

# Waters Engineering, Inc.

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## Civil Engineering and Land Surveying

Post Office Box 567  
908 S. Kingshighway  
Sikeston, Missouri 63801

E-mail: [main@waterseng.com](mailto:main@waterseng.com)  
(573) 471-5680  
Fax: (573 ) 471-5689

E-mailed February 20, 2026

To Prospective Bidders:

Attached is the notice to bidders for the painting and rehab of the existing elevated tank for Scott County PWSD No. 4, that will bid on March 10, 2026.

The tank is a 300,000-gallon torus bottom tank that was constructed in 2009 by Caldwell Tanks. The tank bowl is 43 feet in diameter with a 30-foot head range. The tank height from the top of the concrete foundations to the overflow is 147 feet.

The tank has not been repainted since the initial construction.

The specs call for fully blasting and repainting inside and out. Containment will be required. We have attached the details specs for your review.

The tank is to be taken out of service for the rehabilitation work. The existing pumping system has VFD controls that can be operated to keep the water plant in service and maintain a set pressure leaving the water treatment plant.

The Contractor must provide and place into service a 5,000-gallon temporary hydro-pneumatic bladder pressure tank to be connected to a fire hydrant to be installed on the plant effluent line by the Owner at a location approximately 120 feet east of the existing elevated tank fence.

The site can be viewed on Google Earth street view, go to Haywood City, MO and look to the south.

To obtain bid documents please contact Leann in our office at 573-471-5680 or E-mail to [main@waterseng.com](mailto:main@waterseng.com) for details. There is no charge for digital documents.

This project is subject to the Build America, Buy America Act (BABAA) requirements under Title IX of the Infrastructure Investment and Jobs Act (IIJA), Pub. L. 117-58, §§ 70901-70953. Absent an approved waiver, all iron, steel, manufactured products, and construction materials used in the project must be produced in the United States. **Please pay attention to these special requirements which will be enforced.**

The funding for this project involves loan and grant funding from USDA-Rural Development. There are no CDBG funds involved on the project.

Please let us know if you would like bid documents or if you have any questions.

Good luck,



John Chittenden

Waters Engineering

## ADVERTISEMENT FOR BIDS

### Public Water Supply District of Scott County, Missouri, Number 4 Phase 5B Elevated Tank Rehabilitation

#### General Notice:

**Public Water Supply District of Scott County, Missouri, Number 4** (Owner) is requesting Bids for the rehabilitation of the existing 300,000-gallon elevated storage tank, hereinafter called the Project.

Bids for the Project will be received at the office of the Engineer, Waters Engineering, Inc., 908 South Kingshiway, P. O. Box 567, Sikeston, MO 63801, until March 10, 2026, at 2:00 PM Central Time. At that time the Bids received will be publicly opened and read.

Owner anticipates that the Project's total bid price will be approximately \$450,000. The substantial completion time is 400 calendar days.

#### Obtaining the Bidding Documents:

Information on the Project can be found at the website for Waters Engineering, Inc. at [waterseng.com](http://waterseng.com).

The Issuing Office for the Bidding Documents is:

**Waters Engineering, Inc.  
908 South Kingshighway  
Sikeston, MO 63801**

Prospective Bidders may obtain or examine the Bidding Documents at the Issuing Office on Monday through Friday between the hours of 8 AM to 4 PM, and may obtain copies of the Bidding Documents from the Issuing Office as described below.

Printed copies of the Bidding Documents may be obtained from the Issuing Office by paying a non-refundable fee of \$300 for each set. Make deposit checks for Bidding Documents payable to Waters Engineering, Inc.

Digital copies of the Bidding Documents may be obtained from the Issuing Office at no charge. Prospective Bidders desiring digital copies must contact the Issuing Office at E-mail address [main@waterseng.com](mailto:main@waterseng.com) or calling 573-471-5680, on Monday through Friday between the hours of 8 AM to 4 PM for information on the drop box procedure to be used for obtaining digital copies.

Checks for printed copies Bidding Documents shall be payable to Waters Engineering. Upon request and receipt of the non-refundable charge indicated above plus a non-refundable shipping charge, the Issuing Office will transmit the Bidding Documents via delivery service. The shipping charge amount will depend on the shipping method selected by the prospective Bidder.

The date that the Bidding Documents are transmitted by the Issuing Office will be considered the Bidder's date of receipt of the Bidding Documents.

Partial sets of Bidding Documents will not be available from the Issuing Office. Neither Owner nor Engineer will be responsible for full or partial sets of Bidding Documents, including Addenda if any, obtained from sources other than the Issuing Office.

**The bids will remain subject to acceptance for 90 days after the Bid opening, or for such longer period of time that the Bidder may agree to upon request of the Owner.**

**Instructions to Bidders:**

For all further requirements regarding bid submittal, qualifications, procedures, and contract award, refer to the Instructions to Bidders that are included in the Bidding Documents.

**Domestic Preference:**

**This project is subject to the Build America, Buy America Act (BABAA) requirements under Title IX of the Infrastructure Investment and Jobs Act (IIJA), Pub. L. 117-58, §§ 70901-70953. Absent an approved waiver, all iron, steel, manufactured products, and construction materials used in the project must be produced in the United States.**

**The following waivers apply to the Contract:**

**BABAA De Minimis, Small Grants, and Minor Components.**

**This Advertisement is issued by:**

**Owner: Public Water Supply District of Scott County, Missouri, Number 4**

**By: Chris Grojean**

**Title: District President**

**Date: February 24, 2026**

## SECTION 1 - ELEVATED STORAGE TANK REHABILITATION

### 1. SCOPE.

This Section covers the field preparation of surfaces, repair, performance and completion the surface preparation and painting of interior and exterior surfaces for the 300,000 gallon elevated tank of Scott County PWSD No. 4 on Route U south of Haywood City, Missouri, as specified herein.

### 2. GENERAL.

The tank is a 300,000-gallon torus bottom tank that was constructed in 2009 by Caldwell Tanks. The tank bowl is 43 feet in diameter with a 30-foot head range. The tank height from the top of the concrete foundations to the overflow is 147 feet. Details on the tank are provided in the original tank shop drawings attached hereto.

The tank has not been repainted since the initial construction.

The tank is to be taken out of service for the rehabilitation work. The existing pumping system has VFD controls that can be operated to maintain a set pressure leaving the water treatment plant.

The Contractor must provide and place into service a 5,000-gallon temporary hydro-pneumatic bladder pressure tank to be connected to a fire hydrant to be installed on the plant effluent line by the Owner at a location approximately 120 feet east of the existing elevated tank fence.

The Contractor shall furnish all equipment, coating materials, tools, rigging, labor, insurance, taxes and any other requirements to prepare the surfaces and paint all surfaces defined in the Proposal.

It is the intent of these specification to prescribe first class workmanship, materials and procedures; however, it shall be the responsibility of the Contractor to provide first class workmanship at all times.

The Contractor shall remove and replace after painting all antennae, wiring, hardware, hardware accessories, handle covers, electrical cover plates and similar items in order to facilitate the complete coating of the tank surfaces. Tape and masking protection will be acceptable only where it is not possible to remove the hardware or fixture mentioned.

### 3. QUALITY ASSURANCE.

#### 3.1 License.

The Contractor shall hold a valid State Contractor's license, if required, for performing surface preparation and coating work and shall have three years practical experience and successful history in the application of specified products to surfaces of steel water tanks. Upon request, he shall substantiate this requirement by furnishing a list of reference jobs completion.

#### 3.2 General.

Quality assurance procedures and practices shall be utilized to monitor all phases of surface preparation, application and inspection throughout the duration of the project. Procedures or practices not specifically defined herein may be utilized provided they meet recognized and accepted professional standards and are approved by the Engineer.

#### 3.3 Surface Preparation.

Surface Preparation will be based upon comparison with: "Pictorial Surface Preparation Standards for Painting Steel Surfaces" – SSPC - Visual Standard for Abrasive Blast Cleaned Steel.

### 3.4 Application.

No coating shall be applied: When the surrounding air temperature or the temperature of the surface to be coated is below manufacturers printed instructions; to wet or damp surfaces or in rain, snow, fog or mist; when the temperature is less than 5°F above the dew point. Dew point shall be measured by use of an instrument such as a Sling Psychrometer in conjunction with US Department of Commerce Weather Bureau Psychometric Tables.

If any of the above conditions are prevalent, coating work shall be delayed or postponed until the conditions are favorable. The day's coating shall be completed in time to permit the film sufficient drying time prior to damage from atmospheric conditions.

### 3.5 Inspection Devices.

The Contractor shall furnish, until final acceptance of coating, inspection devices in good working condition for the detection of holidays, a gauge for the measurement of dry-film thickness gauge and certified instrumentation to test the accuracy of holiday detectors.

Dry-film thickness gauges and holiday detectors shall be made available for the Engineer's use at all times until final acceptance of application. Holiday detection devices shall be operated in the presence of the Engineer.

### 3.6 Container Labeling.

The material containers shall be provided with the following information:

1. Manufacturer's name, product name, and number.
2. Type of paint and generic name.
3. Color name and number.
4. Storage and temperature limits.
5. Mixing and application instructions, including requirements for precautions which must be taken.
6. Drying or curing time.

## **4. REFERENCE STANDARDS.**

The standards referenced in this specification form a part of this specification. Unless otherwise specified the latest issue, revision or amendment of the referenced standards in effect on the date of the bid shall govern.

If there is a conflict between the requirements of the cited reference standards and this specification, the requirements of this specification shall prevail.

### 4.1 Steel Structures Painting Council Specifications.

PA-2	Measurement of Dry Paint Thickness with Magnetic Gauges
PA-Guide 3	A Guide to Safety in Paint Application
SP-6	Commercial Blast Cleaning
SP-7	Brush-Off Blast Cleaning
SP-10	Near-White Blast Cleaning

### 4.2 American Water Works Association Standards.

D-100	Welded Steel Tanks For Water Storage - Section 8 - Welding
D-652	Disinfection of Water Storage Facilities

## **5. SAFETY.**

- 5.1 In accordance with the requirements of the OSHA Regulations for Construction, the Contractor shall provide and require the use of personal protective and lifesaving equipment for all persons working in or about the project.
- 5.2 All pertinent local, state and federal safety regulations shall be adhered to rigidly. All safety precautions noted on the manufacturers Product Data Sheet and Material Safety Data Sheet shall be observed. Material Safety Data Sheets (MSDS) and Product Data Sheets for all paint, solvents, sealers and chemicals used, shall be available on the job site at all times.
- 5.3 The Contractor shall carefully inspect all tank surfaces, ladders and rigging connections before they are used. Any excessively deteriorated parts shall be repaired or replaced before use.
- 5.4 All of the Contractor's activities and equipment used on the jobsite must be in compliance with Federal, State and Local laws, ordinances and regulations. Defective or substandard equipment shall not be used. Hoists, ladders and electrical equipment, scaffolding, hand or powered tools must meet safety standards.
- 5.5 No smoking will be permitted in water tanks.
- 5.6 Spray equipment must be grounded at all times during sandblasting and painting. Grounding to scaffolding is not sufficient.
- 5.7 Head and face protection and respiratory devices shall be used. Applicable health and safety precautions required by appropriate regulatory agencies such as OSHA, ANSI, etc. shall be followed.
- 5.8 Ventilation shall be adequate to reduce the concentration of air contaminant to the degree that a hazard to the worker does not exist.
- 5.9 Whenever the occupational noise exposure exceeds the maximum allowable sound levels, the Contractor shall provide and require the use of approved ear protective devices. Noise levels cannot exceed OSHA or local regulations for other workers or residents.
- 5.10 All temporary ladders and scaffolding shall conform to the applicable requirements of the OSHA Regulations for Construction. They shall be erected where requested by the Owner's Representative to facilitate proper inspection and be moved by the Contractor to locations requested by the Owner's Representative.
- 5.11 The Contractor shall follow and strictly adhere to all applicable health and safety regulations and precautions as required by local, state, and federal regulatory agencies such for the surface preparation, removal, and waste disposal of all lead-based paint systems.
- 5.12 The Contractor shall follow all local, state, and federal guidelines for lead removal when blasting.
- 5.13 At a minimum, soil samples should be taken before and after blasting is performed. These samples shall be delivered to the Owner.
- 5.14 A watertight ground cover should also be placed on the ground beneath the tank and the containment shroud.
- 5.15 Dust should be kept to a minimum by performing blasting on calm days for select time periods to prevent excessive releases and to prevent dust from contaminating surrounding properties.

## **6. REPAIRS AND MODIFICATIONS.**

As a part of the basic contract item, the Contractor shall perform the following modification, repair and installation work.

- 6.1 Remove the existing tower ladder cage, and install a commercially-available 6-foot high aluminum lockable ladder guard at the base of the exterior ladder. The ladder guard shall be hinged on 1 side and have 2 padlock on the opposite side.
- 6.2 Install new safety climb systems for the tower ladder and the exterior and interior tank ladders.
- 6.3 Replace the existing vent with an AWWA-approved aluminum screened vent mounted on the existing riser with stainless steel bolts, nuts and washers. The vent shall be similar to the unit shown the in drawing attached to this Section.
- 6.4 Replace the existing drain valve with a frost-proof drain valve with lock and splash pad.
- 6.5 Provide hinged davit arm for the riser and shell manholes.
- 6.6 Replace the riser and shell manhole bolts with new stainless steel bolts.
- 6.7 Replace the 12-mesh stainless steel insect screen inside the overflow behind the flap.
- 6.8 Adjust the windage rods.

## **7. PAINT AND SEALER MATERIALS.**

### **7.1 Materials.**

Materials used must be as manufactured by Tnemec, Sherwin-Williams, Porter International, Carboline or an approved equal. Tnemec product numbers are used herein as a basis for product suitability. All manufacturers shall utilize their coatings which interchange with these Tnemec product numbers. No claim as to unsuitability, unwillingness to use the same, or inability to produce first class work with same will be entertained unless such claim is made in writing to the Engineer before signing of Contract.

