32,49,55
	--	Paint touch-up required on support leg	--
	--	--	--
<b>Exterior Balcony</b>			
	--	S&I rescue port base at top of vertical ladder	27
	--	S&I rescue port base at roof hatch	49
	--	S&I rescue port base at valve pit	10
	--	Supply detailed rescue procedures	--
<b>Catwalk</b>			
	--	Separate report available	--
	--	--	--
<b>Anchorage</b>			
	--	--	--
	--	--	--
<b>Existing Maintenance Contract?</b>	No		

Thank you for allowing Landmark Municipal Services to assist you in the maintenance of your elevated water storage facility. To maintain the integrity of your facility we recommend that you schedule your next:

Safety inspection and report	2014
Remote Inspection & Report (RIR)	3 Yrs After CIR
Clean, inspect and report (CIR)	ASAP

**Siteworks**

EXTERIOR VALVE CHAMBER	Yes	9 - 12
WALKWAYS	None	--
OVERFLOW SPILLWAY	Good, screen intact	17, 18
<b><u>REPAIRS OR MAINTENANCE REQUIRED</u></b>		

**Security**

FENCE & GATES	Good	13 - 16
LADDER	Security gate required at bottom of ladder	23
HATCH LOCKS	Good	57, 58

**REPAIRS OR MAINTENANCE REQUIRED**

Security gate required at bottom of ladder

**Valve Chamber**

DOES THE TANK HAVE A VALVE CHAMBER OR PIT?	Pit	9 - 12
CONDITION OF VALVE CHAMBER / PIT	Fair	9 - 12
CONDITION OF PIPING	Maintenance Coat Required	9 - 12
CONDITION OF VALVES	Maintenance Coat Required	9 - 12
ARE THERE ANY INDICATIONS OF SETTLEMENT?	No	9 - 12
IS THE CONCRETE IN THE CHAMBER CRACKED, SPALLED OR LEAKING?	No	9 - 12
IS THERE ANY INDICATION OF PIPE MOVEMENT?	No	9 - 12
CONDITION OF VALVE PIT? WET / DRY?	Wet	9 - 12

**REPAIRS OR MAINTENANCE REQUIRED**

Surface prep / paint pipes and valves

**Foundations**

HOW FAR DOES THE FOUNDATION EXTEND OUT OF THE GROUND? (Support Legs)	8 - 12"	14 - 16
ARE THERE ANY INDICATIONS OF FOUNDATION SETTLEMENT?	No	--
IS CONCRETE OR GROUT CHIPPED OR CRACKED	No	--
IS THE SOIL AT THE BASE SATURATED OR IS THERE PONDED WATER?	No	--
IS THERE ANY INDICATION OF UNDERGROUND PIPE LEAKAGE?	No	--
IS SOIL AT BASE ERODED?	No	--
IS THE FOUNDATION UNDERMINED OR EXPOSED?	No	--

**REPAIRS OR MAINTENANCE REQUIRED****Support Structure**

RISER CYLINDER STRAIGHT?	Yes	20
GUY RODS IN GOOD ADJUSTMENT & TUNED?	Yes	20 - 22
SIGNS OF CORROSION OR REDUCTION TO GUY RODS?	Minor	31
CONDITION OF ROD & STRUT PINS AND BOLTS?	Good	20 - 22
CONDITION OF STRUTS AND COLUMNS?	Good	20 - 22

**REPAIRS OR MAINTENANCE REQUIRED**

Paint touch-up required on support leg

**Exterior Balcony**

CONDITION OF BALCONY FLOOR?	Fair	33 - 40
CONDITION OF BALCONY HANDRAIL?	Good	33 - 40
CONDITION OF SPLICES, SUPPORTS AND SHAFT CONNECTIONS?	Good	33 - 40
DOES THE BALCONY FLOOR DRAIN?	Yes	33 - 40

**REPAIRS OR MAINTENANCE REQUIRED**

### Anchorage

ARE BASE PLATE DETERIORATED OR IN POOR CONDITION?	No	14 - 16
ARE ANCHORS, NUTS & BOLTS DETERIORATED OR IN POOR CONDITION?	No	14 - 16
ARE ANCHOR BOLT CHAIRS DETERIORATED OR IN POOR CONDITION?	No	14 - 16
ARE ANCHOR BOLTS TIGHT?	Yes	14 - 16

### REPAIRS OR MAINTENANCE REQUIRED

### Accessories

<b>LADDERS</b>	* To Valve Pit	Good	11
	* To Landing (Balcony)	Removal and replacement required	25
	* To Roof	Removal and replacement required	43
	* On Roof	Removal and replacement required	46
	* To Tank Interior (from balcony)	None	--
<b>REST SEATS</b>	None - 2 pc required on access ladder		28
<b>ROOF HATCHES</b>	* Size	24" diameter	57, 58
	* Condition	Fair - Re & Re with 30" x 30" aluminum watertight hatch	57
<b>VENT</b>	* Type	Steel Mushroom Cap	55
	* Condition	Replace with S.S. Combination Unit	55
<b>PAINT RAIL / ROOF COUPLINGS</b>	No roof couplings for internal re-lining replacement. Roof lugs present for exterior re-paint.		49 - 53
<b>ROOF HANDRAIL</b>	None - Roof handrail system required		47, 48
<b>WET RISER GUARDRAIL (Tank Interior)</b>	None		59
<b>TANK ACCESS FROM GROUND</b>	30" diameter wet riser manway required		19
<b>TANK ACCESS FROM SHELL</b>	None - Shell Manway c/w ladder rungs to tank floor recommended		37
<b>TANK ACCESS FROM ROOF</b>	Good - hatch Re&Re recommended (above)		57, 58
<b>RISER INSULATION &amp; HEAT TRACE</b>	None - N/A		--
<b>OVERFLOW PIPING</b>	Good		17, 50
<b>CATHODIC PROTECTION</b>	None		--
<b>AIRCRAFT WARNING LIGHTS</b>	None		--
<b>ANTENNAE</b>	* Anchorage / Mounting	Good	
	* Cable Routing	Poor - Not secured	75, 77
	* Surveys / Warning Signage as per Safety Code 6: Health Canada	None	--
<b>LIGHTNING PROTECTION &amp; TANK GROUNDING</b>	None		--
<b>MIXING SYSTEM</b>	Recommended		--

### REPAIRS OR MAINTENANCE REQUIRED

- All ladders are non-compliant. Remove and replace
- S&I 2pc - Aluminum rest seats on vertical ladder
- Re & Re roof hatch with watertight aluminum
- Upgrade vent system to S.S. Frost proof combo vent / vacuum relief unit
- Roof handrail system required
- Wet riser guardrail required
- Wet riser manway required
- Shell manway w/ ladder rungs to tank floor required
- Secure loose cabling
- Mixing System Recommended

**FALL ARREST & RESCUE SYSTEM**

Photo No.

