

CLAYTON COUNTY WATER AUTHORITY

Request for Bid

CRYSTAL LAKE TANK PAINTING

Bid Opening: Tuesday, July 7, 2015 at 2:00 p.m. (local time)

ADDENDUM # 1

Dated: June 30, 2015

Acknowledgment of receipt of this addendum **MUST BE SIGNED AND INCLUDED IN YOUR RESPONSE TO THE RFB.**

BID REVISIONS:

Please replace the following sections within the Request for Bid package with the following revised sections provided with this Addendum:

- a) Table of Contents – Revised
- b) Division 2, Section 3 – Bid Submittals – Revised
- c) Division 4, Section 2 – Post Award Submittals – Revised
- d) Division 5, Section 1 – Protective Coatings – Revised

QUESTIONS:

1. **We noted that the specifications require a contractor's license. We have bid with Clayton County in the past and they have waived the requirement for contractor's license per an addendum. Will this be the case with this bid?**

Answer:

A Contractor's License will not be required.

2. **Is there a Plan Holder's list available?**

Answer: Below is a list of vendors that we have solicited; however, we posted the bid on several other websites.

Company Name	City	State, Zip	Phone	Email address
ACA & Twins Painting Company, LLC	Stone Mountain	GA 30086	678-462-3944	businesschi@yahoo.com
All American Markets Inc., dba MOPAC	Atlanta	GA	404-872-0434	mopac@mopac.biz
All Painting Contractors, Inc.	NORCROSS	GA 30093	6784070677	info@allpaintingcontractors.com
Atlanta Aviation Consultants			404 808 3136	rundy.tatum@atlantaaviationconsultants.com

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Atlanta Utility Constructors	Decatur	GA 30034	(404)286-1884	ROBINSONRD@AUC-ATLANTA.COM
Atm Constructors Inc	Lithonia	GA 30038	(404)207-2875	rsamitchell@att.net
BEPC LLC	Atlanta	GA 30303	(770)354-6590	imartin@bepcllc.com
Cherry Innovative Painting Co. Inc.	Lithonia	GA 30038	770-981-6511	cherrypaintingcoinc@netzero.net
Commercial Painters 360, LLC			404-399-9999	commercialpainters360@gmail.com
Dixie Painting & Sandblasting, Inc.	Andalusia	AL	334-572-4200	dpsinc@fairpoint.net
Edwards Painting & Contracting, Inc.	Decatur	GA 30035	(404)289-0743	EDDIECUMMINGS@BELLSOUTH.NET
First Infinity Construction, Inc.	East Point	GA	404-763-5963	nicholej@firstinfinity.com
Illuminis Contracting Services, Inc.	Kennesaw	GA	770-455-6081	tomyumkim@yahoo.com
Imigiz Enterprises, LLC	Austell	GA 30168	678-754-0435	imigiz2004@aol.com
Induron Protective Coatings			478-232-0951	cmoye@induron.com
Industrial Painting Services, Inc.	BUFORD	GA 30515-8568	(770)614-4029	BOB@INDUSTRIALPAINTINGSERVICES.NET
Interior Specifics Inc.	Austell	GA 30106	678-576-5210	Kenneycarter3@yahoo.com
Llamas Coatings, Inc.	Smyrna	GA	404-799-0384	smoky@llamascoatings.com
Mcken Unlimited LLC	Decatur	GA 30036	(770)469-5320	mckenunlimited@yahoo.com
MSF Construction, LLC.	Lawrenceville	GA 30043	770-873-7881	mnunez@msfcg.com
Ochoa General Interiors, Inc.	Hapeville	GA 30354	404-254-0716	jose@ochoaconstruction.com
Peachtree Painting Company, LLC	Stockbridge	GA 30281		dbinion@peachtreepaintingco.com
Pittsburg Tank & Tower Co., Inc.	Henderson	KY	270-826-9000	vcaudill@pttmco.com
Premier Painting Service, LLC	Lithonia	GA 30058	678-861-9438	lscottjr@premierpaintingsvc.com
R. E. McLean Tank Co., Inc.	Gastonia	NC	704-810-0460	EdJackson@hotmail.co
Raker Construction Company, L.L.C	Dallas	GA	770-445-1191	sharon@rakerco.com
Southeastern Resources, Inc.			770-242-9605	deand@integrity.com
Southeastern Tank & Tower, Inc.	Lake Park	GA	229-559-7700	jstaten@setanktower.com
Steeple Enterprises, LLC	Ellenwood	GA 30294	678-232-4298	jpatterson@steepleenterprisesllc.com
Superior Industrial Maintenance Company	Harrisburg	NC	704-795-0001	jgregg@gosuperior.net
Tank Pro	Northport	AL	205-534-1844	robert@tankproinc.com
TankRehab.com, LLC	Jacksonville	FL	888-673-8265	tom@tankrehab.com
The Paint Doctor, Inc.	Atlanta	GA 30312	404-524-8283	archiedeese@atlantaspaintdoctor.com
The Sherwin Williams Company			678-361-1959	swrep4432@sherwin.com
Turcotte, LLC	Canton	GA 30115	678-699-0890	turcottellc@gmail.com

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A D D E N D U M # 1

3. Is there an Engineer's Estimate for this project?

Answer: No.

4. Are Prevailing Wages in effect?

Answer: No.

5. Does the tank site have power and water?

Answer:

Electrical power is to be provided by the contractor (see Division 4 – Section 9 of RFB documents). Water will be provided by CCWA (see Division 4 – Section 9 of RFB documents).

6. Since the tank does not contain lead, can the abrasive be given away?

Answer:

See Division 5 – Section 1.15 of RFB documents.

7. Are any permits required?

Answer:

CCWA is not aware of any required permits (see Division 1 – Section 2.2 of RFB documents).

8. Can we work 7 days a week?

Answer:

See Division 4 – Section 1.3 of RFB documents.

9. Can we get a copy of the last inspection report for the tank?

Answer:

We cannot provide a copy of the most recent inspection, as we do not have the report yet, but a copy of the previous inspection report is provided with this Addendum.

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- 10. Will the cell coax going up the leg of the tank and the antennas be removed?**

Answer:

CCWA's one (1) SCADA antenna and its associated coax cable on the tank leg ladder will remain in place during the work. The two (2) antennas mounted on the tank shell ladder cage, on top of the tank, and their associated coax cables, will be removed from the tank prior to the Notice To Proceed date, along with the wooden building and the grated ice bridge assembly located between the tank leg and the wooden building.

- 11. Will project require containment since no lead is present?**

Answer:

Yes, see Division 4 – Section 1, and Division 5 – Section 1.12 B of RFB documents.

- 12. If containment is required, can CCWA remove the ice bridge so that containment tarps can be lowered and raised?**

Answer:

See response to question # 10 above.

- 13. There is a power line or cable line at tank site, can CCWA have this taken down for painting and put back up when project is completed?**

Answer:

The aerial phone line to the wooden building, and the coax cable running from the panels next to the vault, to the tank leg, will be either permanently or temporarily removed by the Notice To Proceed date.

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A D D E N D U M # 1

- 14. How many holes will be left after the cathodic protection system is removed that will need to be repaired?**

Answer:

There are approximately fifteen (15) five inch diameter hand holes with one (1) bolt hole next to each of the hand holes.

- 15. Who is responsible for moving the power lines to allow room for containment?**

Answer:

There are no overhead/aerial power lines on the site, only telephone and coax antenna cables, and they will be either permanently or temporarily removed by the Notice to Proceed date.

- 16. Is the small building at the tank site movable?**

Answer:

The building will be removed from the site by the Notice to Proceed date.

SIGNATURE

COMPANY NAME

DATE

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Addenda

Addendum #1

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Division 2

Bid Requirements

Section 3: Bid Submittals – Revised

3.1 Bid Submittal Requirements:

The following items are required to be included as part of the bid submittal. Failure to include any of these items may result in the bid being deemed non-responsive.

- A. Bid Form – Bidders must submit a hard copy of their completed and signed Bid Form.
- B. Georgia Bid Bond in the amount of five percent (5%) of the total bid amount.
- C. Bidder Qualification Information form, including References. A minimum of three references with information is required as indicated in Division 2, Section 6.
- D. Georgia Security and Immigration Compliance Act of 2006 form.
- E. Contractor Affidavit and Agreement form.
- F. Subcontractor Affidavit form.

If a Contractor/Subcontractor will not be performing any services under this contract, the Contractor/company submitting the bid MUST also complete, sign, date, and have both Affidavit forms notarized and make proper notation of "N/A" - Not Applicable.

Clayton County Water Authority (CCWA) cannot consider any bid which does not include completed affidavits. It is not the intent of this notice to provide detailed information or legal advice concerning the Georgia Security & Immigration Compliance Act of 2006, as amended on May 11, 2009. All Bidders intending to do business with CCWA are responsible for independently apprising themselves and complying with the requirements of that law and its effect on CCWA procurements and their participation in those procurements.

- G. Executed Site Visit Acknowledgment Form.

END OF SECTION

Division 4

General Requirements

Section 2: Post Award Submittals - Revised

2.1 General

- A. This section describes the information that is required to be provided by the Contractor to facilitate the work.
- B. Contractor shall submit to CCWA for approval to use, product information on all materials required to be provided by the Contractor unless noted otherwise.
 - 1. Where a material manufacturer is not specified, Contractor shall submit for use domestically manufactured materials.
 - 2. Materials provided by the Contractor not approved by CCWA shall be subject to rejection without further justification.

2.2 Post Award Submittal Requirements

- A. Manufacturer's Product Data Sheets for all coating and rehabilitation materials, to include surface preparation, application, and storage, mixing, and proportioning requirements (as applicable), maximum pot life, film/coating thickness, and curing requirements of all materials.
- B. Material Safety Data Sheets for all materials.
- C. The Contractor shall provide a memo on the Coating System Manufacturer's letter head, stating that the selected materials are suitable and compatible for application and use as directed under these Specifications.
- D. A color chart for each product to be applied.
- E. Coating System Manufacturer's warranty.
- F. Detailed construction schedule showing major work items and time to complete each item after a Notice to Proceed has been issued. Schedule shall show that project can be completed on-time.
- G. Testing Frequency and subsequent Test Locations and Results (Coating System).
- H. Contractor approval by Coating System Manufacturer - the Coating System Manufacturer shall submit a memo on the manufacturer's letter head, stating that the Contractor is approved to install the coating system specified.