All materials and coatings utilized on the interior of the tank or in contact with potable water shall be NSF approved and listed in ANSI/NSF Standard 61.

- 7.2 Paint and seam sealer materials delivered to jobsite shall be in original sealed and labeled containers of the manufacturer, and shall remain unopened until use.
- 7.3 Materials specified are those that have been evaluated for the specified service. Products of the Tnemec Co. are listed to provide a standard of quality. Equivalent material of other manufacturers may be substituted on written approval of the Owner only. Any requests for substitution shall include manufacturer's literature for each project listing the name, product number, generic type, descriptive information, solids by volume, recommended dry film thickness and certified test data showing results to equal the performance criteria of the products listed herein. In addition, a list of ten projects shall be submitted in which each product has been used and rendered satisfactory service.

All requests for product substitutions shall be made at least five (5) days prior to the bid date of this project.

Manufacturer's color charts shall be submitted to the Owner at least 30 days prior to paint application. The Contractor shall coordinate work so as to allow sufficient time for paint to be delivered to jobsite.

- 7.4 Coating systems shall carry appropriate approvals from NSF (National Sanitation Foundation)/ANSI/CAN 600 for Coatings and Linings. All coatings, both interior and exterior, shall meet all current USEPA Requirements for VOC (Volatile Organic Compounds) Compliance Level.
- 7.5 All materials shall be brought to jobsite in original sealed containers. They shall not be used until the engineer has inspected contents and obtained data from information on containers or label. Materials exceeding storage life recommended by the manufacturer shall be rejected.
- 7.6 All coatings shall be stored in enclosed structures to protect them from weather and excessive heat or cold. Flammable coatings must be stored to conform with City, County, State and Federal safety codes for flammable coating materials. At all times, coatings shall be protected from freezing.
- 7.7 Colors, where not specified herein, shall be as selected by the Engineer/Owner.

## **8. SURFACE PREPARATION GENERAL REQUIREMENTS.**

All surfaces shall, as a minimum, be prepared in accordance with the coating manufacturer's current Product Data Sheets, but shall not be less effort than as set out herein.

### **8.1 Containing Blasting Debris.**

Containment must be used during the blasting and painting operations. The Contractor shall ensure that no detectable release of blasting debris escapes the containment. Contractor is responsible for contamination of rain water, water in basins, equipment, adjacent buildings, work sites, and parking lots. The ground surrounding the site shall be protected from all debris and other materials generated in the cleaning operations. All exterior blasting (except vacuum blasting) shall be enclosed.

All enclosure materials shall be maintained free of tears, cuts or holes. All seams shall be in a manner that insures a seal, which does not allow openings in the containment. Dust collectors shall be used in conjunction with the forced airflow. The Contractor shall be responsible for all materials that are used and for the apparatus or enclosure used to contain debris. The enclosure shall be designed not to impose excessive loading on the structures and appurtenances and if damage would occur it is the responsibility of the Contractor to return Owner's property to its original condition. The Owner reserves the right to stop work or to require additional or different enclosure methods, if the Contractor's operations create a nuisance beyond the containment in the sole opinion of the Owner's Representative or any regulatory agency.

### **8.2 Surface Preparation Inspection and Approval.**

No coating work shall begin before the prepared surfaces or the manner of preparation, is inspected and no exceptions to the work are taken by the Owner or the Owner's Representative.

### **8.3 Steel and Iron Surfaces.**

After abrasive blasting, dust and spent sand shall be removed from the surfaces by brushing or vacuum cleaning. The prime coat shall be applied as soon as possible after the blasting preparation is finished and always before the surface starts to rust. No abrasive blasted surface shall stand overnight before coating, except when approved by the Owner. Only unused fresh sand, grit, or abrasive will be used.

All sharp edges and welds shall be ground smooth to a rounded contour and all weld spatter shall be removed after sandblasting.

## 9. COATING SYSTEMS.

### 9.1 General.

#### 9.1.1 Curing.

Previous coats of paint must be cured in accordance with the manufacturer's data sheet before application of succeeding coats. Each coat of paint shall be tinted to make it distinguishable from succeeding coats. Each coat of paint shall be inspected and approved by the Owner's Representative before application of succeeding coats; otherwise, no credit for coat applied will be given; and the work in question shall be re-coated.

#### 9.1.2 Mixing.

The coatings listed are two-part systems, consisting of a base and catalyst. Mix as directed in the manufacturer's instruction to ensure complete chemical interaction and homogeneity. Pot life stated in manufacturer's product data sheets shall be strictly observed. Any material which thickens or excessively jells shall be discarded.

### 9.2 Welding.

The Engineer shall order necessary welding of pits, seams and appurtenances inside the tank that are found to need welding upon the initial inspection. All welding shall be done in compliance with AWWA D-102.

To the greatest practical extent, the Contractor shall complete all repairs and authorized welding prior to the blasting of the entire tank and applying the primer coat. Interior welds, burnings or repairs on or affecting previously blast cleaned areas shall be re-blasted to duplicate the surrounding area. If welding before priming is not feasible, the affected areas shall be masked, repaired, blasted and edges feathered prior to repainting.

Welding work ordered for the tank rehabilitation that is in addition to the welding required for the repair work noted in Paragraph 6 of this Section shall be completed on an hourly rate basis as outlined in Paragraph 10 of this Section.

### 9.3 Lap Seam & Pit Sealing.

After the completion of the interior SSPC-SP 10 blast cleaning, any un-welded lap seams and any pits 1/8-inch or deeper shall be filled/sealed with Tnemec Series 63-1500 Filler and Surfacer.

The attached shop drawings show the locations of interior seams that are probably not welded.

The base bid shall include an allowance for 800 square feet of pit filling, pit filling in excess of this amount and any welding will be handled through the hourly rates as outlined in Paragraph 10 of this Section.

9.4 Interior Coating System.

The entire tank interior shall be blast cleaned to SPC SP-10 standards. Before rusting occurs the primer shall be applied. If rust is apparent in the pre-prime inspection then the tank interior shall be re-blasted to SP-10.

In summary, the interior coating system shall be as follows:

<u>Surface Preparation:</u>	SSPC-SP10 Near White Metal Blast Cleaning
<u>Primer Coat:</u>	One full coat of Tnemec Series 91-H2O or 94-H2O Hydro-Zinc at 2.5 to 3.5 mils DFT (White).
<u>Finish Coat:</u>	One full coat of 100% Solids Modified Polyamine epoxy paint, Tnemec Series 22 at 16 to 25 mils DFT (Color Off-White).

9.4 Exterior Coating System.

The entire exterior tank surface shall be blast cleaned to SPC SP-6. Before rusting occurs, primer shall be applied. If rust is apparent in the pre-prime inspection then the tank interior shall be re-blasted to SP-6.

The entire exterior tank surface shall be painted with 1 at 2.5 to 3.5 mils DFT, at 2.0 to 3.0 mils DFT and 1 at 2.0 to 3.0 mils DFT.

The exterior coating system shall be as follows:

<u>Surface Preparation:</u>	SSPC-SP6 Commercial Blast Cleaning
<u>Prime Coat:</u>	One coat of zinc rich paint, Tnemec Series 91-H2O or 94-H2O Hydro-Zinc at 2.5 to 3.5 mils DFT.
<u>Intermediate Coat:</u>	One coat of Aliphatic Acrylic Polyurethane paint Tnemec Series 1095 Endura-Shield at 2.0 to 3.0 mils DFT (Contrasting color to other coats).
<u>Finish Coat:</u>	One coat of Advanced Thermoset Solution Fluoropolymer, Tnemec Series 700 Hydroflon at 2.0 to 3.0 mils DFT. The exterior tank color shall be Tnemec Tank White 15BL.

9.5 Tank Lettering.

The exterior of the elevated tank shall have the name of the Owner painted in 2 places with 2 rows of Arial lettering 3 feet high across a 28.5-foot arc as follows:

**SCOTT COUNTY  
PWSD No. 4**

The lettering paint system shall be 2 coats of Aliphatic Acrylic Polyurethane paint - Black at 3.0 to 4.5 mils DFT per coat.

9.6 Concrete Piling Caps.

The concrete foundations shall be prepared by SP-7 Brush-off Blasting and be painted as set out above for the tank exterior to a point 6 inches below grade.

All steel edges bearing on concrete shall have an exterior-grade seam sealer applied before painting.

**10. HOURLY RATE WORK.**

The basic lump sum bid shall include the repairs set out in Paragraph 6, seam sealing and up to 800 square feet of pit filling. Extra pit filling and any extra welding beyond what is required for the repairs set out in Paragraph 6 shall be compensated for on an hourly basis.

To establish a basis for payment for extra welding and sealing work that might be ordered by the Owner for structural or surface repairs, the Contractor shall offer a unit price for labor for welding and applying pit sealer. Such work shall be exclusive of any work required under previous sub-sections of this specification.

- 10.1 The hourly rates for welding shall be for all forms of welding and separate rates shall be proposed for a welder and a welder's helper, said unit prices shall also include all welding materials used in the work but shall not include the cost for any steel materials.
- 10.2 The hourly rate for applying pit sealer shall be for all forms of such work, and separate rates shall be proposed for a sealer applicator and a sealer applicator helper. Materials shall be compensated as set out below.
- 10.3 Structural or plate steel, seam sealer and related items employed in the work shall be compensated at actual invoice purchase price for the materials used plus 5 percent for handling and storing.

**11. DISINFECTION.**

Upon authorization by the Engineer, the Contractor shall washdown the tank interior and disinfection shall be accomplished as set out in AWWA C-652.

**12. CLEAN-UP.**

- 12.1 The Contractor is responsible for removing all sand and paint residue from the project.
- 12.2 Upon completion of the job, all debris, cans, rags, etc., shall be removed from the site by Contractor.
- 12.3 Damage, if any, to buildings, fences, grounds (to include shrubs and trees), and roads shall be repaired and returned to their original condition.

**13. INSPECTION, TESTING & ACCEPTANCE.**

- 13.1 All materials must be inspected by the Owner prior to application.
- 13.2 The Contractor shall perform a test blast area to visually establish the effort required to meet the various blast specifications.
- 13.3 The Contractor must request and receive the Owner's approval of repairs, surface preparation and initial and intermediate paint coats before proceeding with further work.
- 13.4 Any defective work or degradation in blasting must be corrected and a reinspection requested and approval given before proceeding with further stages of work.
- 13.5 The Contractor must maintain adequate provisions to allow proper inspection of the work.
- 13.6 All blast and paint thickness inspection for acceptance of work will be done by the Owner.
- 13.7 At all times the Owner and/or the Owner's Representative shall have access to the work in progress. Contractor shall assist, when requested, in the inspections. Tests will be made for surface condition and profile after blasting, wet film thickness, dry film thickness and pinholes. No pinholes will be allowed. The inspector will also check application practices. The Contractor shall re-paint all areas found defective and remove and replace any coatings placed using improper practices.
- 13.8 In addition to the tests for surface profile, wet film thickness, dry film thickness and pin holes, which will be made during the progress of the work, the Owner will check the coatings after completion of the application for compliance with these specifications. All defects shall be promptly corrected by Contractor.
- 13.9 Owner or Owner's Representative shall be kept informed by Contractor as to the progress of the work. If Contractor fails to notify the Owner or Owner's Representative of progressing work and the inspector has doubts of uninspected work, the Contractor will be responsible to take whatever measures necessary including but not limited to re-blasting and/or re-painting areas in question.

Key Areas of Owner or Owner's Representative Notification by Contractor:

- 1. Profile of blast
  - 2. Prime coat film thickness
  - 3. Stripe coat application and film thickness
  - 4. Finish coat film thickness
- 13.10 Contractor to work between the hours of 7:00 a.m. and 6:00 p.m., Monday through Friday unless given verbal notification by Owner or Owner's Representative to do otherwise.
  - 13.11 Owner or Owner's Representative shall be kept informed by Contractor as to progress of work and any delays due to weather or equipment failure.

**14. WARRANTY.**

- 14.1 The Contractor shall warrant and guarantee that the materials and workmanship furnished under this contract shall be as specified and shall be free from defects for a period of 1 year from the date of final payment.
- 14.2 The coating will be inspected after 1 year to assure that no coating failure has occurred. If any corrosion, bubbling, delaminating or other indications of failure are detected, the Contractor will repair all affected areas. Inspection and repair will be per AWWA D102, Section 9.
- 14.3 Within the guarantee period and upon notification of the Contractor by the Owner, the Contractor shall promptly make all needed adjustments, repairs, or replacements arising out of defects which, in the judgment of the Owner, and/or Owner's Consultant, become necessary during such period.
- 14.4 The costs of all materials, parts, labor, transportation, supervision, special tools and supplies required for replacement of parts, repair of parts, or correction of abnormalities shall be paid for by the Contractor, or by his surety under the terms of the Performance and Payment Bond.
- 14.5 The Contractor shall extend the terms of this guarantee to cover any warranty repair work and all replacement parts furnished under the guarantee provisions for a period of 1 year from the date of completion of such repairs.