**Safety Rail**

LADDER LOCATION	YES / NO	TYPE	YELLOW MARKING AT END OF RAIL?	SECONDARY ARRESTING FEATURE?	RAIL SUPPORT (6FT MAX)	OVERALL CONDITION	
* To Valve Pit	No	--	--	--	--	Poor - all rail covered in paint and must be removed	11
* To Catwalk	Yes	Miller T Rail	Yes	Yes	Yes		25,26,27
* To Roof	Yes	Miller T Rail	Yes	Yes	Yes		43
* On Roof	Yes	Miller T Rail	Yes	Yes	Yes		46

**REPAIRS / UPGRADES OR MAINTENANCE REQUIRED**

Remove and replace fall arrest system

**Entry / Exit Gates**

LOCATION	YES / NO	MIN. 6" FROM END OF RAIL?	PROPER ORIENTATION ?	CONDITION OF PIVOT PIN, SPRING, ETC	
* To Catwalk					--
* To Roof					--
* On Roof					--

**REPAIRS OR MAINTENANCE REQUIRED**

Entry/exit gates req'd on proposed fall arrest system

**Transfer 'D' Rings**

LOCATION	YES / NO	CONDITION	
* To Catwalk	No	2pcs required - top and bottom	24, 32
* At Roof Hatch	No	1pc Required	49
* At end of roof ladder	No	1pc Required	55

**REPAIRS OR MAINTENANCE REQUIRED**

S&I 4pc - 'D' ring transfer stations

**Rescue Port Base**

LOCATION	YES / NO	CONDITION	
* At catwalk (top of ladder)	No	--	27
* At shell manway	N/A	--	--
* On Roof	No	--	49
* At Valve Pit	No	--	49

**REPAIRS OR MAINTENANCE REQUIRED**

S&I rescue port base at top of vertical ladder

S&I rescue port base at roof hatch

S&I rescue port base at valve pit

**Rescue Procedures**

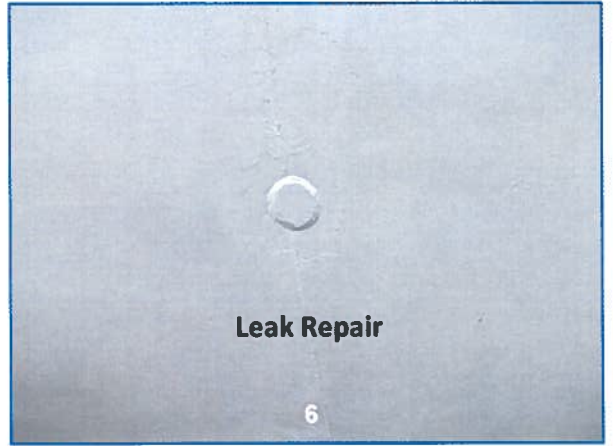
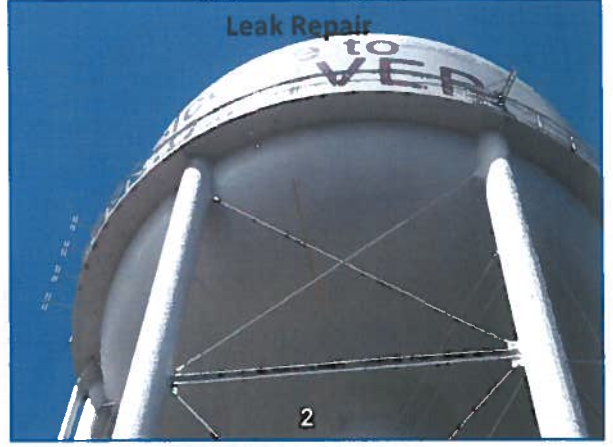
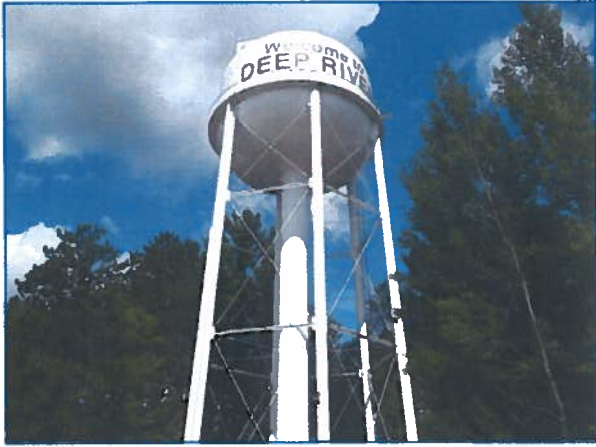
AVAILABLE?

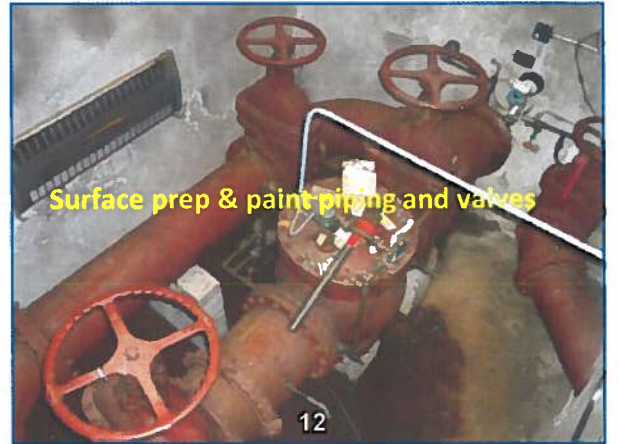
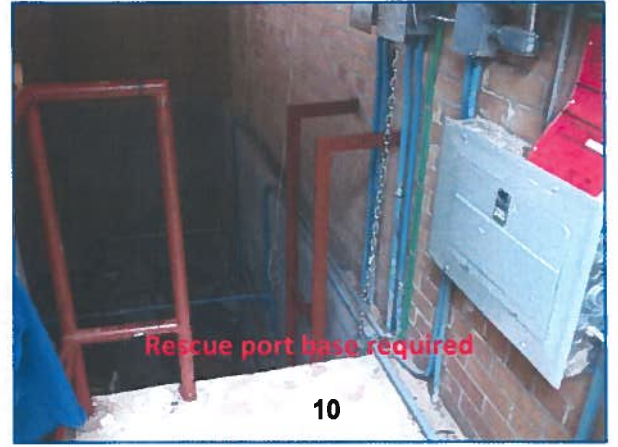
No