Division 4

General Requirements

Section 2: Post Award Submittals - Revised

- I. Safety plan (for information only). Plan shall address confined space, ladders, scaffolding, rigging, fall protection, eye/hearing protection, etc.
- J. Detailed containment and dust control plan for all work, including methods, materials, and equipment to be used. Include diagram of containment system.
- K. List of all Sub-contractors who will be working on the project.

END OF SECTION

Division 5 **Protective Coatings – Revised**

Section 1: General

1.1 Scope

- A. This section includes, but is not necessarily limited to, standards for cleaning and the painting of structures and equipment described in the Specifications. Furnish all materials, equipment and labor necessary to complete the work. The terms "paint" and "coating material" shall be considered synonymous.
- B. Interior surfaces are defined as all inside areas of the tank, both below and above the high water line, including the underside of the roof, ladders, pipe, spider rods, stiffeners, rafters, fittings, and appurtenances.
- C. Exterior surfaces are defined as all outside areas of the tank, including the ladders, pipe, fittings, and appurtenances.

1.2 Substitutions

All coatings shall be the products of a single manufacturer.

1.3 Submittals

Certificate of Installation – Prior to final payment, the Coating System Manufacturer shall submit a memo on the manufacturer's letter head, stating that the Contractor's surface preparation and coating application work has been performed in accordance with manufacturer's instructions.

1.4 Pre-coating Meeting

Prior to ordering any of the materials covered under this section, the Contractor, CCWA's representative, painting subcontractor and paint manufacturer's representative shall attend a pre-coating meeting, and review the work to be performed under this section.

1.5 Quality Assurance

- A. Only those systems and components which are judged acceptable by the CCWA's representative shall be utilized in the work covered by this item. No materials shall be delivered to the job site until CCWA's representative has evaluated their acceptability.
- B. The following information shall be included on the label of all containers of materials supplied under this section:
 - 1. Manufacturer's name.

Division 5 **Protective Coatings – Revised**

Section 1: General

2. Type of paint or other generic identification.
 3. Manufacturer's stock number.
 4. Color (if any).
 5. Instructions for mixing, thinning, or reducing (as applicable).
 6. Manufacturer's application recommendations.
 7. Safety and storage information.
- C. All coating material used on this Project shall be purchased specifically for this Project and furnished in new, unopened containers.

1.6 Manufacturer's Representative During Painting Operations

At a minimum, an authorized representative of the coating manufacturer shall be present at the start-up of painting operations and as needed to be able to meet the requirements of Section 1.3B. Such representative shall instruct the Contractor's workers on the manufacturer's application recommendations.

1.7 Testing Equipment

- A. The Contractor shall furnish and make available to CCWA's representative the following items of testing equipment for use in determining if the requirements of this section are being satisfied. The specified items of equipment shall be available for use at all times when field painting or surface preparation is in progress:
1. Wet film gauge.
 2. Surface thermometer.
 3. Testex Replica Tape.
 4. "Visual Standard for Abrasive Blast Cleaned Steel", as published by SSPC (SSPC-VIS 1-89).
 5. "Visual Standard for Power-and Hand-Tool Cleaned Steel", as published by SSPC (SSPC-VIS 3).
 6. Holiday (pin hole) detector (low voltage).
 7. Sling-psychrometer or other on-site device used to calculate relative humidity and ambient air temperature.
 8. Magnetic dry film gauge, meeting the requirements of SSPC-PA2, Type I or Type II, including calibration.

Division 5 **Protective Coatings – Revised**

Section 1: General

1.8 Product Handling

A. Delivery

1. Deliver materials in original, sealed containers of the manufacturer with labels legible and intact.
2. Each container shall be clearly marked or labeled to show paint identification, date of manufacture, batch number, analysis or contents, and special instructions.

B. Storage

1. Store only acceptable Project materials on the Project site.
2. Store material in a suitable location and in such a manner as to comply with all safety requirements including any applicable federal, state and local rules and requirements. Storage shall also be in accordance with the instructions of the paint manufacturer and the requirements of the insurance underwriters.
3. Restrict storage area to paint materials and related equipment.
4. Place any material, which may constitute a fire hazard, in closed metal containers and remove daily from the Project site.

- C. Material Safety Data Sheets (MSDS): A copy of every component's MSDS shall be available at all times on the Project site.

1.9 Material Schedules

Material Schedules at the end of this section list prime coats, stripe coats, intermediate coats, finish coats that comprise a complete and compatible system of surface protection for the particular substrate. Maintain the unity of these systems, making sure all coats applied to any surface are from the same system and same manufacturer. Verify with the manufacturer the compatibility of the materials used.

1.10 Products

Abrasive Material

- A. The abrasive used in the abrasive cleaning shall be a material acceptable to the regulatory agencies of the state of Georgia for use in the described work. The material shall be of a shape and size to produce a uniform surface of acceptable profile to properly bond the prime coat.

Division 5 **Protective Coatings – Revised**

Section 1: General

- B. The abrasive may be a combination of materials, including additives such as dust inhibitors and Blastox®.
- C. If Blastox® is used it shall be blended with the blasting abrasive by a blending facility authorized by the TDJ Group, Inc.

Coating Materials

- A. Acceptable Manufacturers: The only acceptable manufacturers and products shall be those listed in the Material Schedules at the end of this section.
- B. All applicable data currently published by the paint manufacturer relating to surface preparation, coverages, film thickness, application technique, drying and overcoating times is included by reference as a part of this section. It is the responsibility of the Contractor to obtain and fully understand the appropriate data sheets for the coatings specified.
- C. Products
 - 1. Paints shall be factory mixed and delivered to the site in unbroken original packages bearing the manufacturer's name and brand designation and shall be applied in strict accordance with the manufacturer's printed specifications. Two-component coatings shall be mixed in accordance with manufacturer's instructions. All two-component coatings, once mixed, shall be applied within the pot-life recommended by the manufacturer.
 - 2. Unless otherwise specified, paints shall be of the best grade. All thinners, driers, varnish, etc., shall be of the best grade and shall be furnished by the coating manufacturer for use with the specified paints.
- D. Colors: CCWA will select the colors to be used on the various portions of the work. Provide color cards for the coatings proposed. Where more than one coat of paint is required, job tint off-shade the paint for each undercoat to show complete coverage.

1.11 Mixing and Tinting

- A. When possible, all paints and other materials shall be mixed and tinted by the paint manufacturer prior to delivery to the job site.
- B. When job site mixing and/or tinting is required, the manufacturer's recommendations shall be strictly adhered to. The Contractor shall be solely responsible for the proper conduct of all on-site mixing and/or tinting.

Division 5 **Protective Coatings – Revised**

Section 1: General

1.12 Execution

General:

- A. Protect all surfaces not to be painted, including those of on-site facilities, off-site facilities, vehicles and persons, from paint and damage of any kind caused by surface preparation and painting operations. Repair damage as a result of inadequate or unsuitable protection.
- B. Containment of all exterior surface preparation and coating operations:
 - 1. Contractor shall utilize a 100% sidewall containment system with sufficient height above the tank, and coverage to prevent debris, paint spray or droppings from fouling surfaces not being painted, during surface preparation operation, whether by water blasting, abrasive blast cleaning, or power tool cleaning, and during the painting operation.
 - 2. Contractor shall be solely responsible for all materials and the use of the containment structure/apparatus, and any damage, which may result from its use. The contractor by entering into a contract with CCWA agrees to hold the CCWA harmless from any patent issues that may arise from this work. The Contractor shall be solely responsible to insure that the containment system used shall not impose any excessive loading on structure or any its appurtenances during normal usage or during any normal or abnormal weather conditions such as, but not limited to periods of high winds, etc. Bases or lugs welded to the tank for attachment of support arms and other support points shall be Environmental Coating Schedule following use, and remain on tank for future use. The Contractor must be able to lower any containment/enclosure that has been erected on the structure in a maximum of ten (10) minutes, unless the Contractor and CCWA have agreed to use a containment system that will remain in place.
 - 3. Contractor may at its own expense cut an opening in the riser for use with the rigging for the containment system. If Contractor elects to cut an opening, it shall have radius corners and no cut shall be within 6-inches of an existing seam. The plate removed for the work shall be replaced and welded back in accordance of Division 6, Section 1.1. All welds associated with replacing the plate shall be tested using radiographs.
- C. The Contractor's on-site representative shall keep a record of work performed each day and shall submit it to CCWA's representative weekly.

Division 5 **Protective Coatings – Revised**

Section 1: General

The forms for this record will be furnished by the Contractor. Keep it simple.

- D. No coat of paint shall be applied until the surface has been inspected and accepted by CCWA's representative. The Contractor shall give at least 24 hour notice to CCWA's representative when cleaning is to be performed to prevent inspection delays. The Contractor shall provide the necessary access for inspection by CCWA's representative.
- E. Surface Preparation and Application Overview:
 - 1. Tank Exterior (Overcoat)
 - a. Power tool clean corroded areas (to SSPC-SP11 finish)
 - b. Spot prime power tool cleaned areas
 - c. Pressure-wash clean surfaces
 - d. Apply full intermediate coat.
 - e. Apply final coat
 - 2. Tank Interior (Repaint)
 - a. Abrasive blast clean surface (to SSPC-SP10 finish and surface profile as specified)
 - b. Apply prime coat
 - c. Apply stripe coat
 - d. Apply intermediate coat
 - e. Apply final coat

1.13 Environmental Conditions

- A. Environmental conditions which affect coating application include, but are not necessarily limited to, ambient air temperature, surface temperature, humidity, dew point and environmental cleanliness. Comply with the manufacturer's recommendations regarding environmental conditions under which coatings may be applied.
- B. Surface preparation, cleaning and painting of the exterior surfaces must be performed during periods of still air or only a slight breeze so that fallout of the dust or paint spray produced does not drift beyond the containment system. The CCWA's representative reserves the right to temporarily stop the Contractor from exterior surface preparation or painting when, by observation, it is apparent that the wind direction or velocity prevents compliance with this requirement. Any clean-up of fall-out shall be the responsibility of the Contractor.
- C. All blast residue from the tank shall be properly disposed of off-site by the

Division 5 **Protective Coatings – Revised**

Section 1: General

Contractor in accordance with the provisions of this section and Division 4, Section 5 of these Specifications.