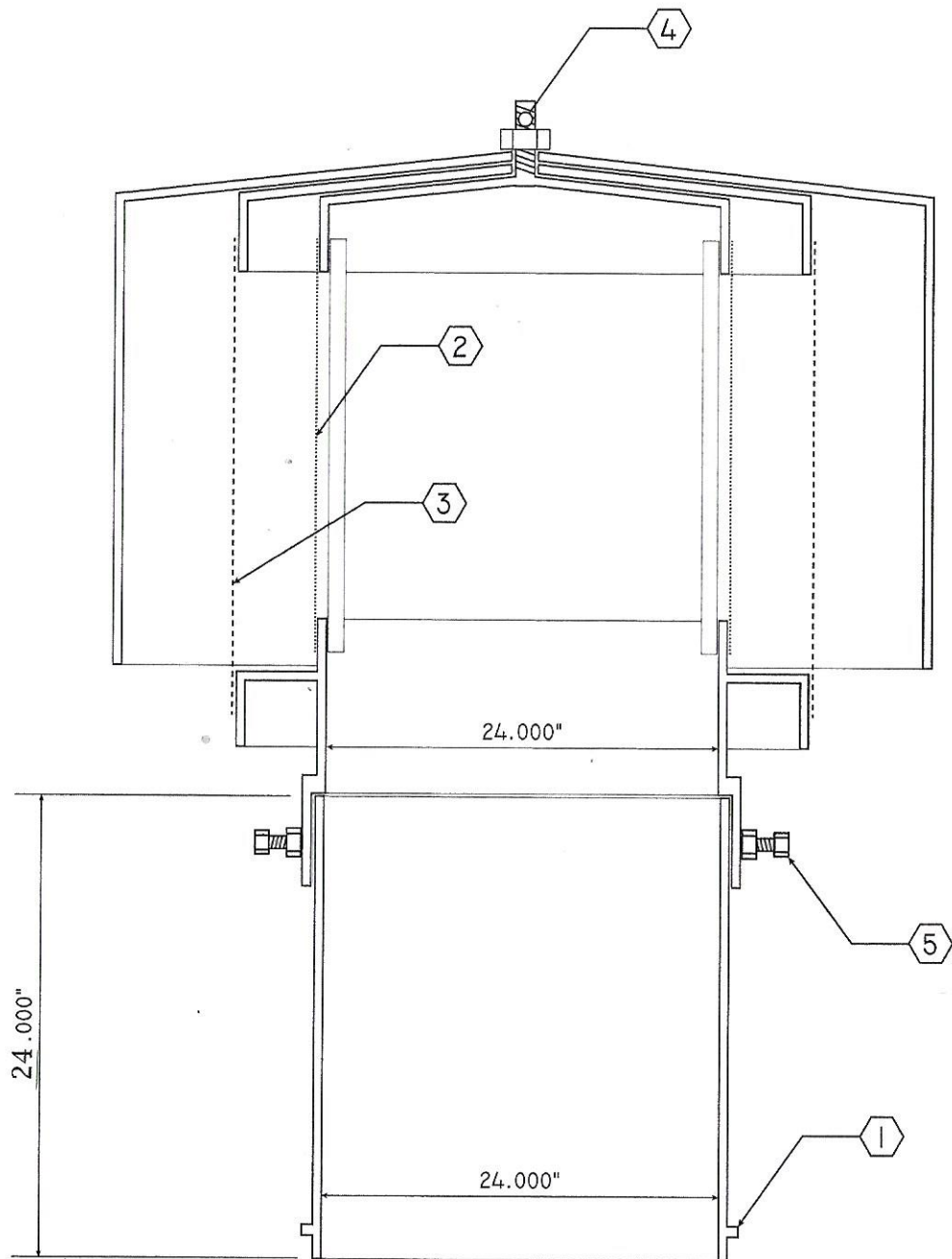
**15. MEASUREMENT AND PAYMENT.**

The rehabilitation of the elevated tank shall be performed as a lump sum item, and shall include the repair, replacement and repainting work noted in the specifications including containment and any required hazardous material handling and disposal. Any additional repair and sealing work required shall be done on an hourly basis at the bid unit prices for additional work plus actual costs for materials consumed in the additional work.

**16. ATTACHED DRAWINGS.**

Attached to this Section is a drawing of the proposed new vent. The proposed vent shall be of aluminum or stainless steel construction similar to that shown on the drawing.

Also attached to this Section are parts of the approved shop drawings for the original tank construction and painting. These drawings provide information on the tank geometry, bowl welding, ladders, overflow, manholes and the existing painting systems.



**NOTES:**

1. VENT HAS #18 MESH FIBERGLASS INNER SCREEN, #4 MESH GALVANIZED OUTER SCREEN. SCREENS SECURED BY STAINLESS STEEL HOSE CLAMPS.  
( AL or SS outer screen / #24 polymar mesh inner screen are also options )
2. VENT AND WELD IN VENT STACK CONSTRUCTED FROM CARBON STEEL WITH THREE COAT EPOXY FINISH/ NSF-61  
( Vent also available in AL or SS -no finish or treatment )
2. VENT RATED FOR INTAKE AND WITHDRAW OF 30,000 GPM WITH A SCREEN AIR SPEED OF 10.63 FPS

**CODED NOTES:**

- ① WELD IN STACK INCLUDES WELD RING TO FACILITATE INSTALLATION
- ② INNER SCREEN WILL BE #18 NON-CORRODIBLE MESH UNLESS #24 MESH IS REQUESTED
- ③ OUTER SCREEN WILL BE #4 MESH
- ④ CENTRAL BOLT DRILLED TO ACCEPT PADLOCK TO PREVENT REMOVAL OF NUT
- ⑤ VENT IS SECURED TO STACK BY WAY OF FIVE 0.500" DIAMETER SET BOLTS

NOT TO SCALE



TOMCAT CONSULTANTS (T.A.P Co)  
PO BOX 317  
ROSEBUD MO 63091  
PH. 573-764-5255

PROJECT:  
REFERENCE DRAWING

TAP CO MODEL S24-W VENT AND  
WELD IN VENT STACK

SECTION DRAWING

DRAWING SHEET  
1 OF 1

# ♀ CALDWELL

TANKS  
INC.

SCOTT COUNTY, MISSOURI  
300,000 GALLON TORUS BOTTOM TANK  
43'-0" DIA. x 30'-0" HEAD RANGE x 147'-0" HWL  
C.T.I. PROJECT NO. E-6854

- Approved as Submitted.
  - Approved Subject to Notes on Drawings or Comment Letter.
  - Fabrication/Installation May Be Undertaken.
  - Submit Revised Record Drawings.
- 
- Revise & Resubmit for Review. Do Not Fabricate/Install.
  - Submittal Rejected. Do Not Fabricate/Install.
- Review / Approval neither extends nor alters any contractual obligations of the Engineer or Contractor.
- Water Engineering, Inc.  
By *[Signature]* Date 9-14-09

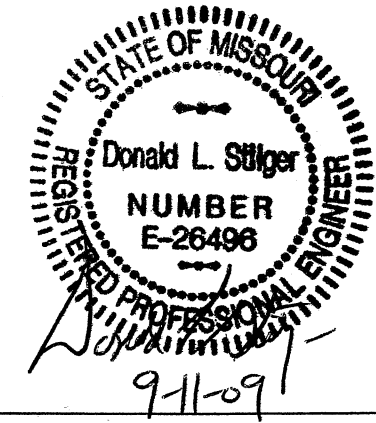
DRAWING INDEX

DWG. #	TITLE
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STANDARD ACCESSORY ASSEMBLIES

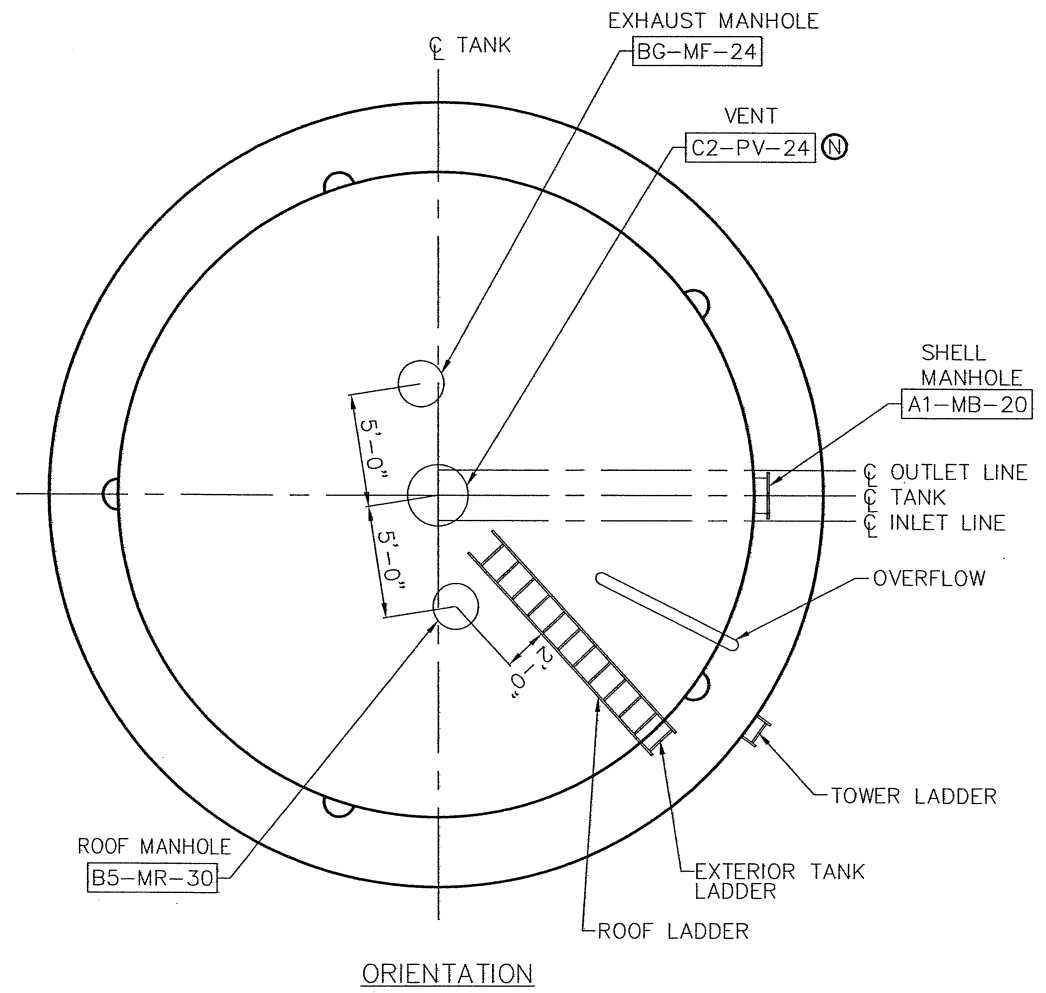
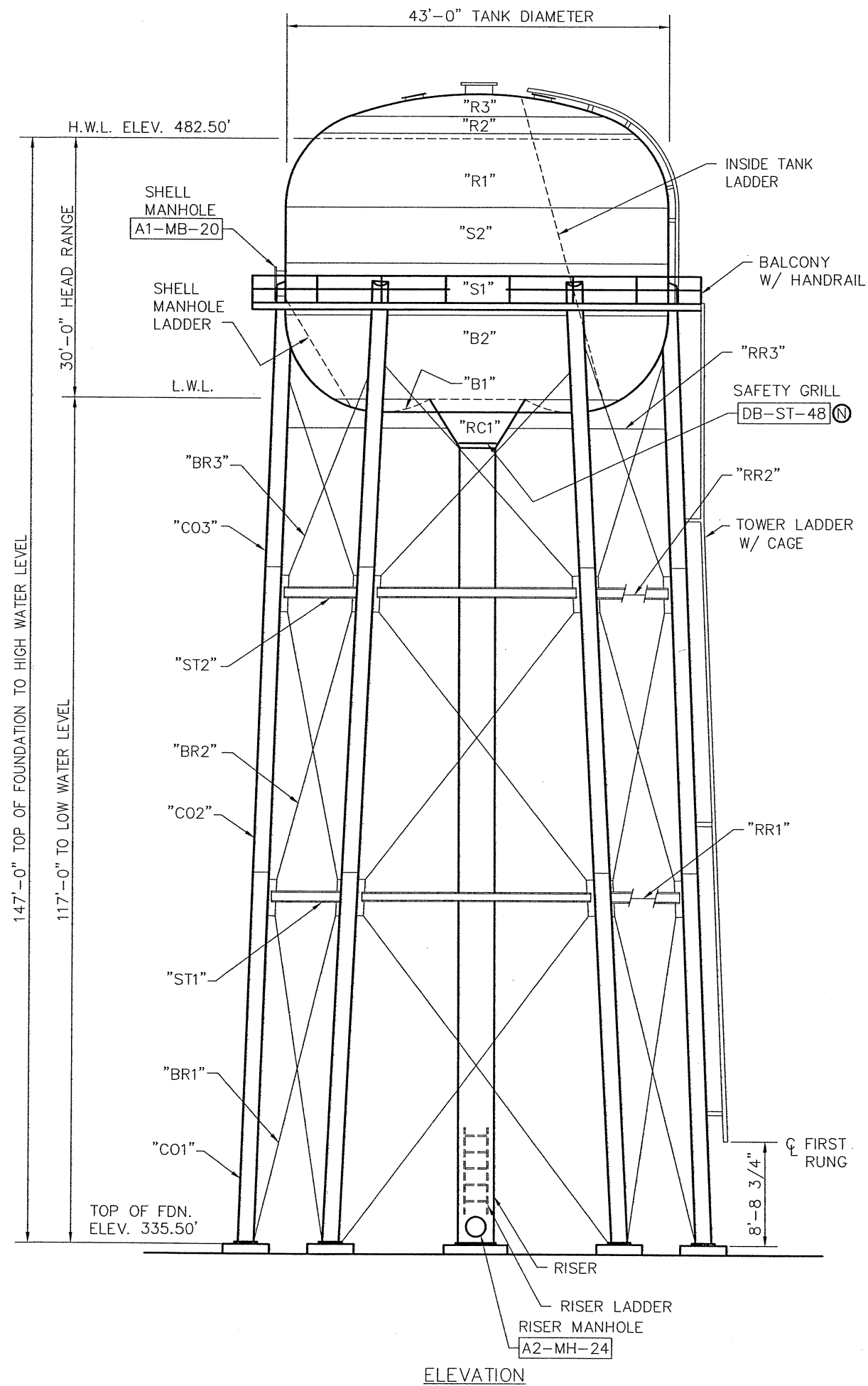
DWG. LOCATION	SUB-ASSY NO.	QTY	DESCRIPTION	PC. WT.
01, 13	A1-MB-20	1	20" DIA. BALCONY SHELL MANHOLE	190
01, 06	A2-MH-24	1	24" DIA. HINGED MANHOLE	565
01	B5-MR-30	1	30" DIA. ROOF MANHOLE	45
01	B6-MF-24	1	24" DIA. EXHAUST FAN MANHOLE	115
01	C2-PV-24	1	24" DIA. VENT	500
01	DB-ST-48	1	48" DIA. SAFETY GRILL (STD. T.B.)	70
15	E3-CW-08	1	COUNTER-WEIGHTED FLAP VALVE FOR 8" PIPE (45' TERMINATION)	30
20	G4-CR-02	23	2" INTERMEDIATE CAGE RING	25
20	G5-CR-04	7	4" INTERMEDIATE CAGE RING	45
20	G6-CD-01	1	LOWER CAGE RING w/ DOOR	75
10	P4-PA-55	60	BRACE ROD PIN ASSEMBLY (4" DIA.)	25
10	P4-PA-40	20	STRUT PIN ASSEMBLY (4" DIA.)	20