--

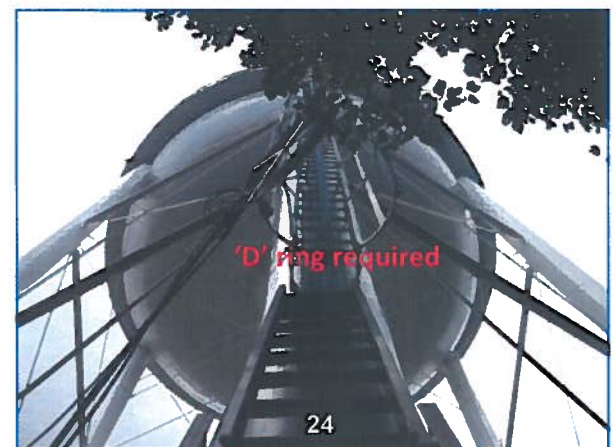
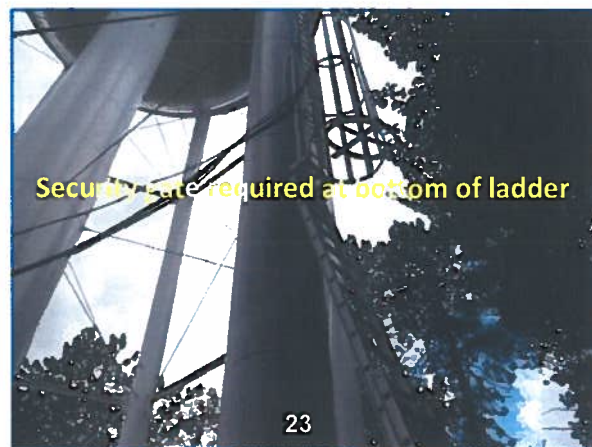
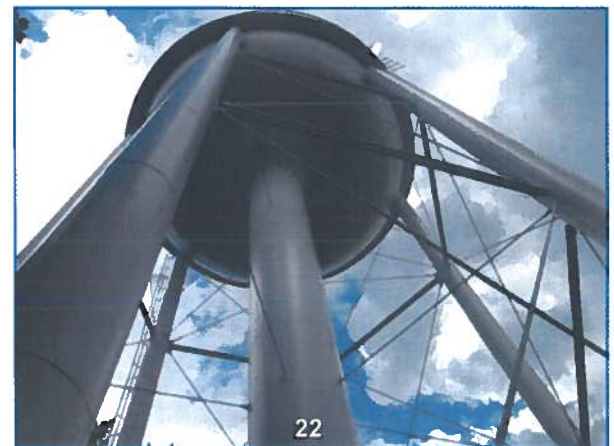
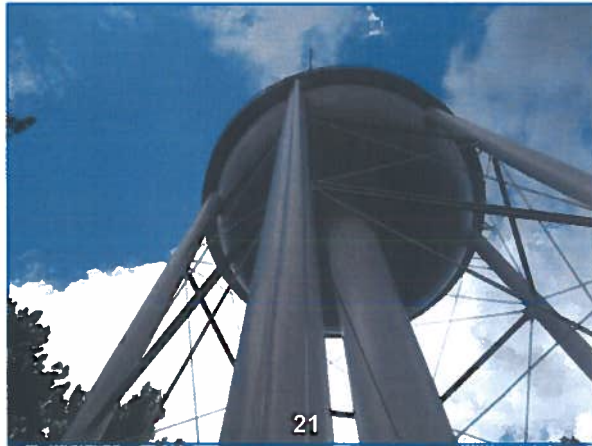
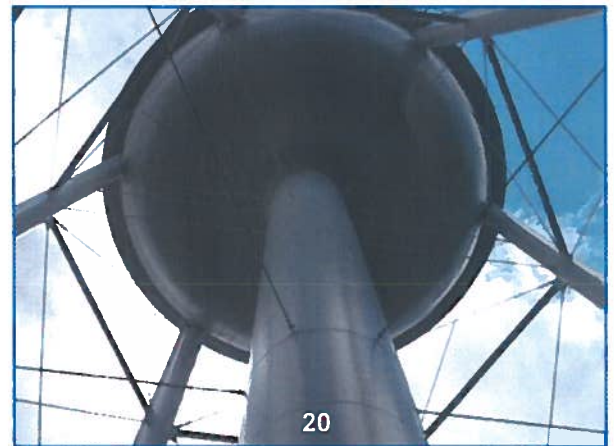
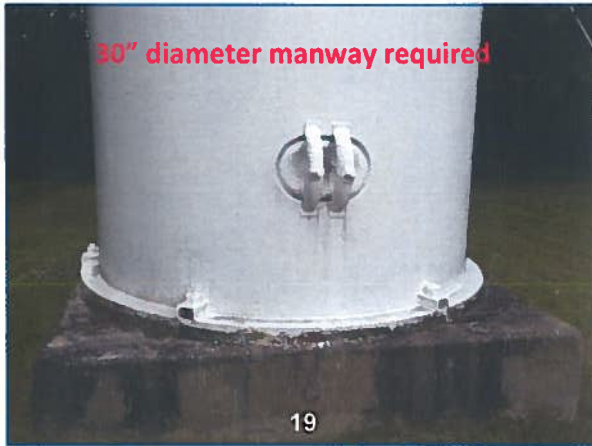
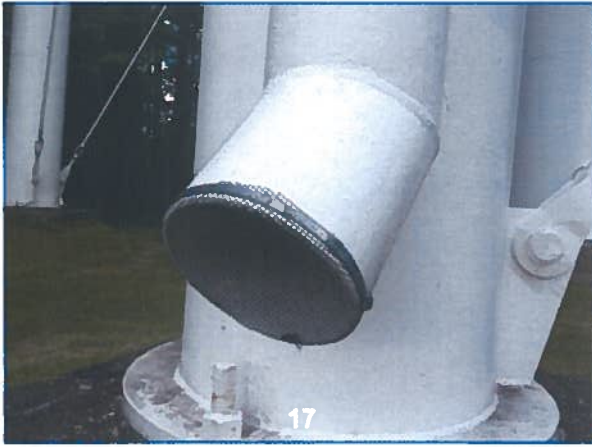
**REPAIRS OR MAINTENANCE REQUIRED**

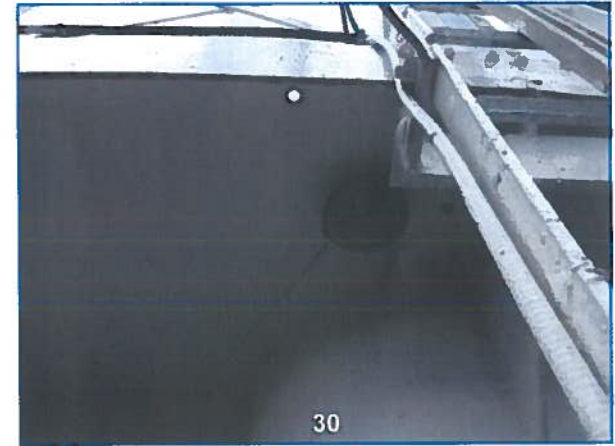
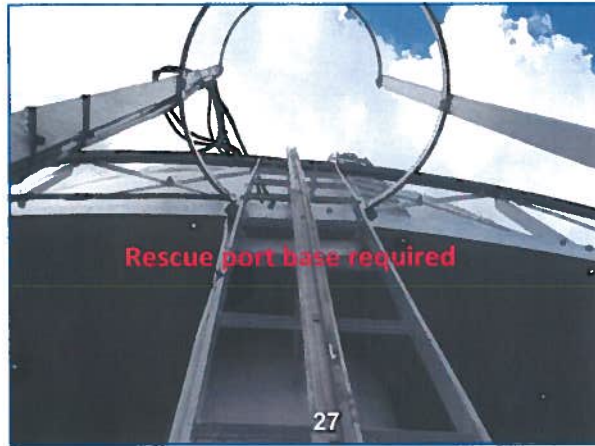
Supply detailed rescue procedures



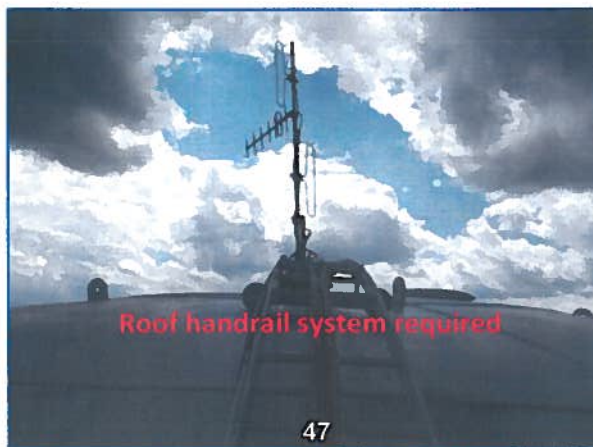
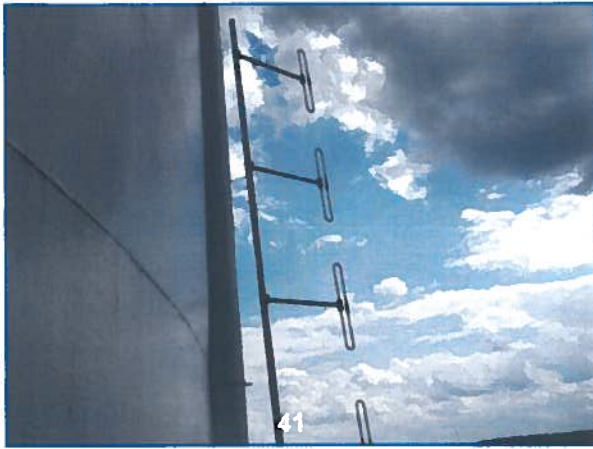


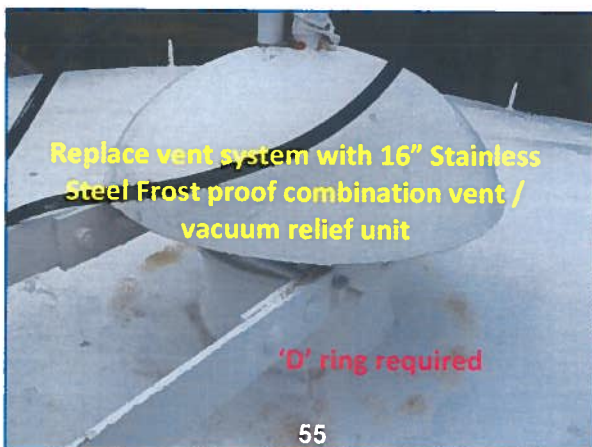
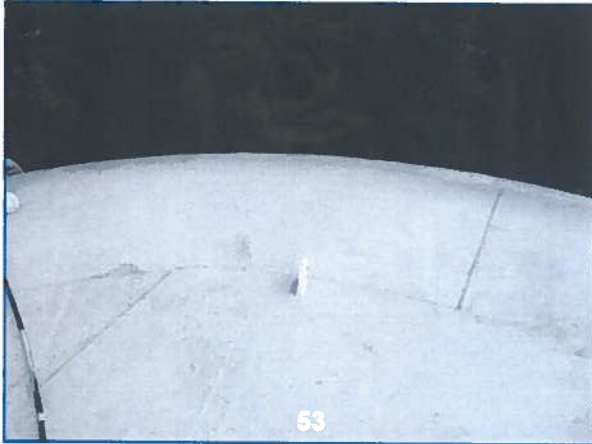