- D. No paint shall be applied upon damp or frosty surfaces, or in wet or foggy weather. No paint shall be applied in temperatures below 40 degrees F, when freezing (32 degrees F) is predicted within 24 hours of application, or under temperature or humidity conditions not recommended by the manufacturer. However, in no case shall coatings be applied when the surface temperature is within 5 degrees F of dew point, and in no cases shall coating be applied over a damp surface.
- E. In situations where condensation on existing surfaces is problematic, provide dehumidification systems to control this surface condition.
- F. The Contractor shall maintain on-site a log recording the following information, obtained at the beginning of the work day, at mid-day and at the end of the work day: ambient air temperature, surface temperature, humidity, dew point and environmental cleanliness. When work is being performed inside the tank or inside another structure, this information shall be recorded for both the interior area where work is being performed and the exterior.

1.14 Safety

- A. General:
 - 1. The Contractor is responsible for the safety of all workers and subcontractors and suppliers performing work on this Project.
 - 2. The Contractor shall protect CCWA's representative and the General Public from harm attributable to the Contractor's performance, or non-performance, of the work on this Project. The protection shall include, but not be limited to, providing the necessary safety equipment and instructions for its use by CCWA's representative, and their agents.
 - 3. The Contractor shall protect the existing on-site and off-site structures, property and environment from damage attributable to the Contractor's performance, or non-performance, of the work on this Project.
 - 4. The Contractor shall comply with the applicable standards of 29 CFR Part 1910 and 29 CFR Part 1926.
 - 5. The listing of the following potential hazards shall in no way relieve the Contractor's responsibility for safety on this Project.

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- B. The interior of these tanks may be considered a confined space hazard. The Contractor shall confirm to CCWA, in writing, prior to the start of the Project that the Contractor has training programs, trained personnel, and is otherwise in compliance with CFR 1910.146.
- C. Lead Exposure
 - 1. Workers shall be protected in accordance with all applicable rules and regulations having jurisdiction over this work. Specifically, workers shall be protected in accordance with 29 CFR Part 1926.62.
 - 2. All testing of the environment associated with the protection of workers, and the establishment of the degree of protection required for the workers, shall be performed under the direction of the Contractor and shall be paid for by the Contractor.

1.15 Containment, Collection and Disposal

- A. Collection and containment of surface preparation debris shall be conducted in accordance with the "Guide for Containing Surface Preparation Debris Generated During Paint Removal Operations" (SSPC-Guide 6). Minimum containment system shall be Class 2W for Water Blasting. Assessment Method for Quantity of Emissions shall be Method A – Visible Emissions, with maximum permitted emissions being Level 1.
- B. The means and methods of containment and collection shall be at the discretion of the Contractor, subject to the following provisions:
 - 1. The Contractor shall provide a tarp, barrier or some other means of containment to prevent debris from coming into contact with the ground.
 - 2. The Contractor shall not allow any surface preparation debris or coating material to fall, blow or drift beyond the drape containment system.
 - 3. The Contractor shall perform a soil analysis prior to any work being performed on each site and after all work has been performed on each site. Such analysis shall be in accordance with Method E for Method for Assessing the Quantity of Emissions, as described in SSPC -Guide 6.
- C. Debris disposal from tank surface preparation operations shall be conducted in accordance with the Guide for Disposal of Lead-Contaminated Surface Preparation Debris (SSPC -Guide 7) and Division 4, Section 5 of these Specifications.
- D. If the analysis of residue shows that it does not contain more than 5 parts

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per million of leachable lead, the Contractor shall dispose of the waste represented by that analysis off site at a location of its choosing, as subject to the approval of the disposal site property CCWA.

- E. If the analysis of residue shows that it contains more than 5 parts per million of leachable lead, the Contractor shall handle, collect, store, transport, and dispose of the waste represented by that analysis in accordance with all rules and regulations having jurisdiction over this work, including:
 - 1. 40 CFR Part 260 Hazardous Waste Management System: General.
 - 2. 40 CFR Part 261 Identification and Listing of Hazardous Waste.
 - 3. 40 CFR Part 262 Standards Applicable to Generator of Hazardous Waste.
 - 4. 40 CFR Part 263 Standards Applicable to Transporters of Hazardous Waste.
 - 5. 40 CFR Part 264 Standards for CCWAs and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.
 - 6. 40 CFR Part 265 Interim Status Standards for CCWAs and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.
 - 7. 40 CFR Part 268 Land Disposal Restrictions.

1.16 Lead Paint Residue Handling

- A. Notice: The Contractor is advised that the paint removal operation may create a residue which contains lead of unknown concentrations.
- B. Existing Information and Conditions: See Appendix D of these Specifications.

1.17 Surface Preparation

- A. All surfaces shall be thoroughly clean, dry, and free from oil, grease or dust. All fabricated metal products shall have all weld flux and weld splatter removed, and sharp peaks in welds ground smooth.
- B. Dry Blast Method: Where so required, all paint, dirt, rust, and foreign material shall be removed by abrasive blasting using the dry blast method. Standards for the surface preparation of ferrous metals required in the Material Schedules are the standards of SSPC-The Society for Protective Coatings. Care shall be taken to blast clean all pits, welds, and other rough

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surfaces so that the rough surfaces do not cause a "shadow" effect.

- C. Power Tool Cleaning Method: Where so required, all paint, dirt, rust, and foreign material shall be removed by using the power tool cleaning method. Standards for the surface preparation of ferrous metals required in the Material Schedules are the standards of SSPC-The Society for Protective Coatings. Care shall be taken to blast clean all pits, welds, and other rough surfaces so that the rough surfaces do not cause a "shadow" effect.
- D. Pressure Wash Method
 - 1. The exterior of the tank shall be spot, power tool cleaned where the coating has failed and the metal and rust is showing. The power tool cleaned areas shall extend to the outer limits of the rusted area but is not intended to remove well bonded adjacent paint. All dirt, rust and foreign material shall be removed in these areas by power tool cleaning. Care shall be taken to clean all pits, welds and other rough surfaces so the rough surfaces do not cause a "shadow" effect. After these areas are cleaned and primed, the remaining exterior surface shall be pressure wash cleaned.
 - 2. Pressure Washing: Pressure washing shall be performed with a pump capable of producing 3,000 psi at the tip. Washing will be performed to remove all dirt, chalked paint, loose paint, mildew, or other foreign material leaving only clean, tight-adhering paint. The initial wash water shall have a fungicide added and may have detergents added. A rinse wash shall be used to remove all residue of the detergents.
- E. All surface preparation and cleaning shall be performed in accordance with the standards and guidelines of SSPC -The Society for Protective Coatings, and as specified in this section. All cleaning shall be performed in accordance with OSHA regulations.
- F. The work shall be performed from scaffolding or platforms of the Contractor's selection, but in no event will blasting be performed from an untethered boson chair that allows the operator to be pushed away from the work surface by the reaction force of the nozzle.
- G. Inspection
 - 1. Cleaned surfaces shall be inspected by the CCWA's representative prior to primer application. Material manufacturer shall be onsite to inspect surface preparation as well when directed by CCWA's representative.

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2. Abrasive blast cleaned surfaces shall be inspected by CCWA's representative, and material manufacturer when directed, for degree of cleanliness and surface profile utilizing the SSPC Visual Standards (VIS 1-89) and the SSPC Surface Profile Comparator. These plates shall be securely wrapped in clear plastic and sealed to protect them from deterioration and marring.

1.18 Application

A. General

1. After specified surface preparation, all surfaces shall be cleaned free of dust or foreign matter. Surfaces shall be completely dry before any paint is applied.
2. All painting shall be performed in accordance with AWWA D102 and as specified herein. The application of paint shall be in strict accordance with the printed instructions of the paint manufacturer.
3. Paint shall be evenly spread in the proper thickness, so that there shall be no drips, runs or sagging of the coating. A uniform coating shall be worked around all irregularities. If runs and drips do occur, they shall be removed and the surface re-coated to the satisfaction of CCWA's representative prior to application of the next coat. As the painter adjusts its physical location during the coating operation, all over sprays that may have settled on the surfaces, especially weld seams, shall be swept or blown off. All overspray, heavy drips, or sags shall be removed. All coating applied on top of overspray shall be removed and the area repainted.
4. Sufficient time, as directed by the manufacturer, shall be allowed for the paint to dry before the application of succeeding coats. Colors shall be chosen by CCWA. Each coat shall be tinted to facilitate positive identification of areas receiving subsequent coats.

B. Interior

1. Field Prime Coats (for field blasted tanks)
 - a. After completion of the surface preparation and cleaning, all surfaces shall receive a complete prime coat. All areas cleaned within one day shall be primed the same day.
 - b. Immediately before priming, the metal shall be cleaned of dust and foreign materials. Air used to blow-off dust shall be dry and free of

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oil. A minimum of two hours shall elapse between the time blasting operations have stopped and priming begins.

c. The prime coat shall be applied by brush, roller or airless spray.