✓ JDM



PLEASE RETURN ALL SUBMITTALS TO:

CALDWELL TANKS, INC.  
P.O. BOX 35770  
LOUISVILLE, KY 40232  
PHONE: (502) 964-3361  
FAX: (502) 966-8732



MATERIAL THICKNESSES		
CONTAINER:	"R3"	1/4"
	"R2"	1/4"
	"R1"	1/4"
	"S2"	1/4"
	"S1"	1/4"
	"B2"	9/32"
	"B1"	1/4"
	TENSION RING	1 1/2"
	RISER CONE "RC1"	11/32"
	COMPRESSION RING	1"
RISER:	48" OD x 5/16"	
COLUMNS:	"C03": 36" O.D. x 0.345"	
	"C02": 36" O.D. x 0.447"	
	"C01": 36" O.D. x 0.471"	
STRUTS:	"ST2": W12x65	
	"ST1": W14x90	
BRACE RODS:	"BR3": 3 1/2" DIA.	
	"BR2": 3 1/4" DIA.	
	"BR1": 3" DIA.	
RISER RODS:	"RR3": 1 1/4" DIA.	
	"RR2": 1 1/4" DIA.	
	"RR1": 1 1/4" DIA.	

**DESIGN NOTES**  
 TANK & TOWER DESIGNED IN ACCORDANCE WITH AWWA D100-05 AND THE PROJECT PLANS AND SPECIFICATIONS. PREPARED BY WATERS ENGINEERING, INC., SIKESTON, MISSOURI

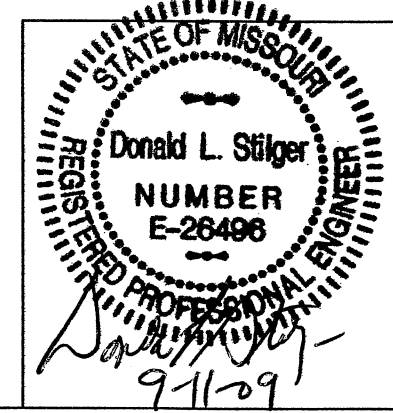
**DESIGN LOADS (AWWA D100-05)**  
 BASIC WIND SPEED: 90 MPH    SNOW LOAD: 25 PSF  
 I = 1.15  
 SEISMIC: S<sub>s</sub> = 226.0%    I<sub>e</sub> = 1.0  
           S<sub>1</sub> = 60.0%        USE GROUP I  
 SITE CLASS E  
 CORROSION ALLOWANCE: N/A

**MATERIAL**  
 STEEL PLATE:            ASTM A283 GR. C; ASTM A36  
 STRUCTURAL STEEL:    ASTM A36; ASTM A53 GR. B  
 BRACE/RISER RODS:    ASTM A36  
 WING & CLEVIS PLATES: ASTM A572-50  
 RISER ROD & STRUT CLIPS: ASTM A572-50  
 LADDER RUNGS:        ASTM A706  
 RISER ROD BOLTS:      ASTM A325  
 BOLTS (U.N.O.):        ASTM A307  
 GROUT:                 EUCO N-S GROUT

**GENERAL NOTES**  
 FOUNDATION, FOUNDATION PIPING & GENERAL SITE WORK, FIELD PAINT, TANK STERILIZATION, WATER TEST, & FENCE, BY C.T.I. SUBCONTRACTORS TO CONTRACT LIMITS.

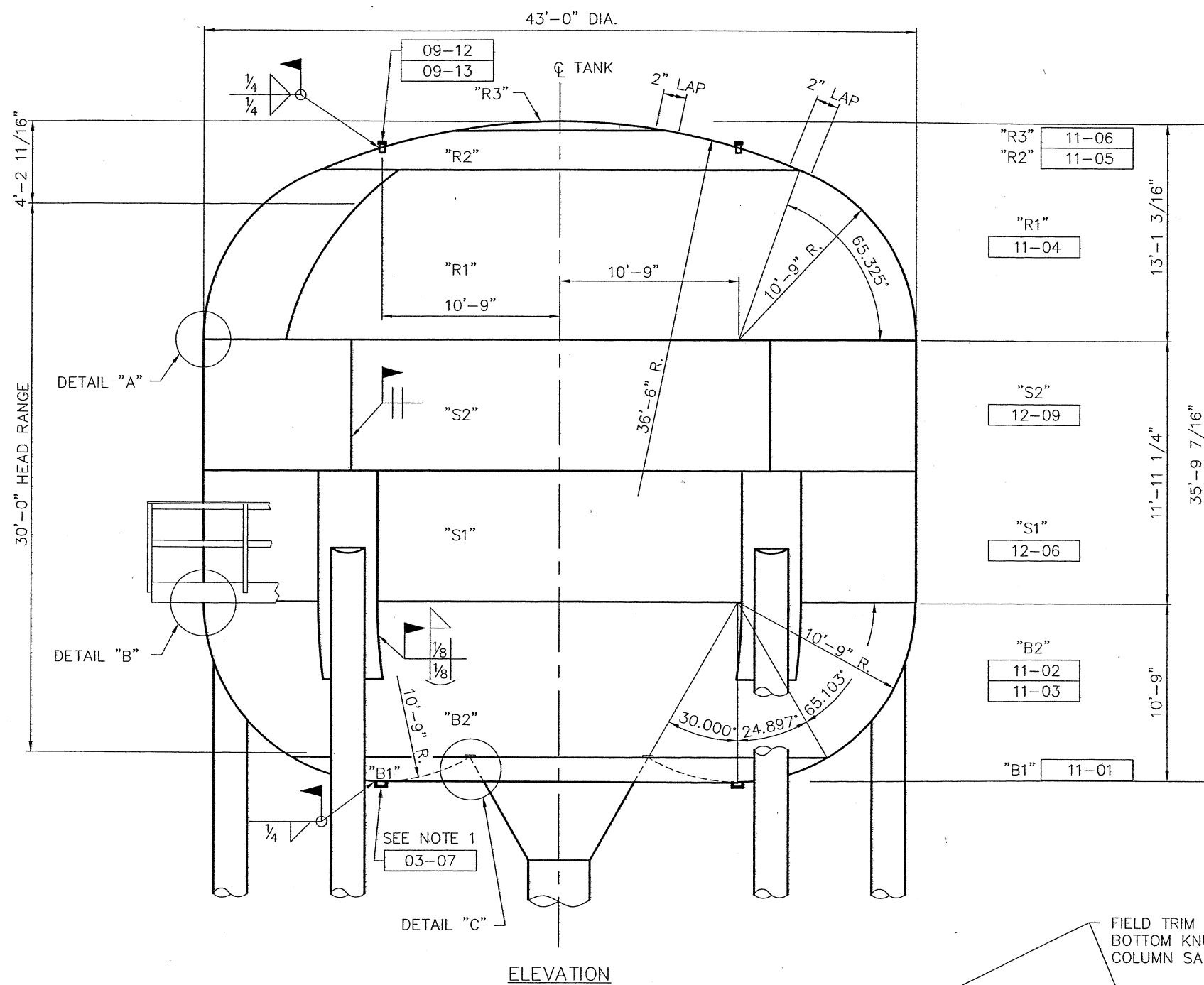
**ENGINEER:**  
**PLEASE NOTE**

**NOTE:**  
 1. ALL TANK APPURTENANCES HAVE BEEN LOCATED IN THE ADJACENT DETAIL. PLEASE VERIFY THAT THESE LOCATIONS ARE ACCEPTABLE. SEE DWG. 06 FOR RISER ORIENTATION.

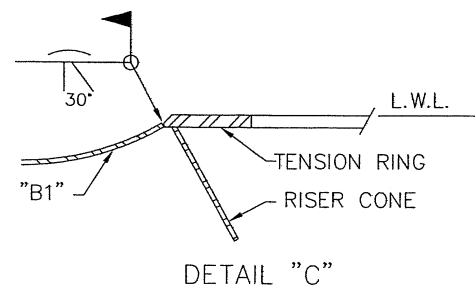


REV.	BY:	DATE	REMARKS
<b>CALDWELL TANKS, INC.</b>			
LOUISVILLE, KY.    NEWNAN, GA.			
SCOTT COUNTY, MISSOURI 300,000 GALLON TORUS BOTTOM TANK			
BY:	CRW <i>WJM</i>	TITLE:	ELEVATION, ORIENTATION & GENERAL NOTES
DATE:	08/14/09	DRAWING NO.:	E-6854    01

(N) DENOTES NON-STANDARD ITEM OR PROCEDURE

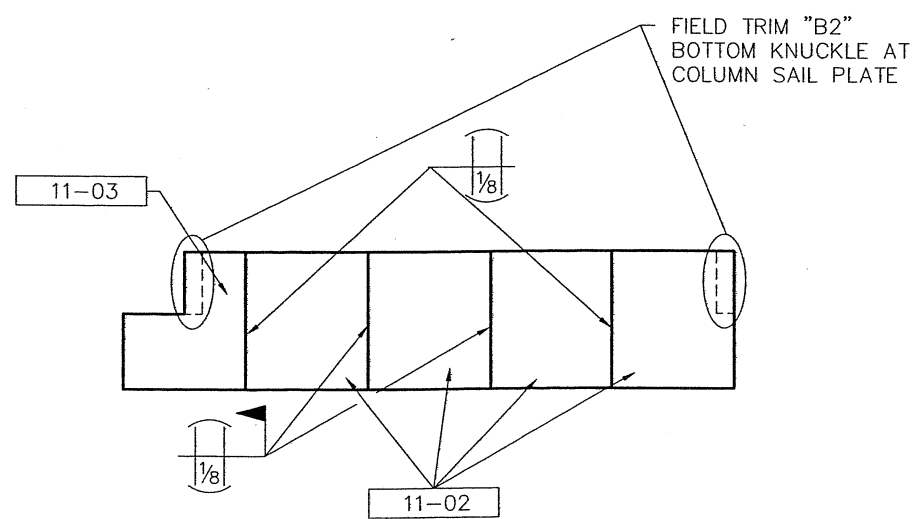


ELEVATION



DETAIL "C"

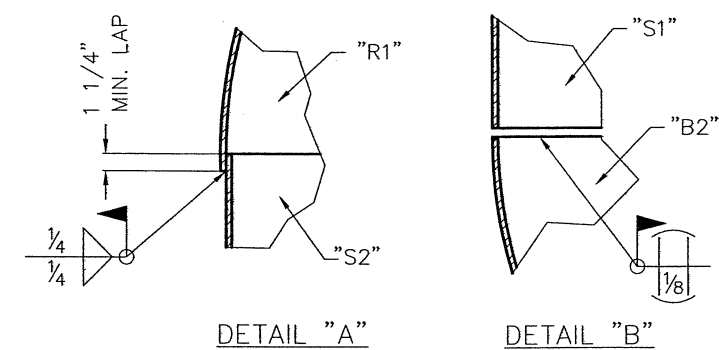
NOTE: BOTTOM OF "B1" IS FLUSH WITH BOTTOM OF TENSION RING.



BOTTOM KNUCKLE DIAGRAM (INSIDE VIEW)

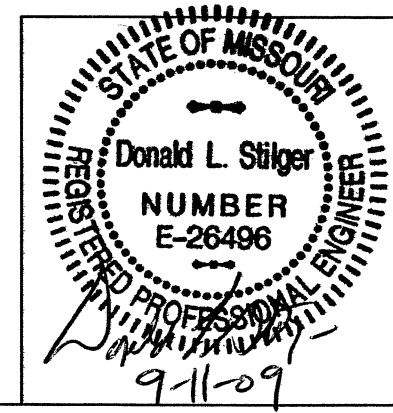
SHIPPING ITEM	QTY.	PC. MK.	QTY.	MATERIAL REQ'D	DESCRIPTION	UNIT WT.
09-BT-01	5			BOTTOM TAIL ASSEMBLY		920
		11-01	2	PL C/F (4) 1/4" x 108" x 266"	"B1" BOT. TAIL	
09-BK-01	5			BOTTOM KNUCKLE ASSEMBLY		1200
		11-02	1	PL C/F (25) 9/32" x 67" x 153"	"B2" BOT. KNUCKLE	
		11-03	1	PL USE DROP FROM 11-02	"B2" CUT-OUT KNUCKLE	
09-BK-02	5			BOTTOM KNUCKLE ASSEMBLY		1380
		11-02	2	PL USE DROP FROM 11-02	"B2" BOT. KNUCKLE	
09-RK-01	10			ROOF KNUCKLE ASSEMBLY		1240
		11-04	2	PL C/F (25) 1/4" x 67" x 153"	"R1" ROOF KNUCKLE	
09-RT-01	5			ROOF TAIL ASSEMBLY		880
		11-05	2	PL C/F (3) 1/4" x 120" x 300"	"R2" ROOF TAIL	
11-01	5			PL USE DROP FROM 11-01 ABOVE	"B1" BOT. TAIL	460
11-02	5			PL USE DROP FROM 11-02 ABOVE	"B2" BOT. KNUCKLE	690
11-04	5			PL USE DROP FROM 11-04 ABOVE	"R1" ROOF KNUCKLE	620
11-05	5			PL USE DROP FROM 11-05 ABOVE	"R2" ROOF TAIL	440
11-06	2			PL C/F (1) 1/4" x 84" x 305"	"R3" ROOF CAP	730
03-07	5			ST 1/2" x 1 1/2" x 12"	HANDLE	
09-12	5			PI 2" DIA. SCH 40 x 4" LG	ROOF SLEEVE	
09-13	5			BY QWIK CAP FOR 2" DIA. PIPE	END CAP	

NOTE: 1. FIELD INSTALL HANDLES [03-07] AT LOW POINT OF BOWL DIRECTLY ABOVE RISER RODS.