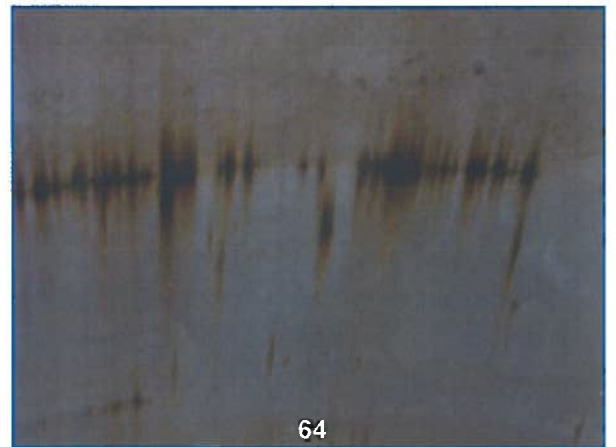
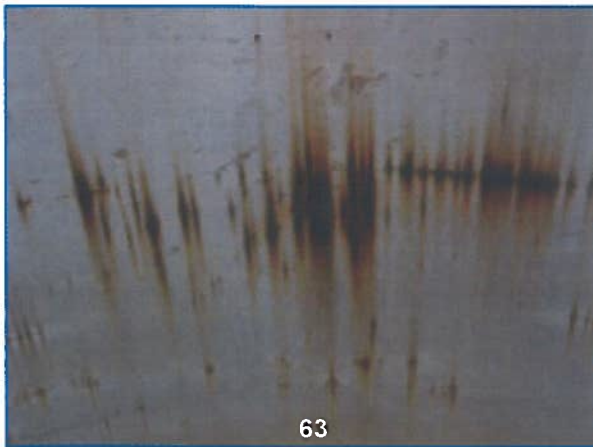
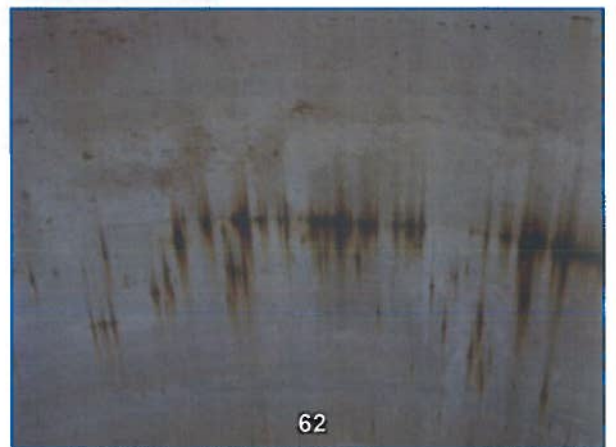
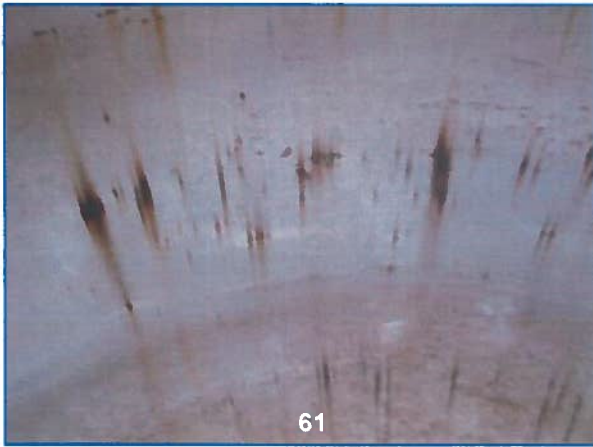
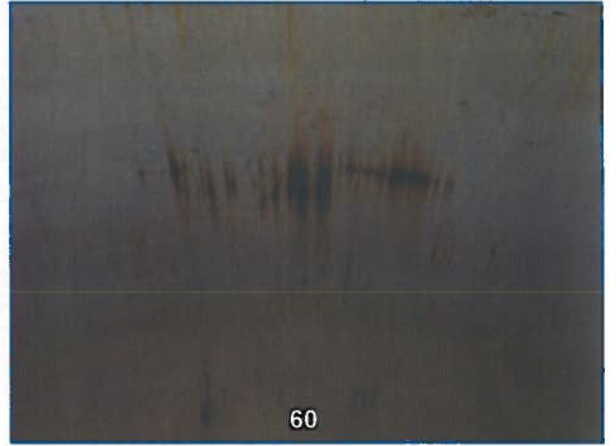
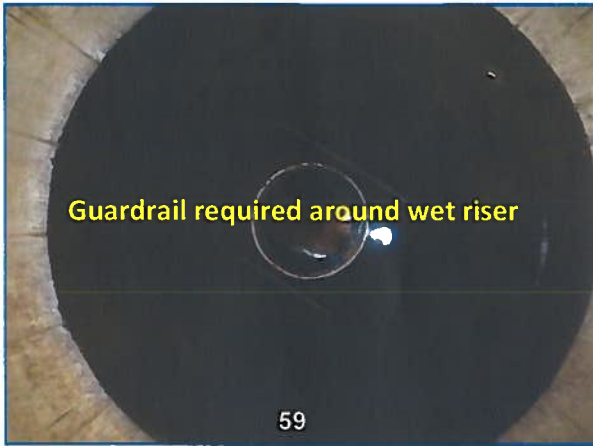
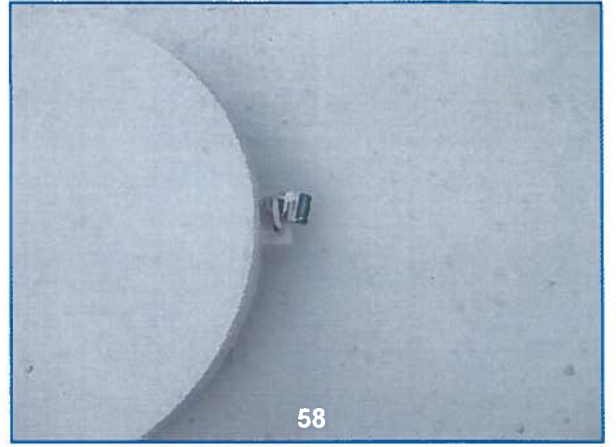
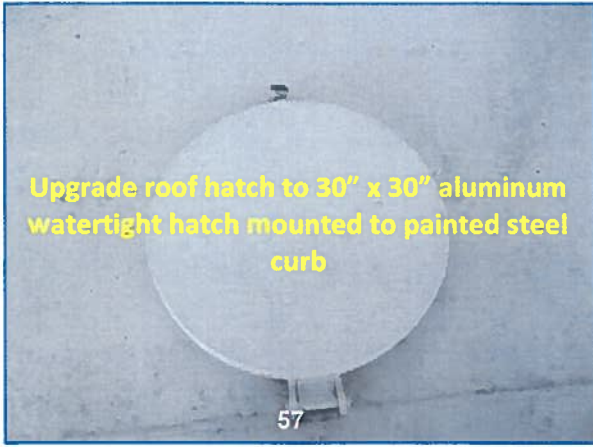