2. Interior Stripe Coat: After completion of the prime coat, all interior weld seams, including attachment welds, shall receive an intermediate stripe coat applied by brush. The purpose of this coat is to assure that no "shaded" areas around the welds exist and to provide more protection for the rough weld areas. Coating shall cover the weld and adjacent metal a minimum of 2-inches each side of the weld. Additionally, all inside corners, outside corners and edges shall receive a stripe coat as required for weld areas.
3. Intermediate Coat: After completion of the stripe coat, all surfaces shall receive an intermediate coat. The intermediate coat shall be applied by brush, roller or airless spray.
4. Finish Coats: After completion of the intermediate coats, all surfaces shall receive a finish coat. The finish coats shall be applied by brush, roller or airless spray.
5. Ventilation: The Contractor shall provide adequate forced ventilation sufficient to change the air within the tank at the rate of 1,000 cfm per man. The minimum rate shall be 3,000 cfm. The blower or blowers shall be placed so as to introduce air at the top and withdraw from the bottom. The ventilation system shall operate continuously, including the curing time after coating application has been completed. Care shall be taken as it relates to direction of discharge of air to minimize the impact adjacent occupied structures and property.

C. Exterior

1. Spot Prime Coats (for overcoating)
 - a. After completion of the surface preparation and cleaning of the corroded areas, all such areas shall receive a spot prime coat. All areas cleaned within one day shall be primed the same day.
 - b. Immediately before priming, the metal shall be cleaned of dust and foreign materials. Air used to blow-off dust shall be dry and free of oil.
 - c. The prime coat shall be applied by brush, roller or airless spray.
2. Intermediate Coat: After completion of the spot prime coat and pressure

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wash surface preparation, all surfaces shall receive the specified intermediate coat. The intermediate coat shall be applied by brush, roller or airless spray.

3. **Finish Coat:** After completion of the intermediate coat, all surfaces shall receive a finish coat. The finish coat shall be applied by brush, roller or airless spray.
- D. **Inspection:** Unless otherwise noted, film thicknesses specified are minimum dry film thicknesses. Each coat shall be checked as follows:
 1. Immediately after application, wet film thickness readings shall be taken by the Contractor and CCWA's representative with a wet film gauge.
 2. When thoroughly cured, dry film thickness readings shall be made by the Contractor and CCWA's representative in accordance with SSPC-PA 2. Where the prime coat is found deficient and finish coating is of a different formulation, additional prime coats shall be applied at no additional cost to the CCWA. The finish coating may not be used to correct deficiencies in the thickness of the prime coat.
 3. The total dry film thickness shall be checked by CCWA's representative prior to acceptance and if found to be less than specified, additional finish coats shall be applied at no additional cost to CCWA to obtain the specified thickness.
 4. After the coating has been applied, the interior coated surface shall be tested by the Contractor in the presence of CCWA's representative with an approved 60 volt low current wet sponge type holiday detector. Any thin areas, defects, flaws and holidays in the coating shall be immediately repaired.
 5. The Contractor shall provide the necessary equipment for making the above tests.
- E. **Defective Work:** Remove and replace, at the direction of CCWA's representative, any painting work found to be defective or applied under adverse conditions.

1.19 Maintenance Materials

Furnish CCWA at least one gallon of each type component and color of paint used for finish coats and one gallon of each type of thinner required. Containers shall be tightly sealed and clearly labeled.

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1.20 Coating Repair

Where coatings have been damaged, the surfaces shall be cleaned and repainted. Surface preparation shall conform to SSPC-SP 11, and feathered into undamaged areas. Painting shall be performed as specified for the damaged surface.

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1.21 Coating Material Schedules

Type: Epoxy/Polyurethane Use: Exterior Tank			Surface Preparation: SSPC-SP11 Power Tool Cleaning to Bare Metal	
Coat	Minimum Dry Film Thickness (Mils)	Thmec	Induron	Sherwin-Williams
Spot Prime	Mfr. specific	Series 135 Chembuild (3.0 to 4.0 mils)	E-Bond 100 (3.0 to 5.0 mils)	Macropoxy 5000 Primer (1.0 to 1.5 mils)
Intermediate Coat	Mfr. specific	Series 135 Chembuild (3.0 to 4.0 mils)	Induramastic 85 (3.0 to 5.0 mils)	Macropoxy 646 FC Epoxy (3.0 – 5.0 mils)
Finish Coat	Mfr. specific	² 1074U Endura-Shield II (2.0 to 3.0 mils)	6600 Indurethane Plus (2.0 to 3.0 mils)	Acrolon Ultra (2.0 to 3.0 mils)
System				

Type: Zinc/Epoxy Use: Interior Tank - Potable Water			Surface Preparation: SSPC-SP10 Near-White Blast Cleaning Surface Profile: 2.0 to 3.0 mils	
Coat	Minimum Dry Film Thickness (Mils)	Thmec	Induron	Sherwin-Williams
Prime Coat	Mfr. specific	Series 94-H2O (2.5 to 3.5 mils)	Indurazinc MC67 (2.5 to 3.5 mils)	Corothane I Galvapac 2K (2.0 to 3.0 mils)
Stripe Coat	Mfr. specific	¹ N140 Pota-Pox Plus (2.0 to 3.0 mils)	³ PE-70/RC-70 (2.0 to 3.0 mils)	Macropoxy 646 PW (2.0 to 3.0 mils)
Intermediate Coat	Mfr. specific	¹ N140 Pota-Pox Plus (4.0 to 6.0 mils)	³ PE-70/RC-70 (4.0 to 6.0 mils)	Macropoxy 646 PW (4.0 to 6.0 mils)
Finish Coat	Mfr. specific	¹ N140 Pota-Pox Plus (4.0 to 6.0 mils)	³ PE-70/RC-70 (4.0 to 6.0 mils)	Macropoxy 646 PW (4.0 to 6.0 mils)
System	Total Dry Film Thickness (Mils)	10.5 to 15.5 mils	10.5 to 15.5 mils	10.0 to 15.0 mils

¹ Add Series 44-700 Epoxy Accelerator when the surface temperature is below 50°F.

² Add Series 44-710 Urethane Accelerator when the surface temperature is below 50°F.

³ Use PE-70 for warm weather applications when the surface temperature and the ambient air temperature are above 50°F and are expected not to decrease for at least two hours after application. Use RC-70 for cold weather applications when the surface temperature and the ambient air temperature are above 35°F and are expected not to decrease for at least two hours after application.

END OF SECTION

UTILITY SERVICE

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WWW.UTILITYSERVICE.COM



**Clayton County
Water Authority
Morrow, Georgia**

**500,000 Elevated
Crystal lake Road**

**Water Storage Tank
Inspection Report**

6-20-2011

Water Tank Inspection Report

Customer Name: Clayton County Water Authority

Inspection Date: 6-20-2011

Location: Crystal Lake tank

Capacity: 500,000 Gallons

Foundation Conditions: good

Height: 67' 7" to Low water level

Manufacturer: R. D. Cole Co- Newnan, Ga.

Date of Manufacture: 1964

Drainage: adequate

Valve Connections to tank: good- no leakage

General Appearance: Fair - light mildew,
Color fading, and coating oxidation

Date Last Painted:

Exterior: Previous top coated—unknown date

Interior: Unknown

Exterior

Coating Type: Acrylic enamel

Logo: yes-block style

Type Construction: Welded Design

Conditions: Rust- light mildew- Chalking- oxidation

Target Indicating System- yes

Mil Thickness average- 9 mils- low to 13 high- average

Exterior Paint Re-Coat Capability- yes- with proper surface
Preparation

Interior

Coating Type: High build epoxy

Small coating blisters are forming in the lower bowl area.

Barnacle formation and pitting (steel loss) is noted in the lower
bowl, riser, and on interior ladder

(Please note that heavy mud accumulations were removed at inspection)

Recommendations:

Exterior: Renovate exterior by top coating with a compatible acrylic paint system

Interior: Renovate total interior surfaces by sand blast cleaning to remove all old epoxy coating.
Apply a 2 coat high build epoxy paint system to all interior surfaces. Stripe coat all welded seams
Washout interior at minimum of 2 year intervals to Prevent mud buildup

Repairs:

Remove interior overflow, install on exterior leg to To ground level with screen, closure flap, and splash pad
Install additional balcony drain holes to prevent standing rainwater

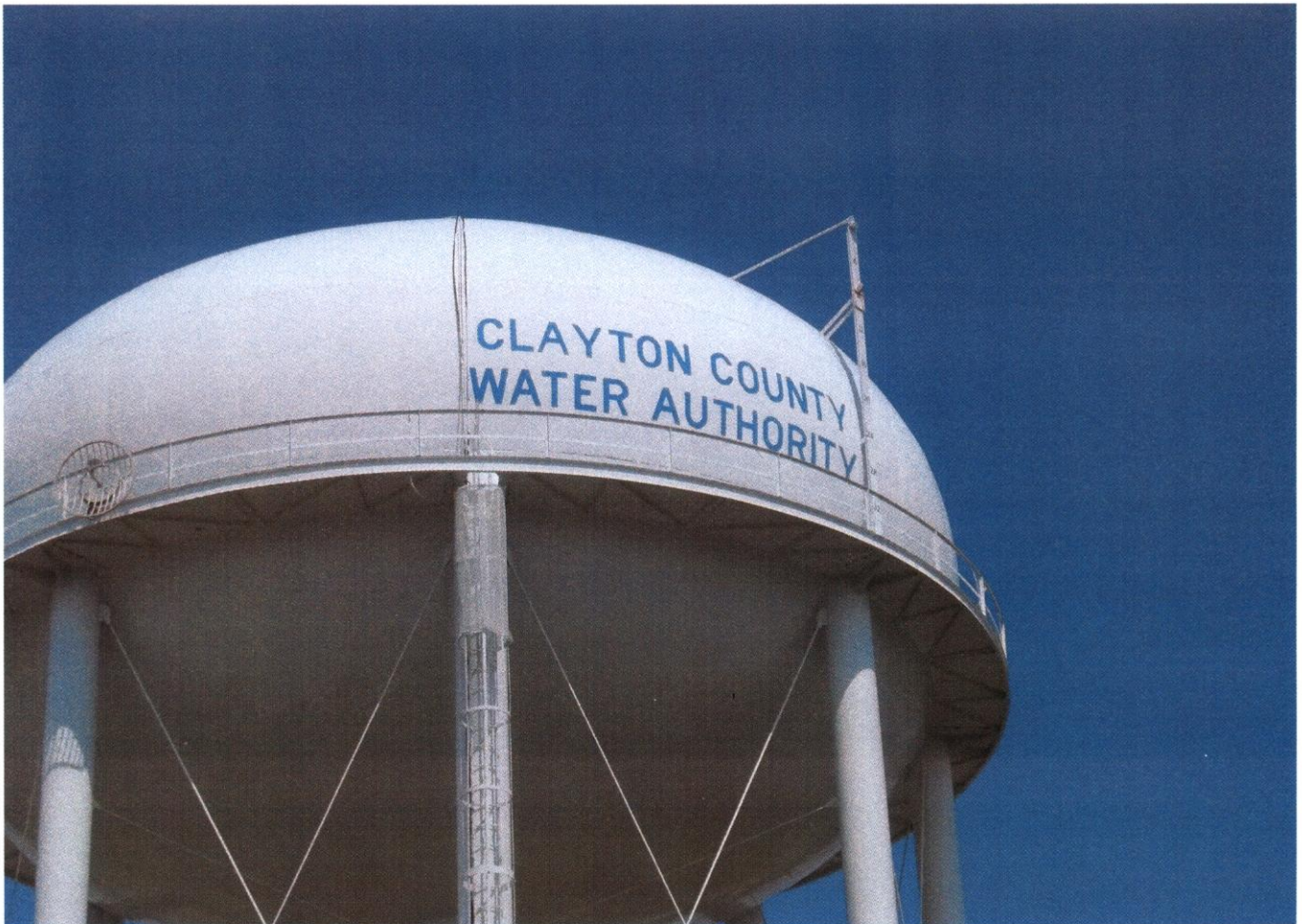
Make any and all other repairs as required to provide a sound water tight vessel in accordance with AWWA standards, latest editions, and Georgia E.P.D. regulations for potable water storage vessels.