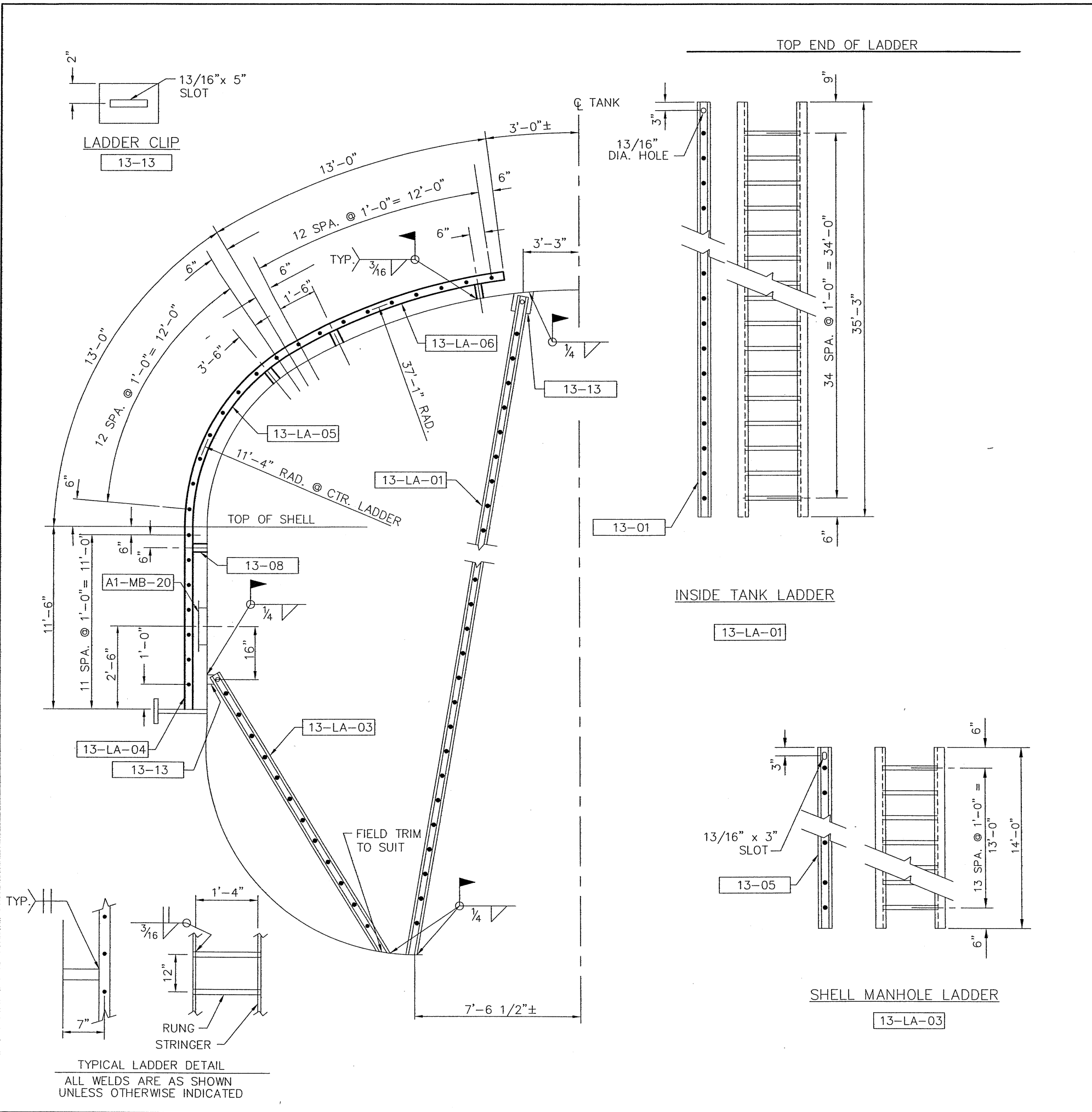


DETAIL "A"

DETAIL "B"

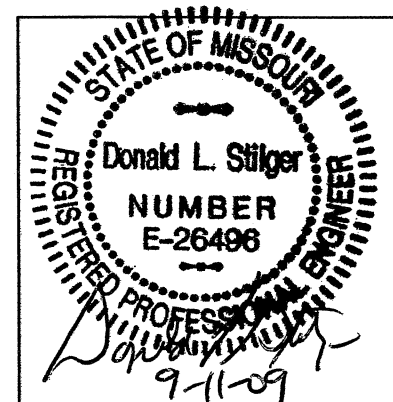


REV.	BY:	DATE	REMARKS
<b>CALDWELL TANKS, INC.</b> LOUISVILLE, KY.      NEWNAN, GA.			
SCOTT COUNTY, MISSOURI 300,000 GALLON TORUS BOTTOM TANK			
BY: CRW	JMM	TITLE: TANK ASSEMBLY DETAILS	
DATE: 08/14/09		DRAWING NO.: E-6854	09



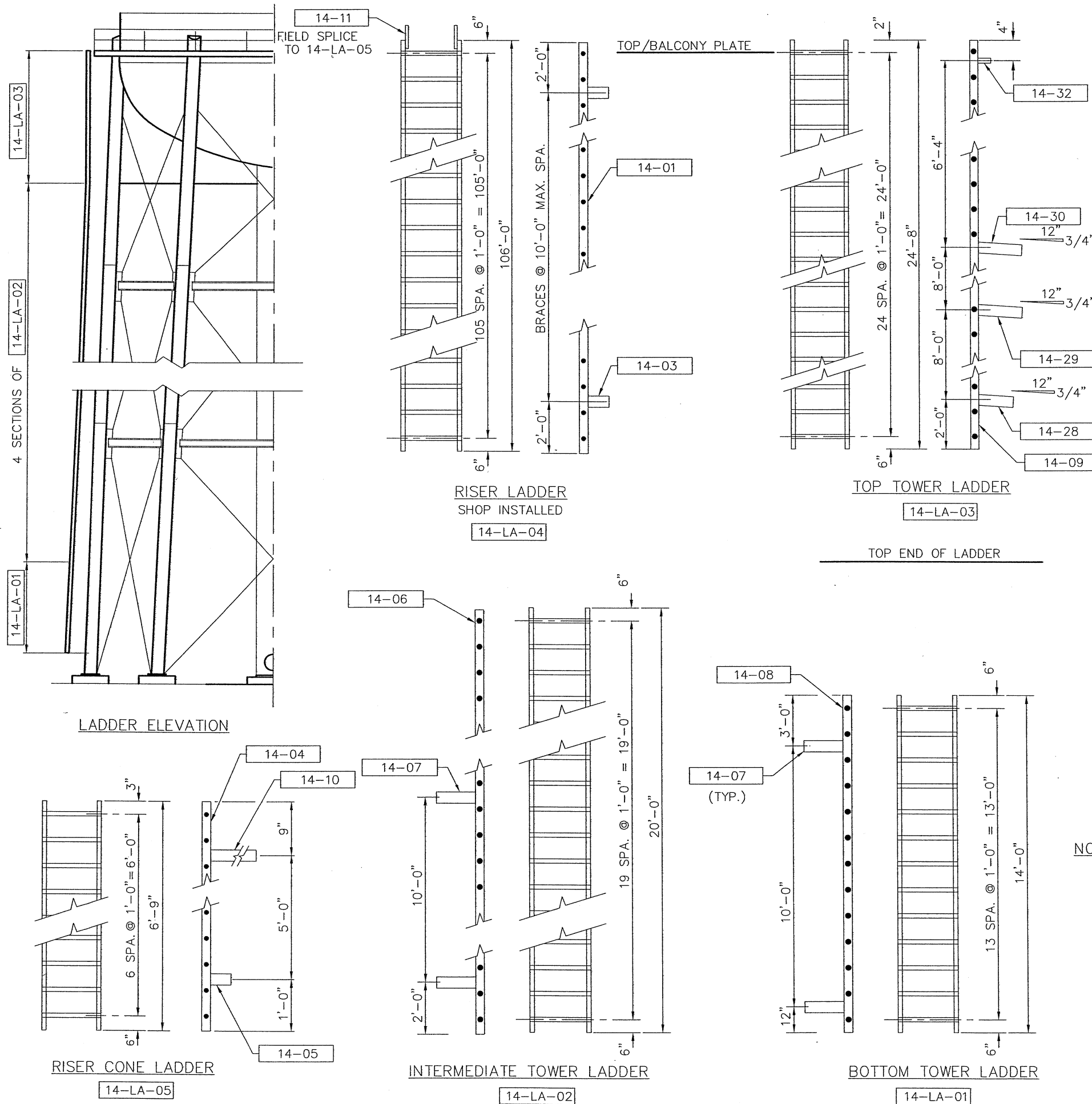
SHIPPING ITEM	QTY.	PC. MK.	QTY.	MATERIAL REQ'D	DESCRIPTION	UNIT WT.
13-LA-01	1			INSIDE TANK LADDER		360
		13-01	2	CH C3 x 4.1# x 35'-3"	STRINGER	
		13-02	35	RB 3/4" DIA. REBAR x 1'-4 7/8"	RUNG	
13-LA-03	1			SHELL MANHOLE LADDER		150
		13-05	2	CH C3 x 4.1# x 14'-0"	STRINGER	
		13-02	14	RB 3/4" DIA. REBAR x 1'-4 7/8"	RUNG	
13-LA-04	1			TANK LADDER		85
		13-07	2	FB 3/8" x 2" x 11'-6"	STRINGER	
		13-02	11	RB 3/4" DIA. REBAR x 1'-4 7/8"	RUNG	
		13-08	2	FB 3/8" x 2" x 6"	BRACE	
13-LA-05	1			TANK LADDER		100
		13-09	2	FB 3/8" x 2" x 13'-0"	STRINGER	
		13-02	13	RB 3/4" DIA. REBAR x 1'-4 7/8"	RUNG	
		13-08	2	FB 3/8" x 2" x 6"	BRACE	
13-LA-06	1			TANK LADDER		100
		13-10	2	FB 3/8" x 2" x 13'-0"	STRINGER	
		13-02	13	RB 3/4" DIA. REBAR x 1'-4 7/8"	RUNG	
		13-08	4	FB 3/8" x 2" x 6"	BRACE	
13-12	4			BY 3/4" DIA x 1 1/2" (ZINC PL)	M. BOLT w/NUT	
13-13	4			FB 3/8" x 4" x 8"	LADDER CLIP	
14-14	15			BY GALVANIZED	RUNG CLAMP	
13-15	37			BY LIN. FT. GALVANIZED (ROOF)	SAFETY RAIL	
13-16	34			BY LIN. FT. GALVANIZED (TANK)	SAFETY RAIL	

**NOTE:**  
 1. ALL LADDERS, EXCEPT 13-LA-03, WILL BE EQUIPPED w/RAIL-TYPE SAFE CLIMBING DEVICES.



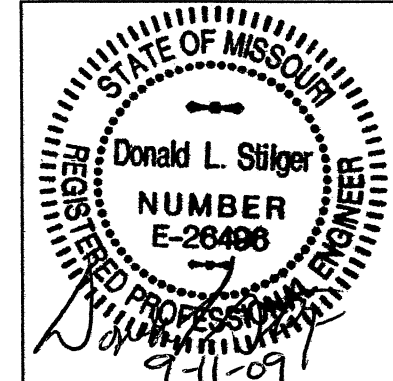
REV.	BY:	DATE	REMARKS
<b>CALDWELL TANKS, INC.</b> LOUISVILLE, KY.      NEWNAN, GA.			
SCOTT COUNTY, MISSOURI 300,000 GALLON TORUS BOTTOM TANK			
BY:	CRW/JDM	TITLE:	TANK LADDER DETAILS
DATE:	08/14/09	DRAWING NO.:	E-6854