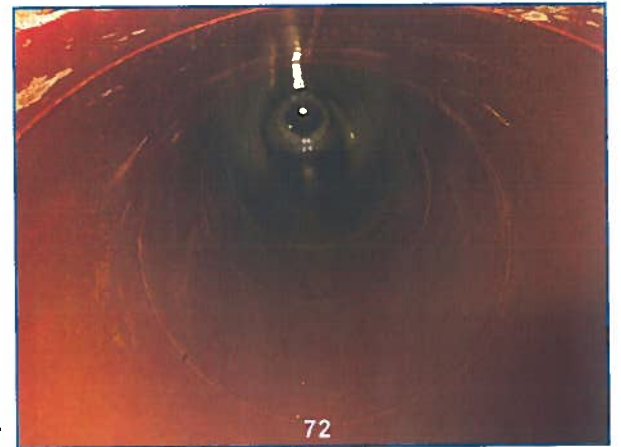
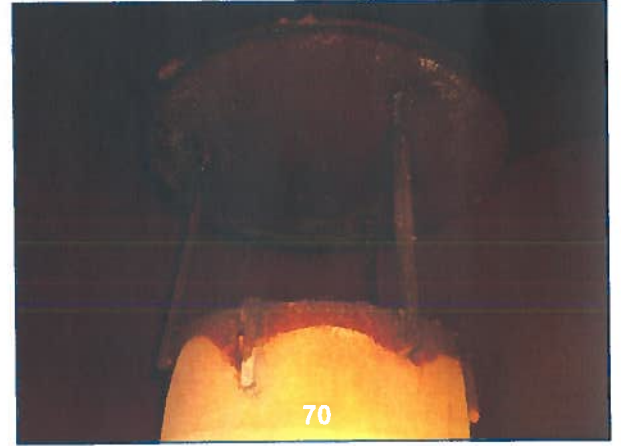
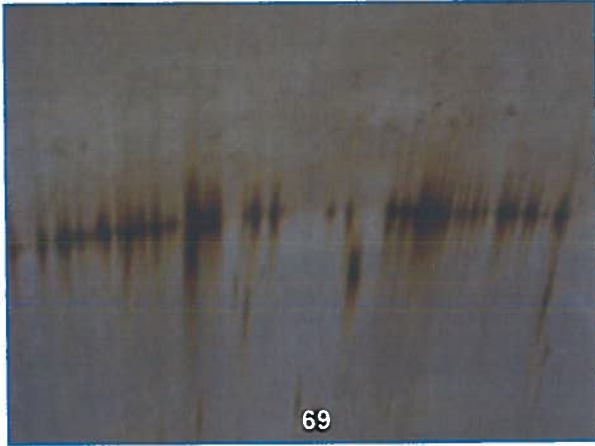
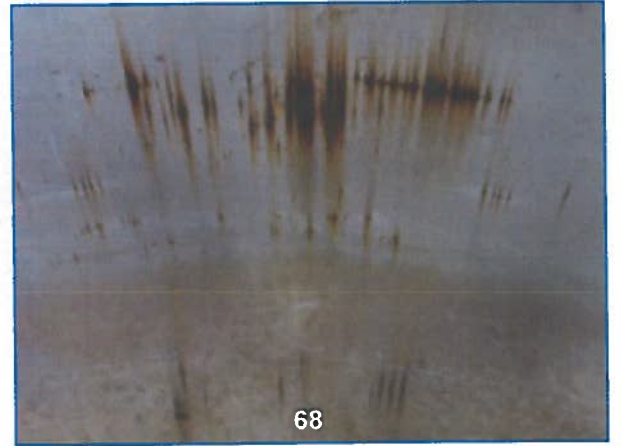
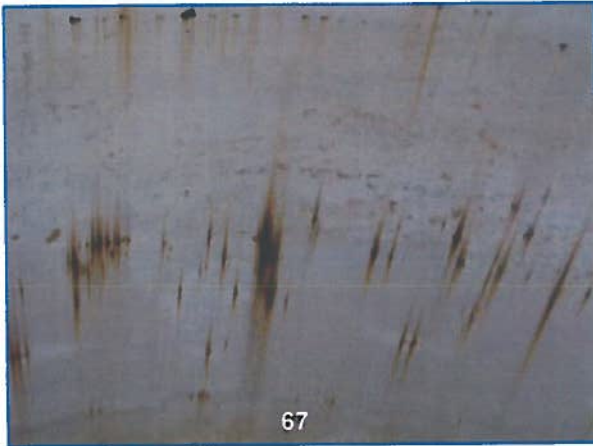
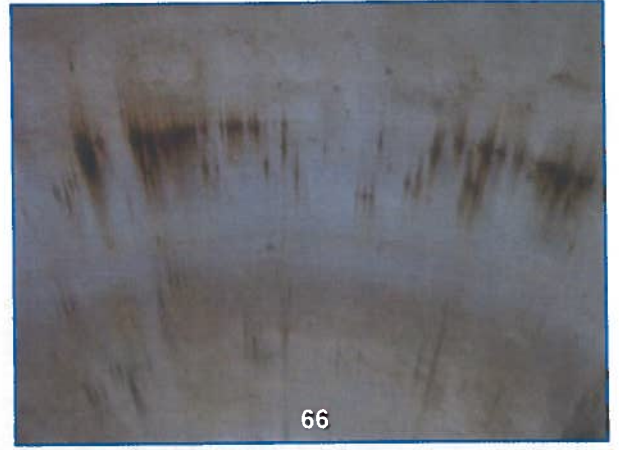
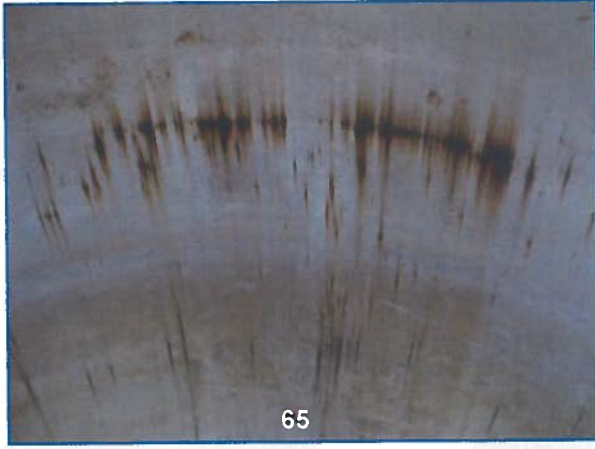