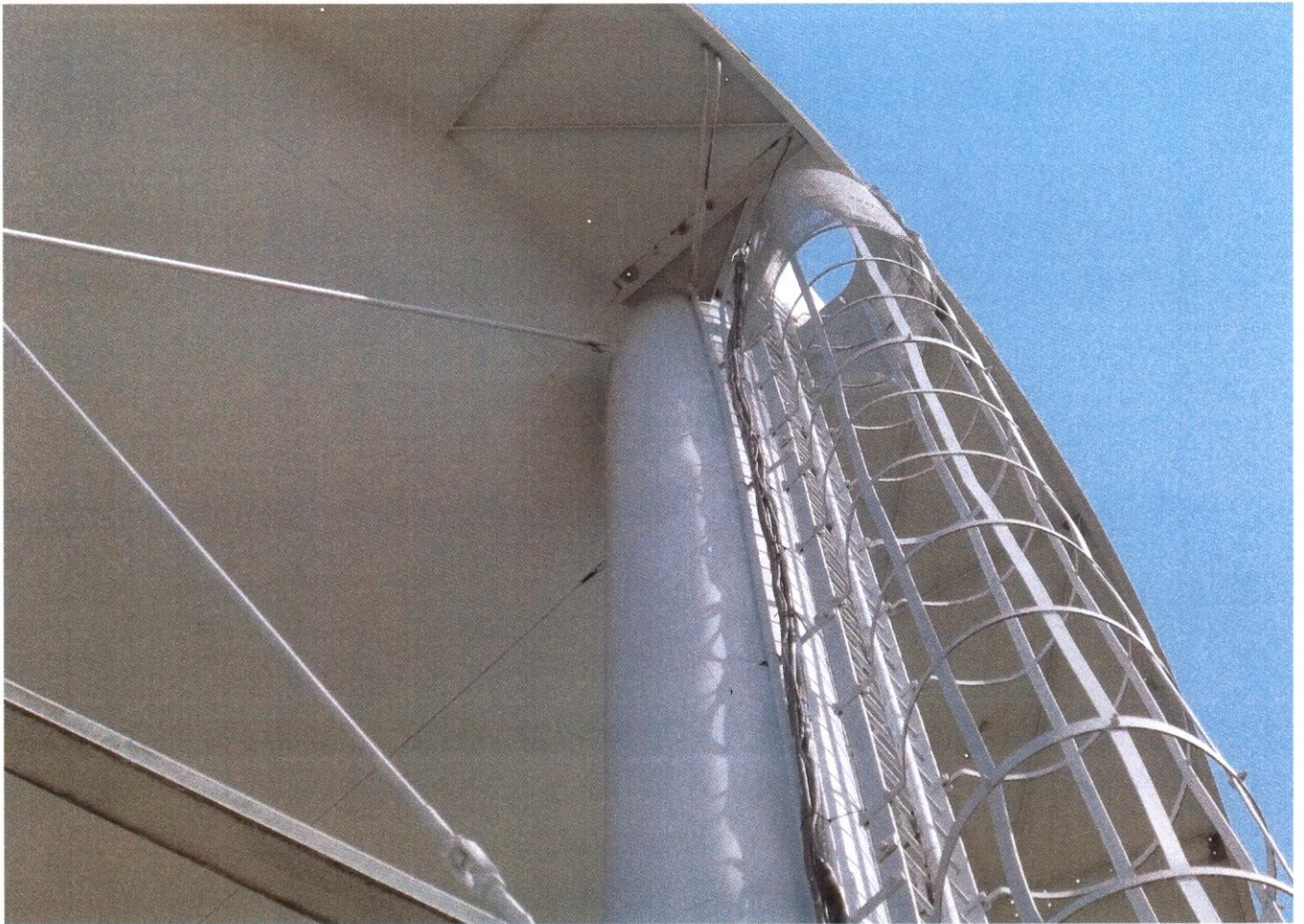
This report is respectfully submitted by Utility Service Co., Inc