TOP END OF LADDERS

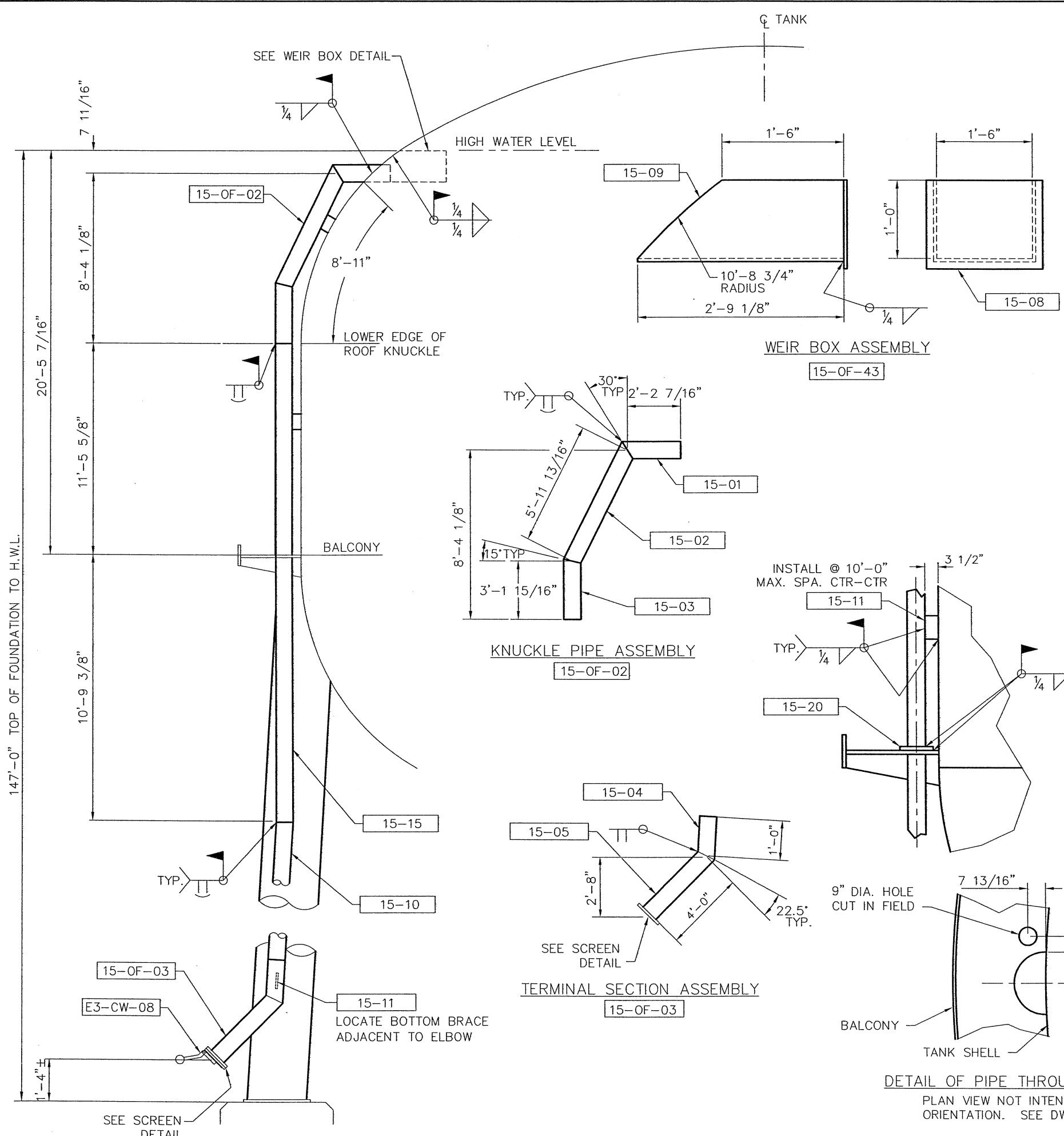


SHIPPING ITEM	QTY.	PC. MK.	QTY.	MATERIAL REQ'D	DESCRIPTION	UNIT WT.
14-LA-01	1			BOTTOM TOWER LADDER		115
		14-08	2	FB 3/8" x 2" x 14'-0"	STRINGER	
		14-02	14	RB 3/4" DIA. REBAR x 1'-4 7/8"	RUNG	
		14-07	4	FB 3/8" x 2" x 8 3/16"	BRACE	
14-LA-02	4			INTERMEDIATE TOWER LADDER		150
		14-06	2	FB 3/8" x 2" x 20'-0"	STRINGER	
		14-02	20	RB 3/4" DIA. REBAR x 1'-4 7/8"	RUNG	
		14-07	4	FB 3/8" x 2" x 8 3/16"	BRACE	
14-LA-03	1			TOP TOWER LADDER		195
		14-09	2	FB 3/8" x 2" x 24'-8"	STRINGER	
		14-02	25	RB 3/4" DIA. REBAR x 1'-4 7/8"	RUNG	
		14-32	2	FB 3/8" x 2" x 6"	BRACE	
		14-30	2	FB 3/8" x 4" x 21 11/16"	BRACE	
		14-29	2	FB 3/8" x 4" x 15 11/16"	BRACE	
		14-28	2	FB 3/8" x 2" x 9 11/16"	BRACE	
14-LA-04	1 (w/ RISER)			RISER LADDER		815
		14-01	2	FB 3/8" x 2" x 106'-0"	STRINGER	
		14-02	106	RB 3/4" DIA. REBAR x 1'-4 7/8"	RUNG	
		14-03	24	FB 3/8" x 2" x 9 1/16"	BRACE	
14-LA-05	1			RISER CONE LADDER		55
		14-04	2	FB 3/8" x 2" x 6'-9"	STRINGER	
		14-02	7	RB 3/4" DIA. REBAR x 1'-4 7/8"	RUNG	
		14-05	2	FB 3/8" x 2" x 8 5/8"	BRACE	
		14-10	2	FB 3/8" x 4" x 1'-1 13/16"	BRACE	
14-11	2			FB 3/8" x 2" x 6"	BRACE	
** 14-12	1			BY NYLON & LEATHER	HARNESS	
** 14-13	1			BY CAST BRONZE	SLEEVE	
14-14	38			BY GALVANIZED	RUNG CLAMP	
14-15	114			BY LIN. FT. GALVANIZED (TOWER)	SAFETY RAIL	
14-16	102			BY LIN. FT. GALVANIZED (RISER)	SAFETY RAIL	
14-17	1			BY 25° TRANSITION x 7'-6" LG. w/ BACKWARDS BEND, GALV.	SAFETY RAIL	
14-18	3			BY LIN. FT. GALVANIZED (RISER CONE)	SAFETY RAIL	
14-19	1			BY PIVOT DISMOUNT	SAFETY RAIL	

NOTES: 1. SEE DWG. 13 FOR TYPICAL LADDER DETAIL.  
 2. ALL LADDERS WILL BE EQUIPPED w/ RAIL-TYPE SAFE CLIMBING DEVICES.  
 \*\* 3. PARTS 14-12 & 14-13 SHALL BE SHIPPED DIRECTLY TO OWNER.



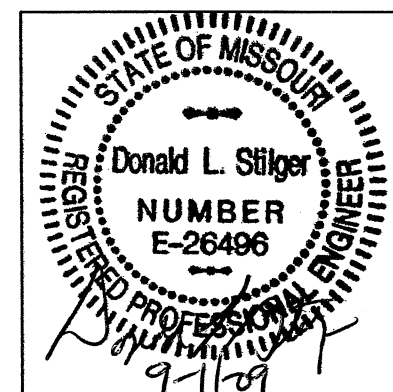
REV.	BY:	DATE	REMARKS
<b>CALDWELL TANKS, INC.</b>			
LOUISVILLE, KY. NEWNAN, GA.			
SCOTT COUNTY, MISSOURI 300,000 GALLON TORUS BOTTOM TANK			
BY:	CRW JMM	TITLE:	TOWER LADDER DETAILS
DATE:	08/14/09	DRAWING NO.:	E-6854 14



SHIPPING ITEM	QTY.	PC. MK.	QTY.	MATERIAL REQ'D	DESCRIPTION	UNIT WT.
15-OF-43	1			WEIR BOX ASSEMBLY		105
		15-08	1	PL 1/4" x 1'-1" x 1'-8"	END PLATE	
		15-09	1	PL 1/4" x 3'-6" x 2'-9 1/8"	SIDE PLATE	
15-OF-02	1			KNUCKLE PIPE ASSEMBLY		325
		15-01	1	PI 8" STD. WT. x 2'-2 7/16"	PIPE	
		15-02	1	PI 8" STD. WT. x 5'-11 13/16"	PIPE	
		15-03	1	PI 8" STD. WT. x 3'-1 15/16"	PIPE	
15-OF-03	1			TERMINAL SECTION ASSEMBLY		145
		15-04	1	PI 8" STD. WT. x 1'-0"	PIPE	
		15-05	1	PI 8" STD. WT. x 4'-0"	PIPE	
15-15	1			PI 8" STD. WT. x 22'-3"	OVERFLOW	635
15-10	1			PI 8" STD. WT. x 111'-0"	OVERFLOW	3170
15-11	15			FB 3/8" x 6" x 3 1/2"	BRACE	
15-20	1			PL 3/8" x 13 1/2" OD x 8 3/4" ID	BALCONY RING	
15-21	1			PL 3/8" x 13 1/2" OD x 8 3/4" ID	PLATE FLANGE	
15-13	1			BY #12 MESH x 13 1/2" DIA.	SCREEN	
15-14	6			BY 1/2" DIA. x 1 1/2" (ZINC PL.)	M. BOLT w/NUT	
E3-CW-08	1			ST FOR 8" PIPE	FLAP VALVE	

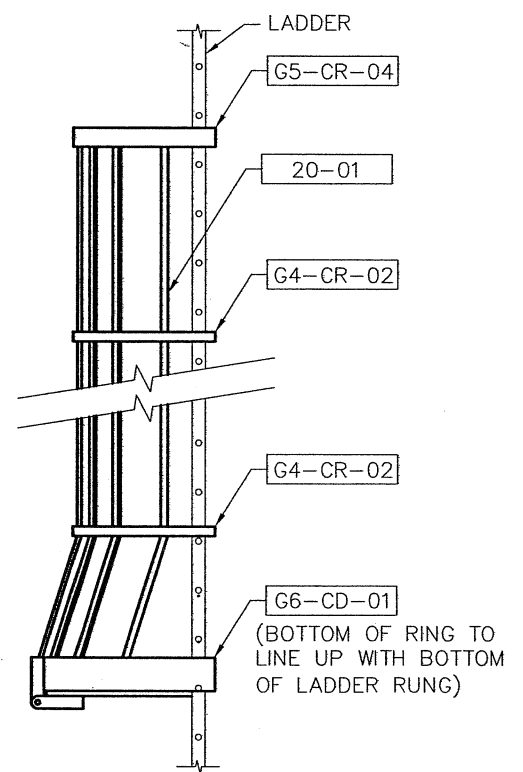
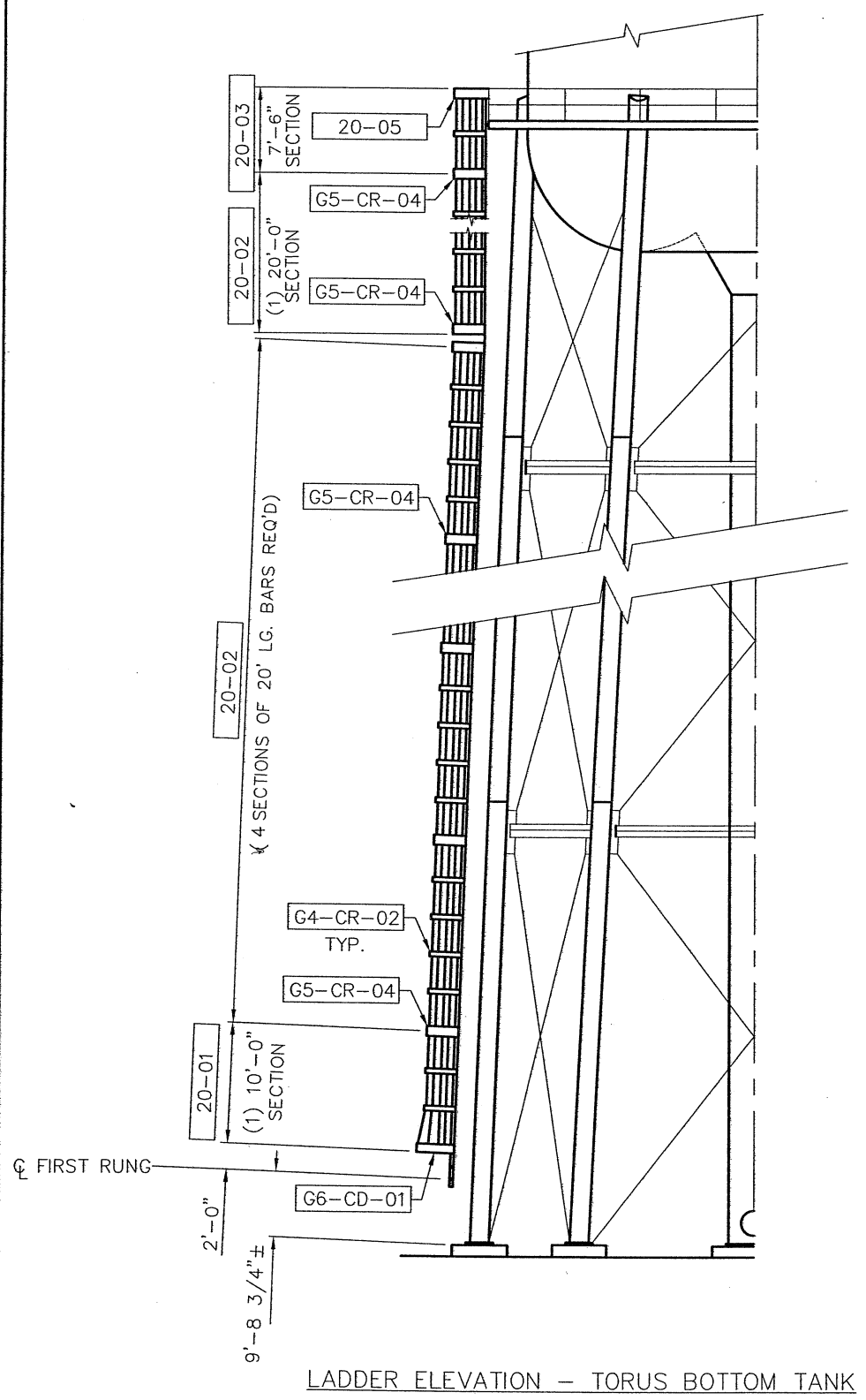
NOTES:

- FIELD TRIM OVERFLOW PROJECTION INTO TANK FLUSH WITH INSIDE TANK.
- WALL THICKNESS OF STD. WT. PIPE EQUALS SCH. 40 FOR 8" DIA. STEEL PIPE.