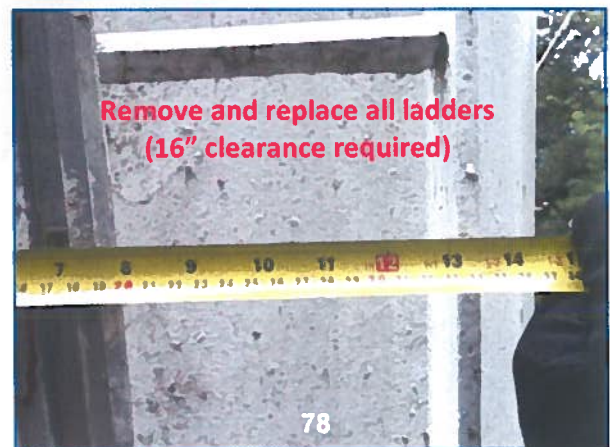
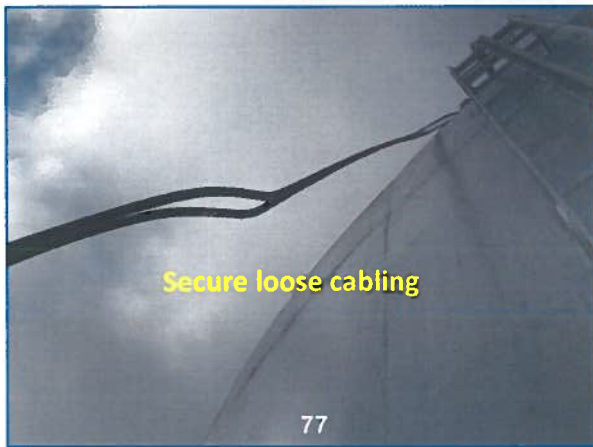
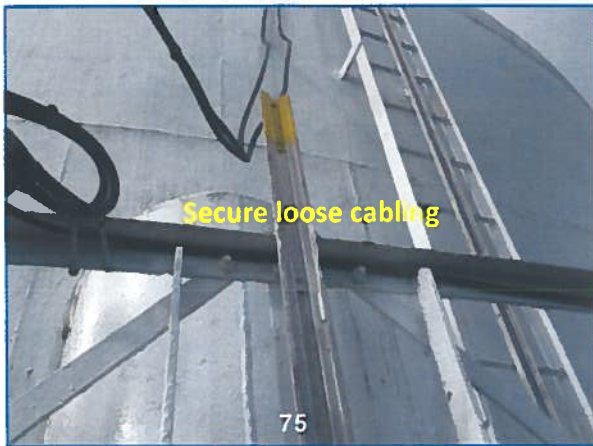
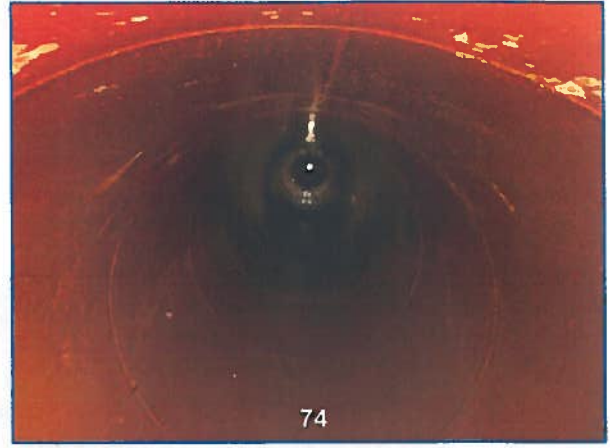
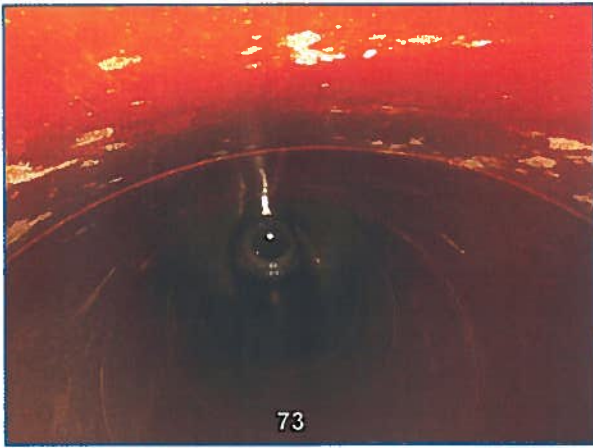
















August 29, 2013

**Town of Deep River**  
**Public Works Department**  
100 Deep River Road  
Deep River, ON  
K0J 1P0

Att: **Ms. Krista Cadoreth**

Phone: 613.584.2000 Ext. 107

**LMS Quote # 13091:**

**Deep River Multi-Legged Elevated Tank Upgrades**

Krista;

Landmark Municipal Services is pleased to provide budgetary pricing for the following repairs & upgrades at the above mentioned potable water storage facility:

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| 1) Ladder Upgrades:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>\$ 60,000.00</b> |
| <ul style="list-style-type: none"><li>- Remove existing ladders, brackets, fall arrest system and cages</li><li>- Replace with 16" wide galvanized ladder</li><li>- Supply and install (S&amp;I) new aluminum 'T' rail fall arrest system</li><li>- S&amp;I entry / exit gates at top and bottom of each ladder (4pc)</li><li>- S&amp;I 2pc aluminum rest seats on vertical ladder</li><li>- S&amp;I ladder security gate at base of ladder.</li><li>- Secure loose antenna cabling (once new ladders are installed)</li></ul> |                     |
| 2) Remove and replace 24" dia. Roof hatch with 30" x 30" aluminum Watertight cover.                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>\$ 4,000.00</b>  |
| 3) Upgrade vent system to 16" Stainless steel, frost proof, combination vent / vacuum relief unit.<br>(installed over existing vent – antenna relocation by others).                                                                                                                                                                                                                                                                                                                                                           | <b>\$ 6,000.00</b>  |
| 4) Supply and install handrail system on tank roof.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>\$ 10,000.00</b> |
| 5) Design, supply and install 30" dia. Wet riser manway                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>\$ 11,000.00</b> |
| 6) Design, supply and install 30" dia. Shell manway – accessible from Catwalk - c/w ladder rungs to the tank floor.                                                                                                                                                                                                                                                                                                                                                                                                            | <b>\$ 18,000.00</b> |
| 7) S&I wet riser guardrail and touch up external burn marks.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>\$ 6,000.00</b>  |

- 8) Supply and install 4pc – transfer station ‘D’ rings at the following locations:
- At bottom of vertical ladder to catwalk
  - At top of vertical ladder to catwalk
  - At roof hatch
  - At end of ladder on roof
- \$ 1,200.00**

- 9) Supply and install 3pc rescue port bases at the following locations:
- At valve pit
  - At top of vertical ladder
  - At roof hatch
- \$ 7,400.00**

- 10) Supply detailed rescue procedures (to be posted at site) **\$ 300.00**

**SUB TOTAL: \$ 123,900.00**

- 11) Lump Sum – Mobilization, demobilization, coordination, per diem, subsistence, etc. (15% OF SUBTOTAL) **\$ 18,585.00**

**TOTAL \$ 142,485.00**

*Includes cleaning and disinfection of the tank interior  
Includes internal / external paint touch-ups*

**Other:**

- 1) Design, supply, install – Hydrodynamic Mixing System  
(Refer to enclosed Brochure) **\$ 75,000.00**
- 2) **Internal Lining Replacement** **\$ 150,000.00**
- a. Allowance for steel repairs **\$ 25,000.00**



# LANDMARK MUNICIPAL SERVICES

## SPECIALISTS IN WATER STORAGE

### INSPECTIONS—MAINTENANCE—REPAIRS—SAFETY

### COATINGS & LININGS—MIXING SYSTEMS

LANDMARK MUNICIPAL SERVICES IS A SERVICE COMPANY IN THE WATER STORAGE INDUSTRY. LMS CONCENTRATES ON THE FIELD THAT LANDMARK STRUCTURES CO. HAS BEEN A PIONEER AND LEADER IN FOR OVER 30 YEARS, ELEVATED AND GROUND STORAGE WATER TANKS.

- ◇ GENERAL INSPECTION AND MAINTENANCE
- ◇ PAINT INSPECTION & REPAIR
- ◇ STRUCTURAL INSPECTION & REPAIR
- ◇ TANK CLEANING & DISINFECTION
- ◇ ON-LINE ROBOTIC INSPECTION
- ◇ SAFETY COMPLIANCE, CONFINED SPACE / RESCUE, REVIEW & UPGRADES
- ◇ DESIGN, FABRICATION, SUPPLY & INSTALLATION OF MIXING SYSTEMS
- ◇ LIGHTNING PROTECTION & TANK GROUNDING SYSTEMS
- ◇ ANTENNA MOUNT DESIGN, REVIEW, INSTALLATION
- ◇ TANK MODIFICATIONS (MANHOLES, HATCHES, VENT SYSTEMS)
- ◇ MECHANICAL DESIGN / INSTALLATION, REPAIR, ALTERATIONS,
- ◇ DEMOLITION SERVICES
- ◇ EMERGENCY REPAIR & SERVICE

# L.M.S.



# LANDMARK MUNICIPAL SERVICES

## SPECIALISTS IN WATER STORAGE

### INSPECTIONS—MAINTENANCE—REPAIRS—SAFETY

### COATINGS & LININGS—MIXING SYSTEMS

#### THE LANDMARK GROUP

- ◇ LANDMARK STRUCTURES CO.; BURLINGTON, ONTARIO CANADA
- ◇ LANDMARK MUNICIPAL SERVICES; BURLINGTON, ONTARIO CANADA
- ◇ LANDMARK STRUCTURES, LP; FORT WORTH, TEXAS USA