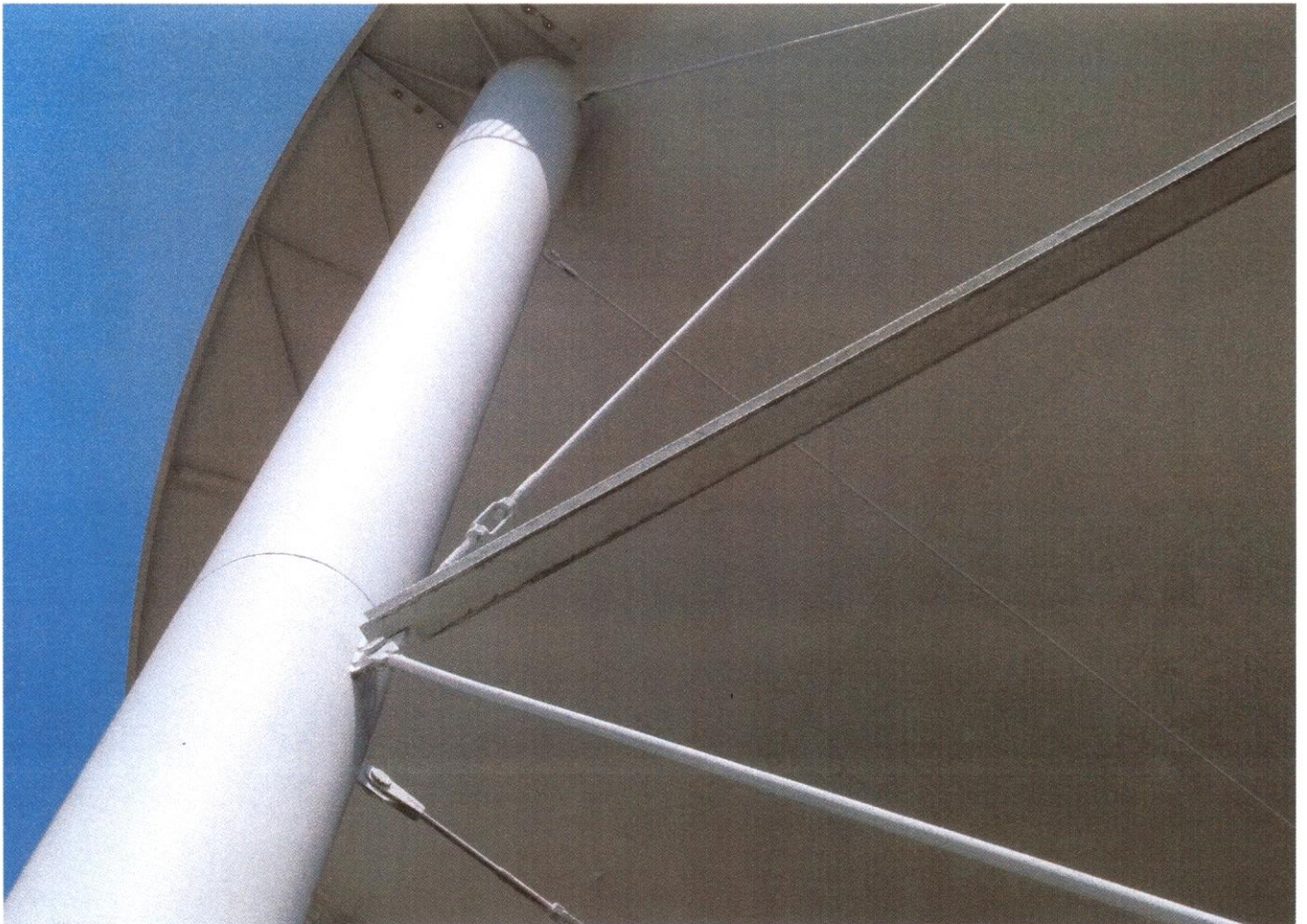


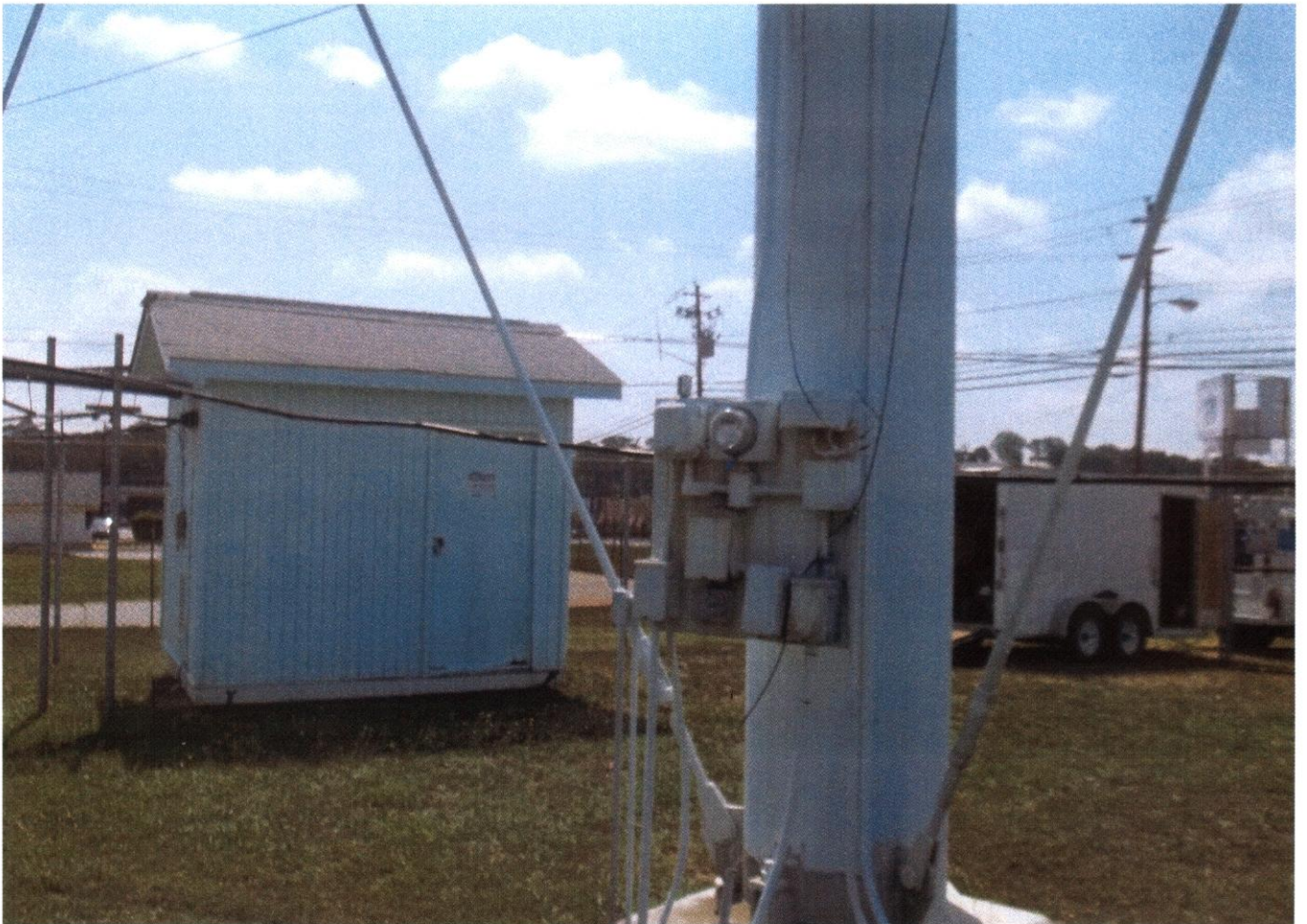
Charles Belcher
Georgia Sales Consultant