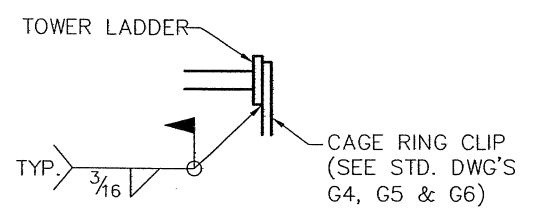


REV.	BY:	DATE	REMARKS
<b>CALDWELL TANKS, INC.</b> LOUISVILLE, KY.      NEWNAN, GA.			
SCOTT COUNTY, MISSOURI 300,000 GALLON TORUS BOTTOM TANK			
BY:	CRW	JDM	TITLE: OVERFLOW DETAILS
DATE:	08/14/09		DRAWING NO.: E-6854

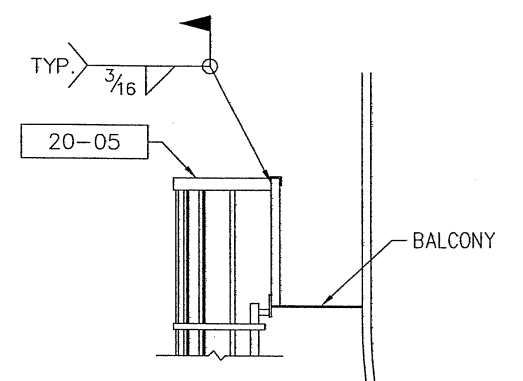
SHIPPING ITEM	QTY.	PC. MK.	QTY.	MATERIAL REQ'D	DESCRIPTION	UNIT WT.
G4-CR-02	23			ST 2" INTERMEDIATE CAGE RING		25
G5-CR-04	7			ST 4" INTERMEDIATE CAGE RING		45
G6-CD-01	1			ST LOWER CAGE RING w/DOOR		75
20-01	7			FB 1/4" x 1 1/2" x 10'-0"	"LC1"	
20-02	35			FB 1/4" x 1 1/2" x 20'-0"	"LC2"	
20-03	7			FB 1/4" x 1 1/2" x 7'-6"	"LC3"	
20-05	1			FB 3/8" x 4" x 7'-0 1/2"	TOP RING	
20-06	298			BY 3/8" x 1" CARRIAGE BOLT	COMPL. W/NUT	



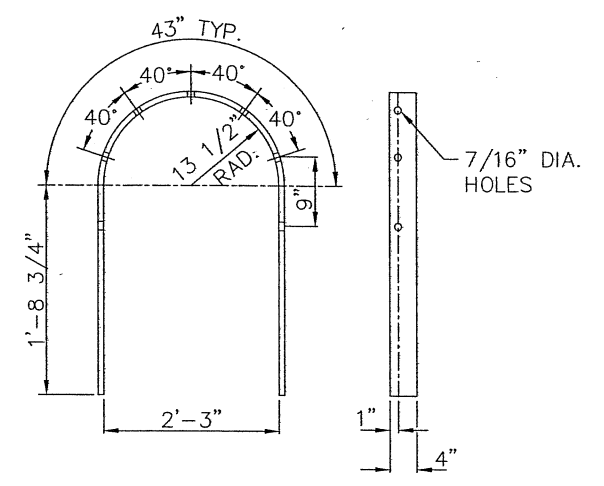
LOWER CAGE DETAIL



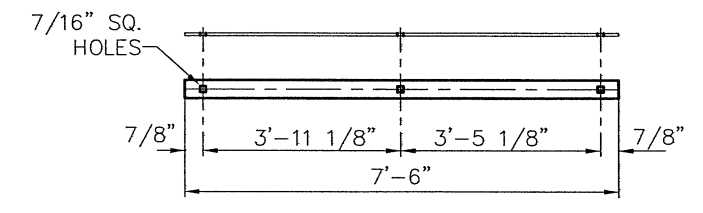
CAGE TO LADDER DETAIL



TOP OF CAGE TO BALCONY CONNECTION

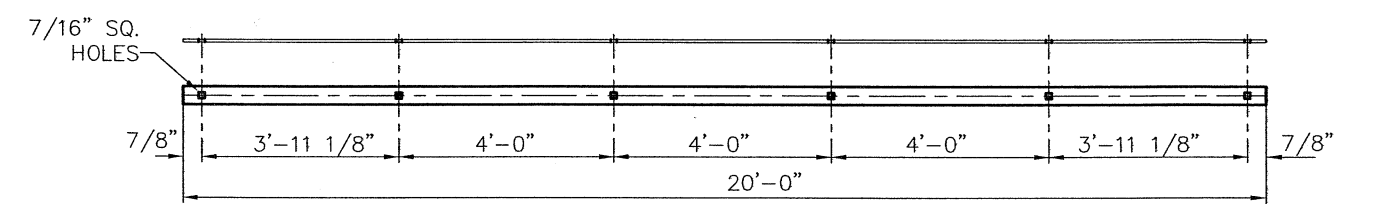


TOP CAGE RING



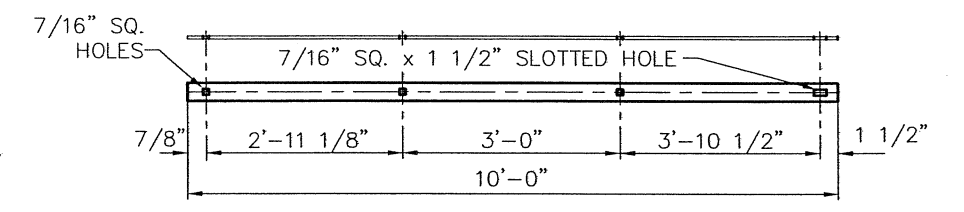
CAGE BAR "LC3"  
20-03

CAGE BAR DETAILS



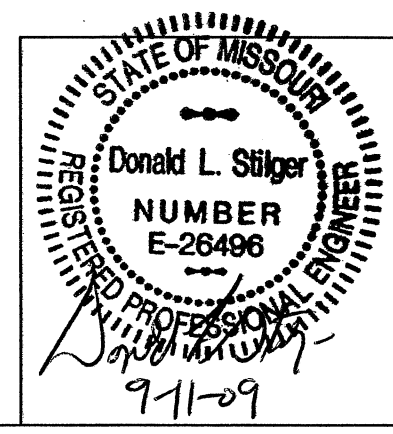
CAGE BAR "LC2"  
20-02

CAGE BAR DETAILS



CAGE BAR "LC1"  
20-01

CAGE BAR DETAILS



REV.	BY:	DATE	REMARKS
<b>CALDWELL TANKS, INC.</b> LOUISVILLE, KY.      NEWNAN, GA. SCOTT COUNTY, MISSOURI 300,000 GALLON TORUS BOTTOM TANK			
BY:	CRW <i>LJM</i>	TITLE:	LADDER CAGE DETAILS
DATE:	08/24/09	DRAWING NO.:	E-6854      20

COAT	LOCATION	DESCRIPTION	MILS/COAT		QTY. REQ'D.
			WET	DRY	
SHOP PRIME	INTERIOR (WET)	ONE FULL COAT TNEMEC SERIES V140-1255 (BEIGE) POTA POX PLUS THINNER: SEE DATA SHEETS	4.5-7.5	3.0-5.0	40 GALLONS
	INTERIOR (DRY)	ONE FULL COAT N/A THINNER: SEE DATA SHEETS	-	-	N/A GALLONS
	EXTERIOR	ONE FULL COAT TNEMEC SERIES 94-H <sub>2</sub> O HYDRO-ZINC THINNER: SEE DATA SHEETS	4.0-5.6	2.5-3.5	90 GALLONS
FIELD PRIME	INTERIOR (WET)	PATCH PRIME COAT ALL SEAMS & ABRADED AREAS TNEMEC SERIES N140-1255 (BEIGE) POTA POX PLUS BRUSH APPLY ONE STRIPE COAT TO ALL WELD SEAMS, EDGES, CORNERS, BOLTS, AND NUTS TNEMEC SERIES N140-11WH (WHITE) POTA-POX PLUS THINNER: SEE DATA SHEETS	4.5-7.5	3.0-5.0	N/A
	INTERIOR (DRY)	PATCH PRIME COAT ALL SEAMS & ABRADED AREAS N/A THINNER: SEE DATA SHEETS	-	-	N/A
	EXTERIOR	PATCH PRIME COAT ALL SEAMS & ABRADED AREAS TNEMEC SERIES 91-H <sub>2</sub> O HYDRO-ZINC THINNER: SEE DATA SHEETS	4.0-5.6	2.5-3.5	N/A
FINISH COATS	INTERIOR (WET)	ONE FULL COAT EACH TNEMEC SERIES N140-11WH (WHITE) POTA-POX PLUS TNEMEC SERIES N140-15BL (TANK WHITE) POTA-POX PLUS THINNER: SEE DATA SHEETS	4.5-7.5	3.0-5.0	N/A
	INTERIOR (DRY)	ONE FULL COAT N/A THINNER: SEE DATA SHEETS	-	-	N/A
	EXTERIOR	ONE FULL COAT EACH TNEMEC SERIES N69 HI-BUILD EPOXOLINE II TNEMEC SERIES 1074U ENDURA-SHIELD II THINNER: SEE DATA SHEETS	4.5-7.5	3.0-5.0	N/A
	EXTERIOR	ONE FULL COAT EACH TNEMEC SERIES N69 HI-BUILD EPOXOLINE II TNEMEC SERIES 1074U ENDURA-SHIELD II THINNER: SEE DATA SHEETS	4.5-6.8	3.0-4.5	N/A

**NOTES:**

- SURFACE PREPARATION:
  - INTERIOR WET SURFACES: BLAST TO SSPC-SP10 (NEAR WHITE BLAST)
  - EXTERIOR SURFACES: BLAST TO SSPC-SP6 (COMMERCIAL BLAST)
  - CENTRIFUGAL METALLIC ABRASIVE BLAST CLEANING (SHOP)
  - OPEN NOZZLE BLAST CLEANING (FIELD)
- PAINT APPLICATION: PAINT SHALL BE APPLIED PER THE MANUFACTURER'S RECOMMENDATIONS, THIS DRAWING, AND THE PROJECT SPECIFICATION.
  - APPLY ALL COATINGS TO BE FREE OF FILM CHARACTERISTICS OR DEFECTS THAT WOULD ADVERSELY AFFECT PERFORMANCE OF THE COATING SYSTEM. APPLY EXTERIOR COATINGS TO BE FREE OF FILM CHARACTERISTICS OR DEFECTS THAT ADVERSELY AFFECT APPEARANCE.
  - PAINT SHALL BE APPLIED TO THE MINIMUM MILLAGES SHOWN.
  - ALL PAINT IS TO BE BY TNEMEC COMPANY, INC.
  - FOR COLD WEATHER APPLICATION: SEE COMMENTS BELOW

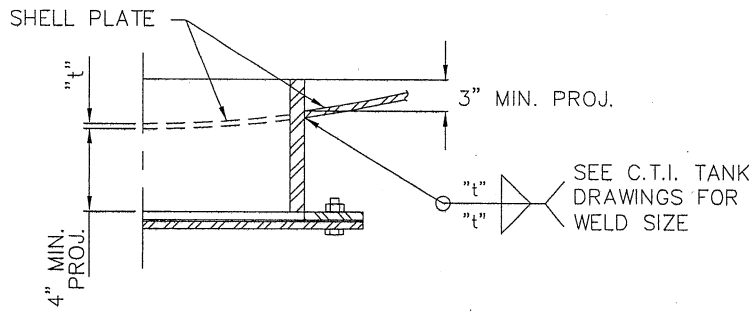
TNEMEC SERIES 91-H <sub>2</sub> O TNEMEC SERIES 94-H <sub>2</sub> O TNEMEC SERIES N140 TNEMEC SERIES N69 TNEMEC SERIES 1074U TNEMEC SERIES V140	TNEMEC SERIES 44-710 URETHANE ACCELERATOR TNEMEC SERIES 44-710 URETHANE ACCELERATOR TNEMEC SERIES N140F POTA-POX PLUS (FACTORY ACCELERATED) TNEMEC SERIES 44-700 EPOXY ACCELERATOR TNEMEC SERIES 44-710 URETHANE ACCELERATOR TNEMEC SERIES 44-700 URETHANE ACCELERATOR	COLD WEATHER ADDITIVE COLD WEATHER ADDITIVE COLD WEATHER SUBSTITUTE COLD WEATHER ADDITIVE COLD WEATHER ADDITIVE COLD WEATHER ADDITIVE
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- BEFORE BLAST CLEANING, THE FIELD PAINTING CONTRACTOR SHALL CONFIRM THAT SURFACE IMPERFECTIONS SUCH AS SHARP FINS, SHARP EDGES, WELD SPLATTER, OR BURNING SLAG ARE REMOVED FROM THE SURFACE.
- FIELD PAINTING CONTRACTOR SHALL STERILIZE TANK INTERIOR PER AWWA C652-92, AND PROJECT SPECIFICATIONS.
- DO NOT PAINT SAFETY DEVICES.
- TANK VENT(S) AND MANWAY(S) SHALL BE SHOP BLAST CLEANED AND COATED WITH A HOLDING PRIMER. THE TYPE AND MANUFACTURER OF THE PRIMER SHALL BE AT THE DISCRETION OF CTI. THE HOLDING PRIMER SHALL BE COMPLETELY REMOVED IN FIELD BY BLAST CLEANING TO THE SPECIFIED DEGREE OF CLEANLINESS AND THE ITEMS SHALL BE PRIMED AND COATED IN ACCORDANCE WITH THE PAINT SYSTEM(S) SHOWN ON THIS SHEET.
- PAINT TANK SIGNS TWO COATS TNEMEC SERIES 1074U ENDURA-SHIELD II SADET BLUE AT 3.0-4.5 MILS DFT EACH. SEE DWG. 16 FOR TANK SIGN DETAILS.
- CONCRETE FOUNDATIONS SHALL BE PAINTED w/ EXTERIOR SYSTEM TO 6" BELOW GRADE.
- ALL STEEL EDGES BEARING ON CONCRETE SHALL HAVE SEAM SEALER APPLIED BEFORE PAINTING.