#### LANDMARK MILESTONES

1972	INCORPORATION OF THE ORIGINAL LANDMARK COMPANY
1975	FIRST INVOLVEMENT IN THE DESIGN / BUILD FIELD OF WATER STORAGE TANK CONSTRUCTION
1977	INVENTION OF THE ELEVATED COMPOSITE WATER STORAGE TANK BY CAZALY ASSOCIATES AND LANDMARK
1978	CONSTRUCTION OF THE FIRST ELEVATED COMPOSITE WATER STORAGE TANK IN NORTH AMERICA AT MOUNT ALBERT, ONTARIO
1985	INCORPORATION OF LANDMARK IN THE UNITED STATES OF AMERICA
1986	CONSTRUCTION OF THE FIRST ELEVATED COMPOSITE WATER STORAGE TANK IN THE UNITED STATES AT SOUTHLAKE, TEXAS
1995	CONSTRUCTION OF THE LARGEST ELEVATED WATER STORAGE TANK IN CANADA AT WASAGA BEACH, ONTARIO
1996	CONSTRUCTION OF THE LARGEST ELEVATED COMPOSITE WATER STORAGE TANK IN THE USA AT TOPEKA, KANSAS
2006	OVER 500 ELEVATED TANKS, STANDPIPES AND GROUND STORAGE TANKS CONSTRUCTED IN 25 YEARS

## LANDMARK MUNICIPAL SERVICES

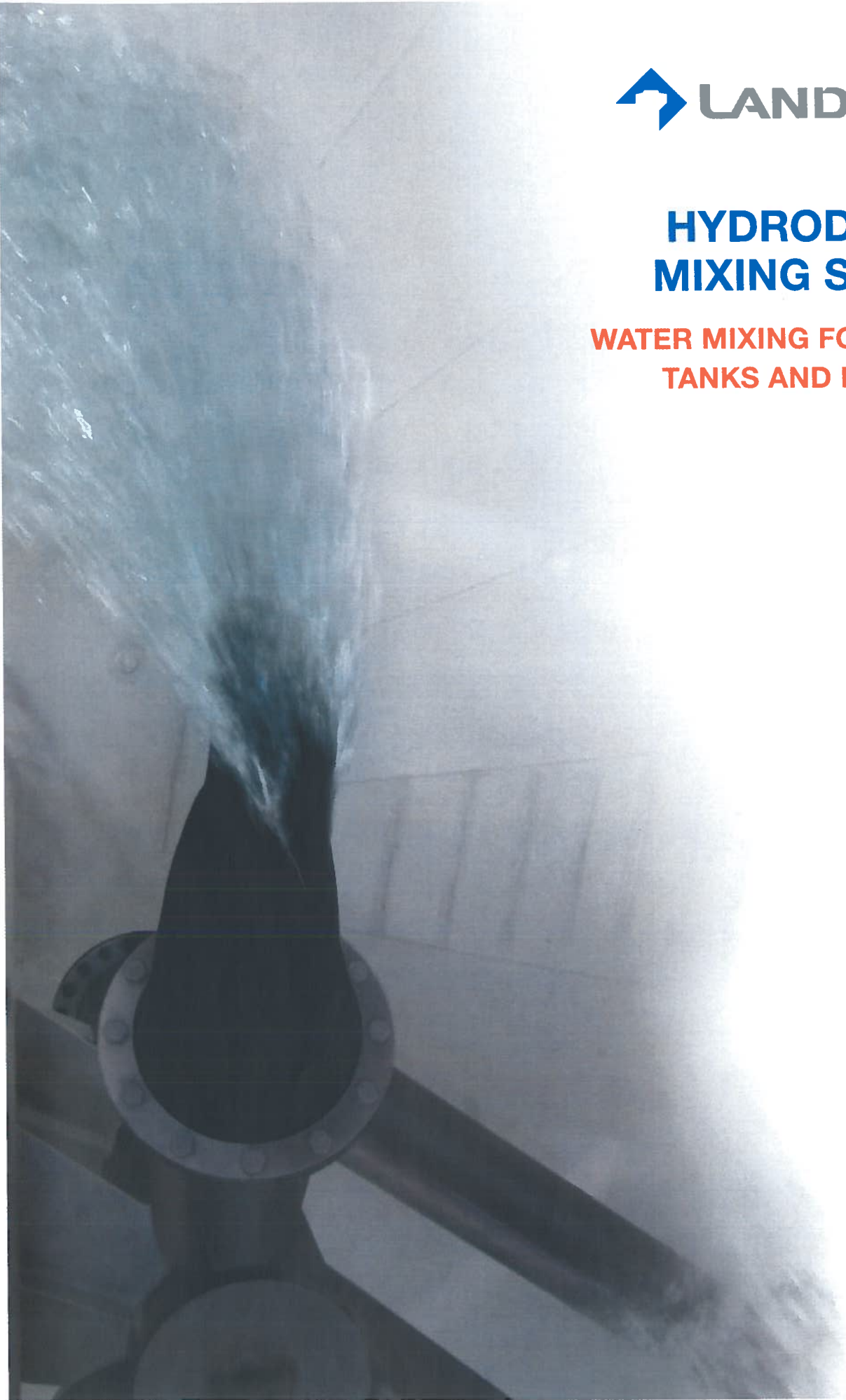
3091 HARRISON COURT  
BURLINGTON, ON L7R 3X4  
TEL: 905.319.7700  
FAX: 905.319.1373

SALES@LDMKCAN.COM  
WWW.WATERTOWERMAINTENANCE.CA



# HYDRODYNAMIC MIXING SYSTEMS

WATER MIXING FOR STORAGE  
TANKS AND RESERVOIRS



# LANDMARK HYDRODYNAMIC MIXING SYSTEM

PROTECT WATER QUALITY WITH AN EFFICIENT,  
COST EFFECTIVE, TANK SPECIFIC SOLUTION.

## The Quality Challenge

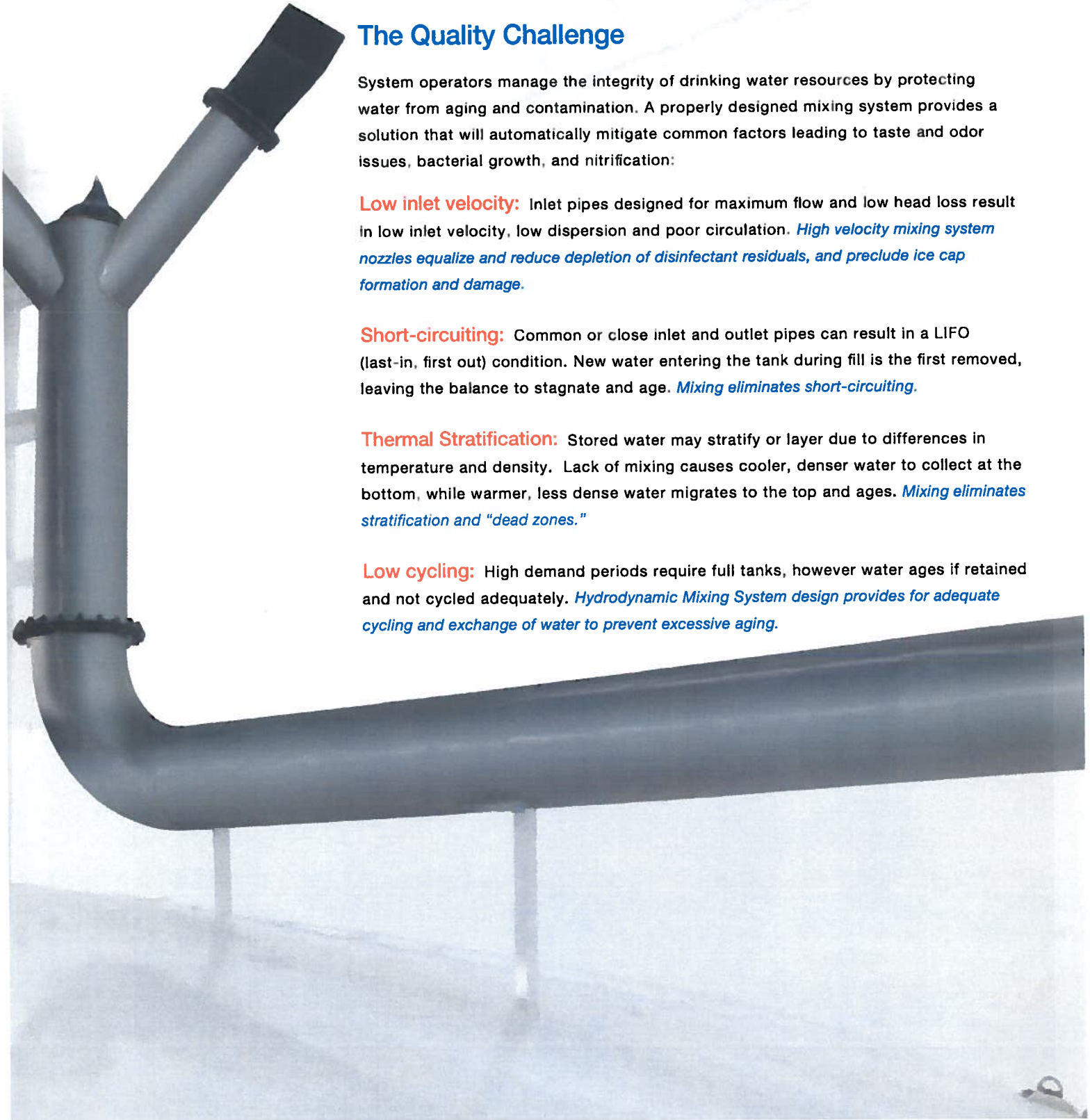
System operators manage the integrity of drinking water resources by protecting water from aging and contamination. A properly designed mixing system provides a solution that will automatically mitigate common factors leading to taste and odor issues, bacterial growth, and nitrification:

**Low inlet velocity:** Inlet pipes designed for maximum flow and low head loss result in low inlet velocity, low dispersion and poor circulation. *High velocity mixing system nozzles equalize and reduce depletion of disinfectant residuals, and preclude ice cap formation and damage.*

**Short-circuiting:** Common or close inlet and outlet pipes can result in a LIFO (last-in, first out) condition. New water entering the tank during fill is the first removed, leaving the balance to stagnate and age. *Mixing eliminates short-circuiting.*

**Thermal Stratification:** Stored water may stratify or layer due to differences in temperature and density. Lack of mixing causes cooler, denser water to collect at the bottom, while warmer, less dense water migrates to the top and ages. *Mixing eliminates stratification and "dead zones."*

**Low cycling:** High demand periods require full tanks, however water ages if retained and not cycled adequately. *Hydrodynamic Mixing System design provides for adequate cycling and exchange of water to prevent excessive aging.*

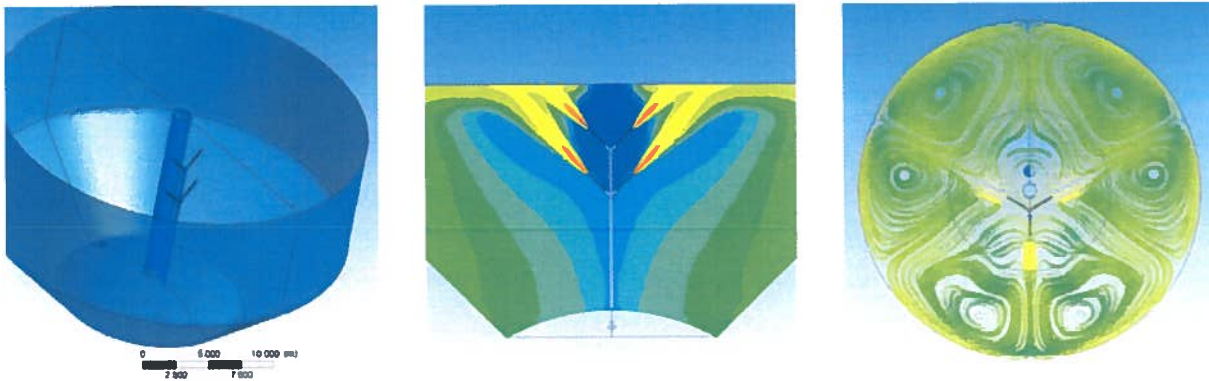


## The Integrated Solution: Landmark HMS

Landmark delivers optimized mixing for all types of new and existing tanks and reservoirs.

### Mixing System Function

- Manifold piping, inlet nozzle and outlet port combination utilizes energy of system operation to achieve complete mixing—no external power source required
- Inlet nozzles with variable orifice elastomeric check valves provide turbulent flow and increased momentum flux—harnessing more mixing power
- Outlet ports with wafer check valves are separated from inlet nozzles to maintain circulation

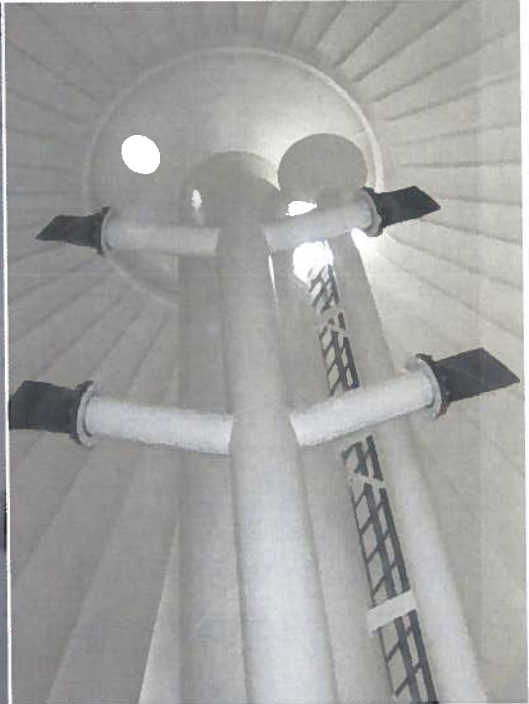
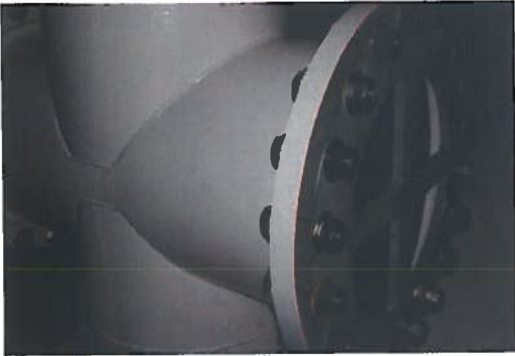


### Tank Specific Analysis and Engineering

- Every Landmark mixing system is based on a Computational Fluid Dynamics (CFD) analysis modeled to address specific tank and system operating conditions
- Design considerations include tank geometry, operation cycle and flow magnitude, as well as seasonal, emergency and future demand
- Design submittals include HMS drawings and specifications, hydraulic analysis, mixing analysis, installation instructions, certifications and operation manuals
- Inlet and outlet valves are NSF 61 certified for highest standards of quality and safety
- Materials of construction are selected to meet customer specific needs and provide maintenance-free performance
- Services includes consultation, monitoring and best practice recommendations for maximizing system benefits in everyday operation

## Landmark Leadership in Water Quality

- Industry leader in Hydrodynamic Mixing System development, with first systems designed and installed in the 1990s
- Invented the two leading mixer styles: “2-Tier 2-Y” and “Trillium”
- Extensive research, analysis and testing of tank mixing efficiency
- Four mixing system patents —in U.S. and Canada
- Unparalleled warranty and customer support



Landmark is a full service provider of water storage system services which include consultation, design, construction, monitoring, communications, rehabilitation and maintenance. Contact us for complete details.

Dallas/Fort Worth | Toronto | Chicago

Website: [landmarkwatermixing.com](http://landmarkwatermixing.com)

Email: [watermixing@teamlanmark.com](mailto:watermixing@teamlanmark.com)

Phone: 817.439.8888 (U.S.) | 905.319.7700 (Canada)