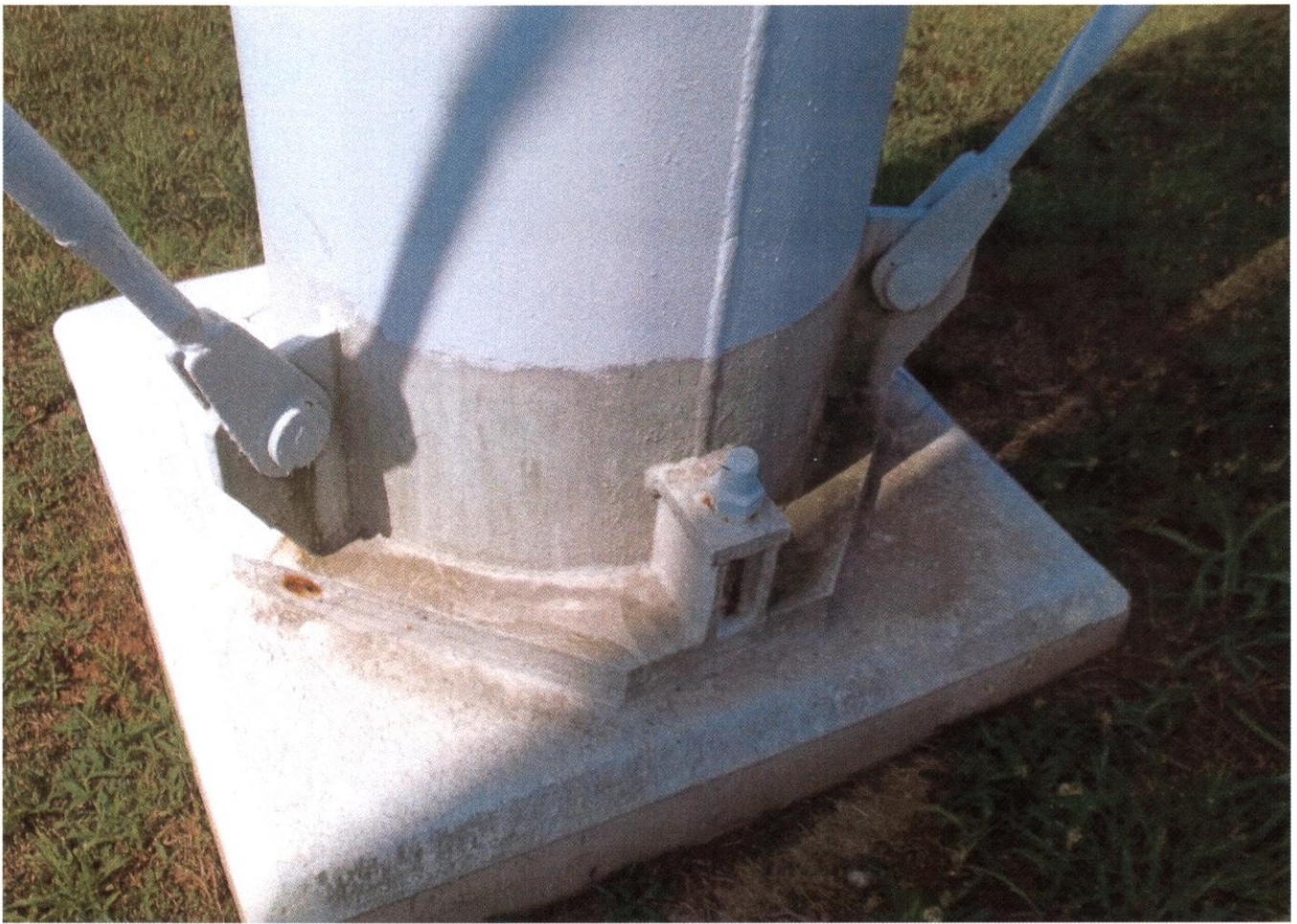
EXTERIOR



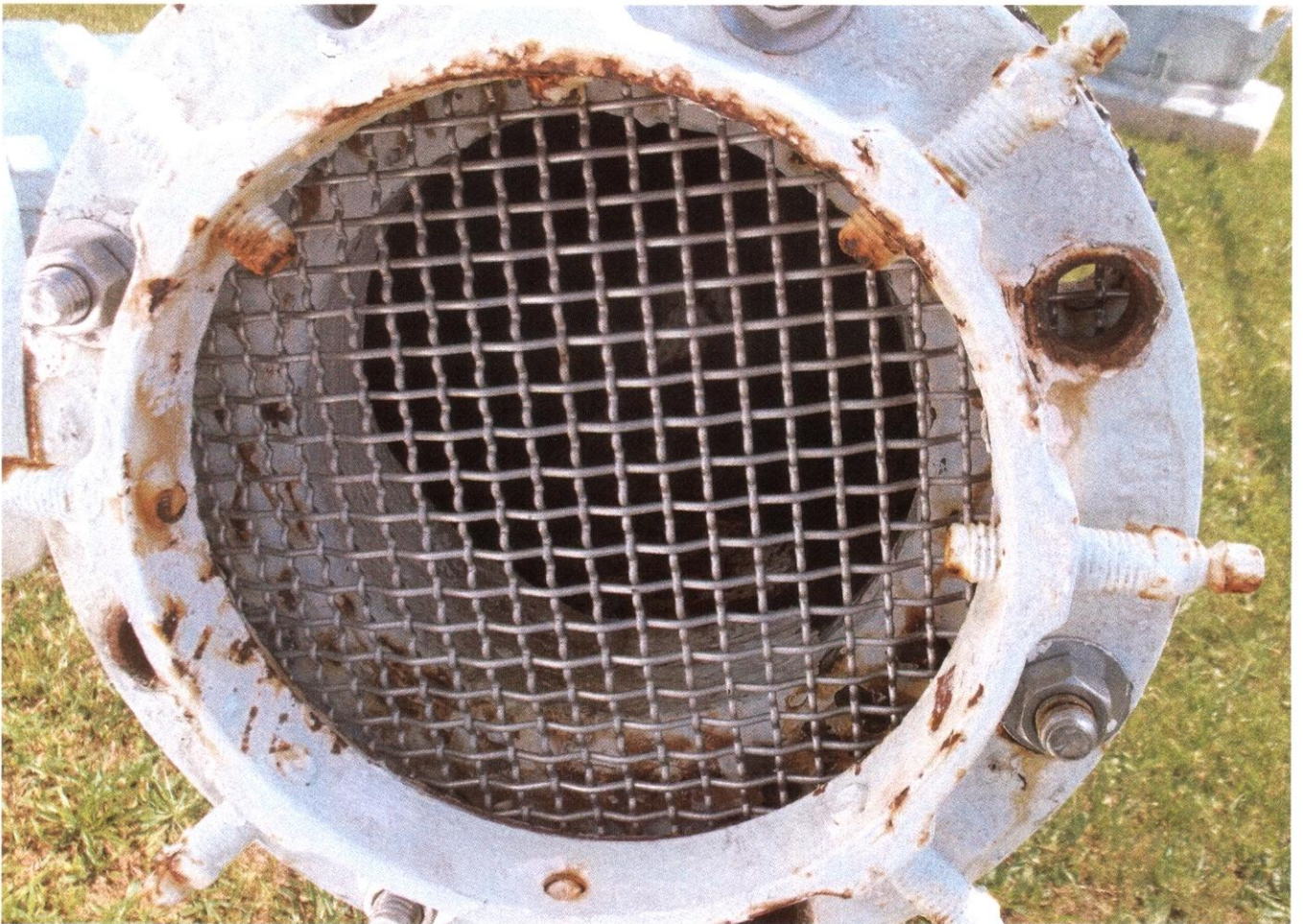


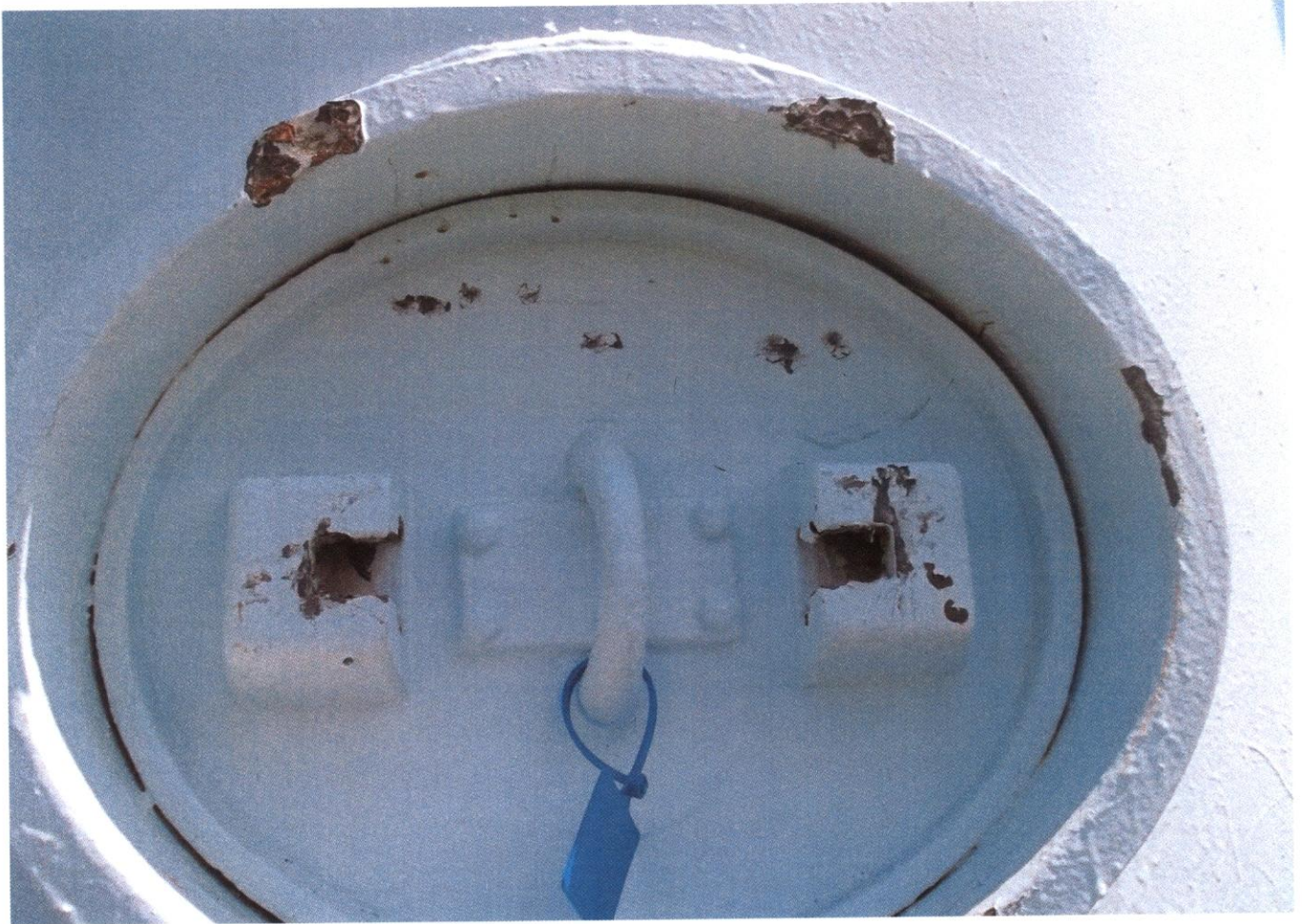




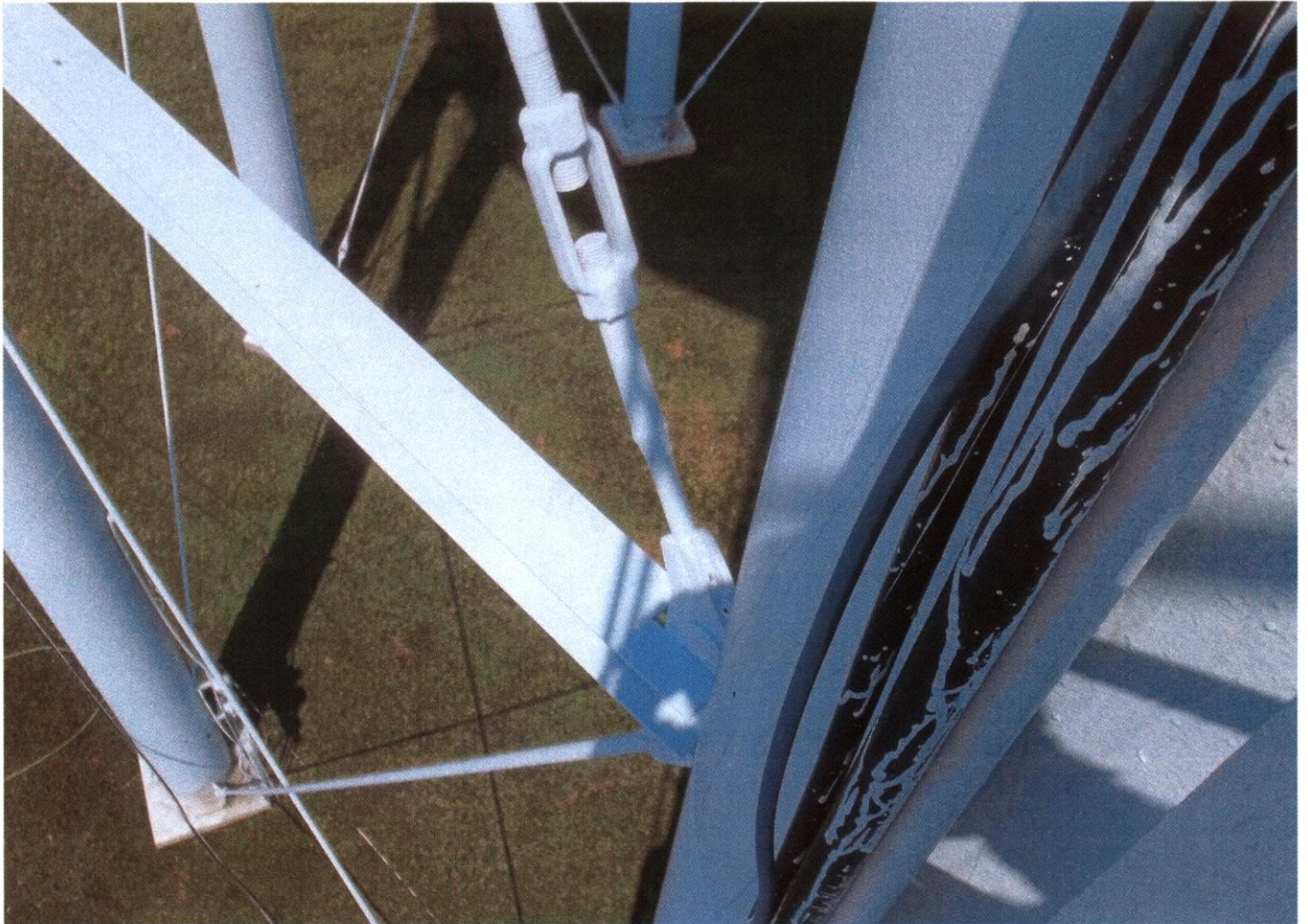






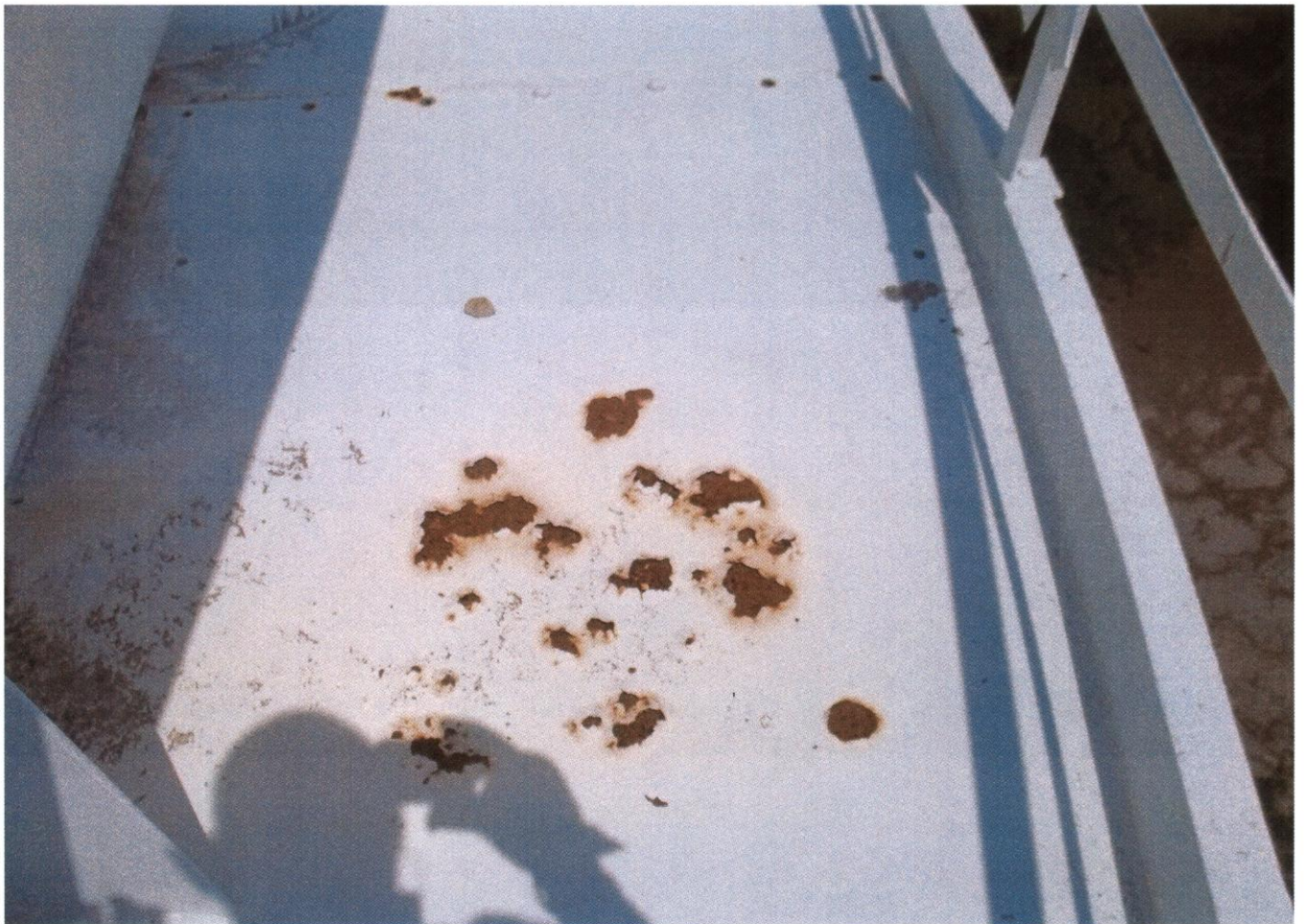


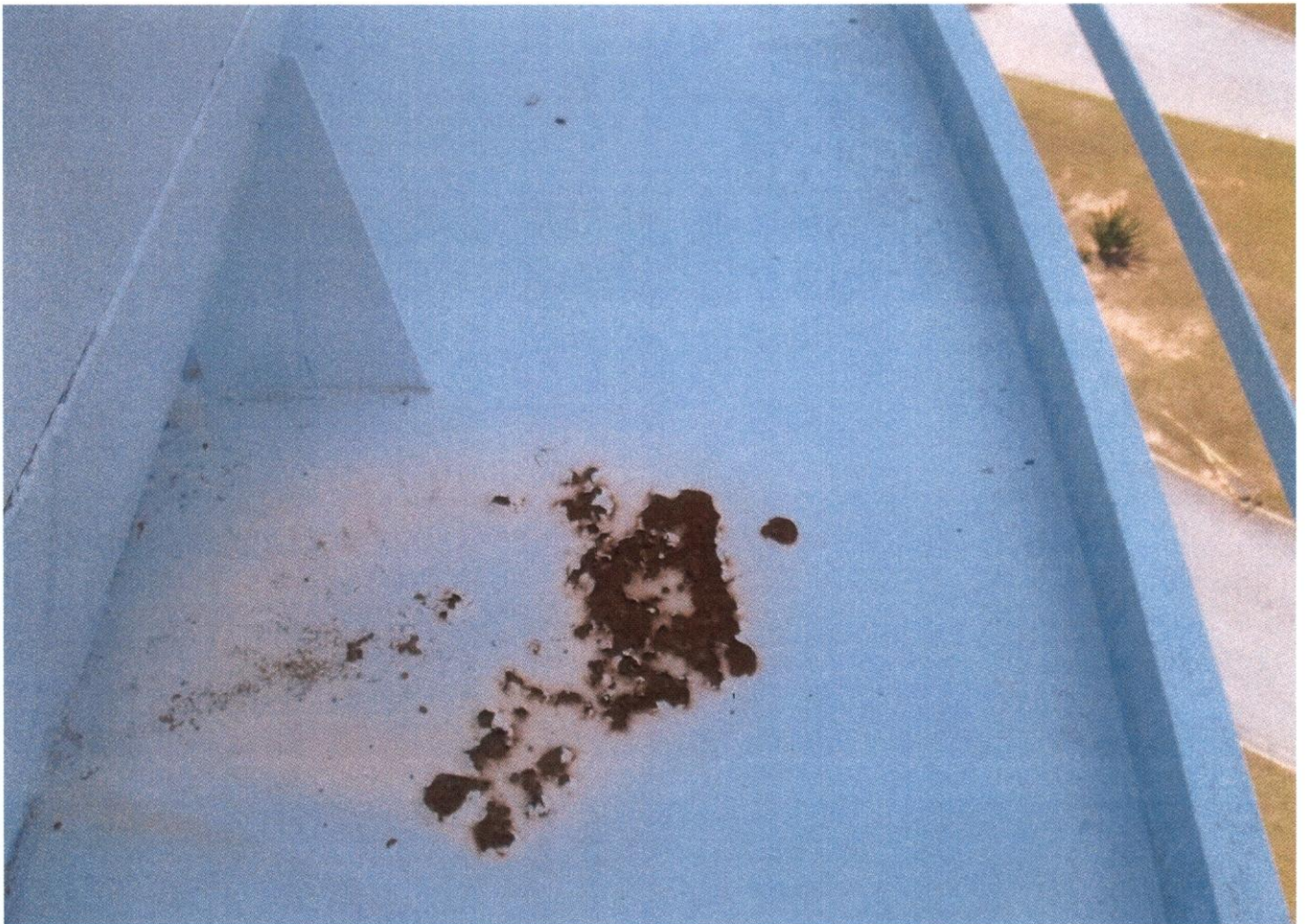


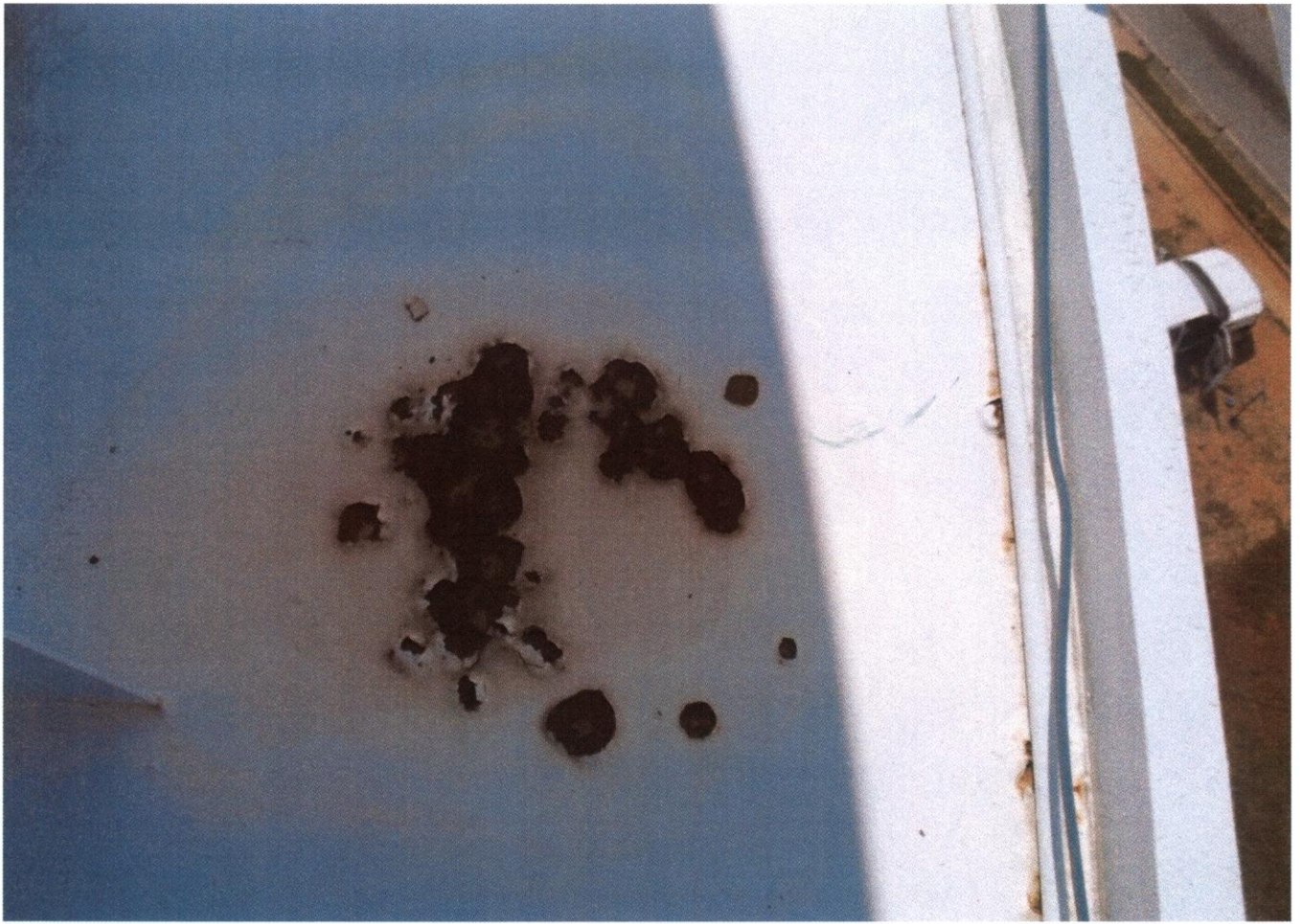


















INTERIOR