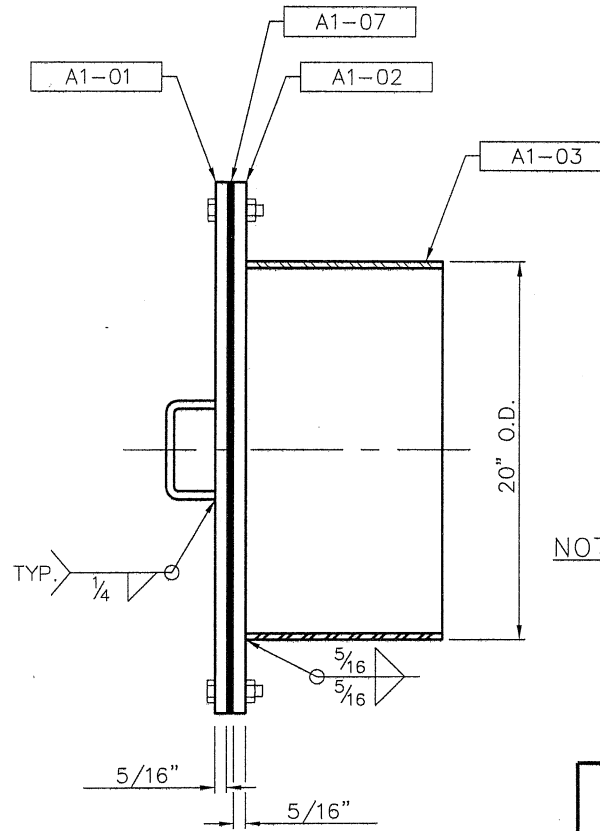
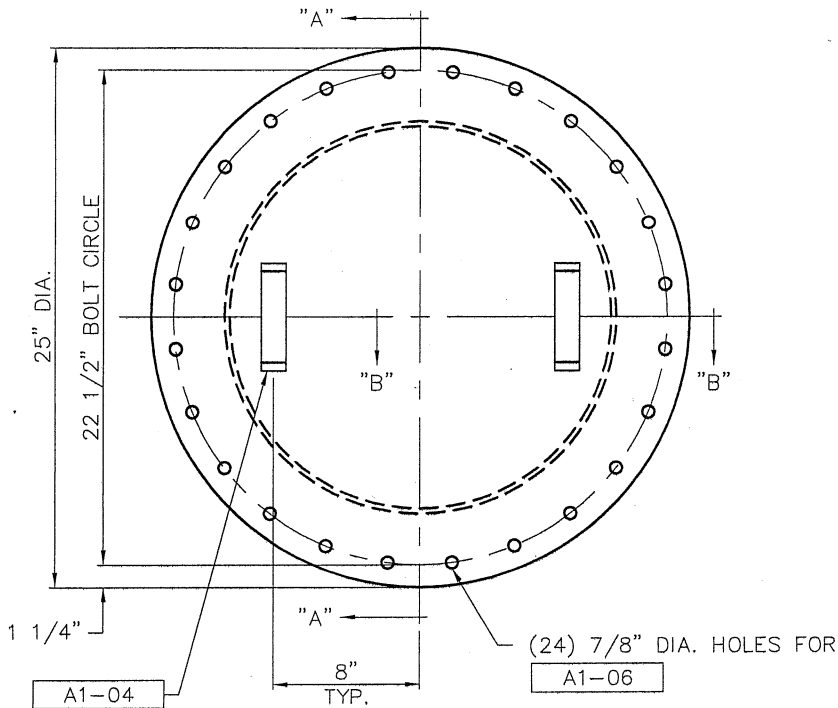
SURFACE AREAS:		
INTERIOR - (WET) =	7,900	SQ. FT.
INTERIOR - (DRY) =	N/A	SQ. FT.
EXTERIOR =	19,100	SQ. FT.
TOTAL MINIMUM DRY MILLAGES:		
INTERIOR: (WET)	INTERIOR: (DRY)	EXTERIOR:
PRIME = 3.0-5.0	PRIME = N/A	PRIME = 2.5-3.5
INTERM. = 3.0-5.0	INTERM. = N/A	INTERM. = 3.0-5.0
FINISH = 3.0-5.0	FINISH = N/A	FINISH = 3.0-4.5
TOTAL = 9.0-15.0	TOTAL = N/A	TOTAL = 8.5-13.0

REV.	BY:	DATE	REMARKS
	CRW	08/24/09	
<b>CALDWELL TANKS, INC.</b>			
LOUISVILLE, KY. NEWNAN, GA.			
SCOTT COUNTY, MISSOURI			
300,000 GALLON TORUS BOTTOM TANK			
BY: CRW <i>JMM</i>			TITLE: PAINT SCHEDULE
DATE: 08/24/09			DRAWING NO.: E-6854 P1

SHIPPING ITEM	QTY.	PC. MK.	QTY.	MATERIAL REQ'D.	DESCRIPTION	UNIT WT.
A1-MB-20	1			20" DIA. BALCONY SHELL MANHOLE		190
		A1-01	1	PL 5/16" x 25" DIA w/(24) 7/8" HOLES	COVER w/HOLES	
		A1-02	1	PL 5/16" x 25" OD x 20 1/8" ID w/(24) 7/8" HOLES	FLANGE w/HOLES	
		A1-03	1	PI 20" OD x 3/4" x 8" LG	PIPE NECK	
		A1-04	2	FB 1/2" x 1 1/2" x 1'-0" (BENT)	HANDLE	
A1-06	24			BY 3/4" DIA. x 1 3/4" (ZINC PL.)	M. BOLT w/NUT	
A1-07	1			BY 1/4" THK. 25" OD x 20" ID	RUBBER GASKET	



SECTION "B-B"



SECTION "A-A"

NOTES:

- COVER PLATE AND FLANGE THICKNESSES SHALL BE INCREASED WHEN MANHOLE IS SUBJECT TO HYDROSTATIC PRESSURE GREATER THAN 26'-8" OF WATER DEPTH.
- NECK THICKNESS PROVIDES ADEQUATE REINFORCEMENT FOR RISER/SHELL PLATE THICKNESS 1/2" AND LESS.

CALDWELL TANKS, INC.

LOUISVILLE, KY.

NEWNAN, GA.

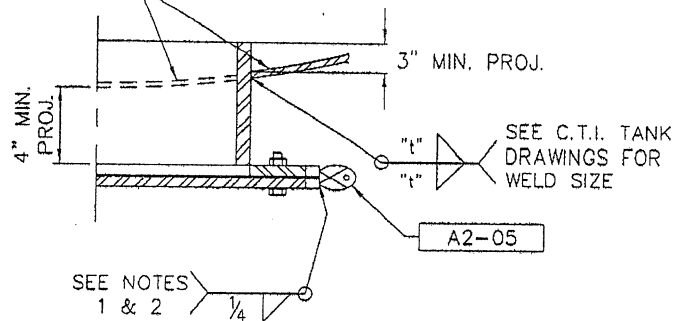
TITLE:

20" DIA. BALCONY SHELL MANHOLE

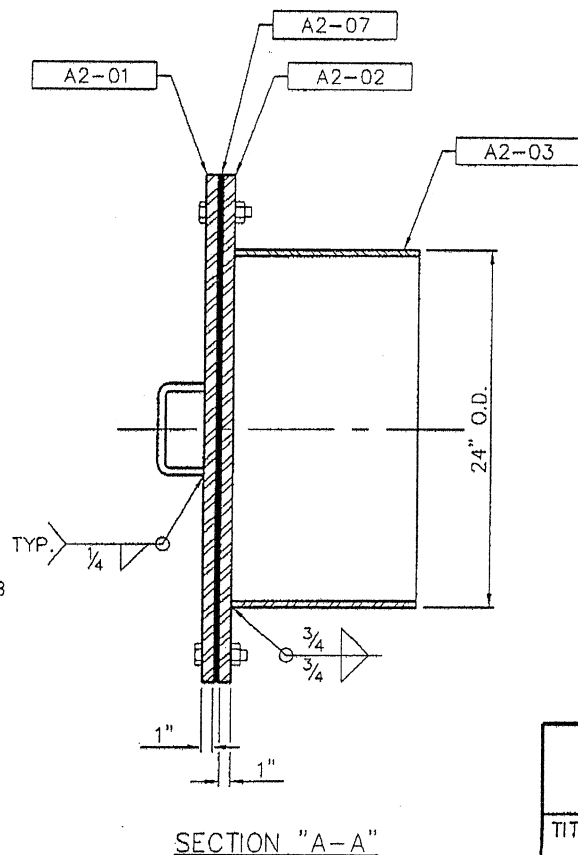
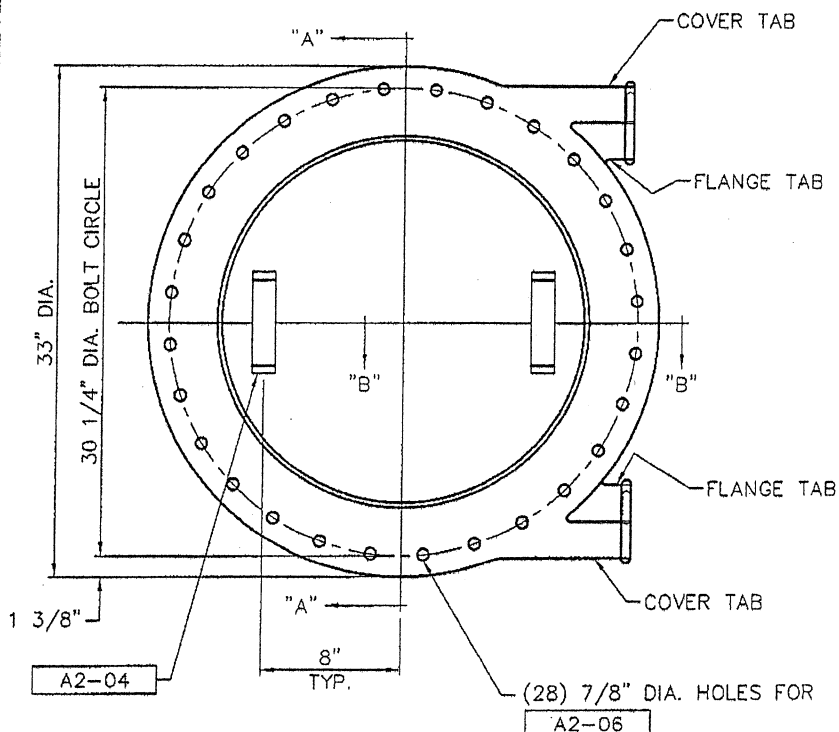
DRAWING NO.:

A1

RISER/SHELL PLATE



SECTION "B-B"



SECTION "A-A"

SHIPPING ITEM	QTY.	PC. MK.	QTY.	MATERIAL REQ'D.	DESCRIPTION	UNIT WT.
A2-MH-24	1			24" DIA. HINGED MANHOLE		565
		A2-01	1	PL 1" x 33" DIA w/(28) 7/8" HOLES	COVER w/HOLES	
		A2-02	1	PL 1" x 33" OD x 24 1/8" ID w/(28) 7/8" HOLES	FLANGE w/HOLES	
		A2-03	1	PI 24" OD x 3/4" x 12" LG	PIPE NECK	
		A2-04	2	FB 1/2" x 1 1/2" x 1'-0" (BENT)	HANDLE	
		A2-05	2	BY WELD-ON PIN HINGE (S.S.)	HINGE	
A2-06	28			BY 3/4" DIA. x 3 1/2" (ZINC PL.)	M. BOLT w/NUT	
A2-07	1			BY 1/4" THK. 33" OD x 24" ID	RUBBER GASKET	

NOTES:

1. ALIGN COVER AND FLANGE AS SHOWN. USE TEMPORARY 11 GA. SHIM TO MAINTAIN SPACING BETWEEN COVER AND FLANGE BEFORE INSTALLING HINGES.
2. WELD MALE SECTION OF PIN HINGE TO FLANGE. FLANGE TAB MUST BE LOCATED BELOW COVER TAB.
3. COVER PLATE AND FLANGE THICKNESSES SHALL BE INCREASED WHEN MANHOLE IS SUBJECT TO HYDROSTATIC PRESSURE GREATER THAN 150' OF WATER DEPTH.
4. NECK THICKNESS PROVIDES ADEQUATE REINFORCEMENT FOR RISER/SHELL PLATE THICKNESS 3/8" AND LESS.

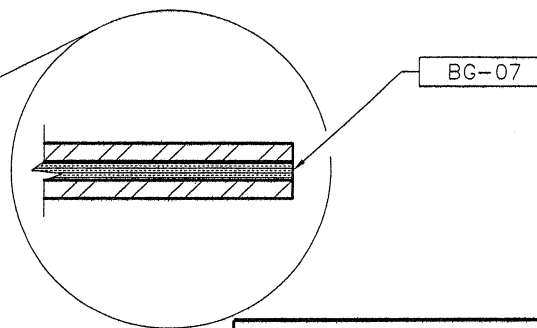
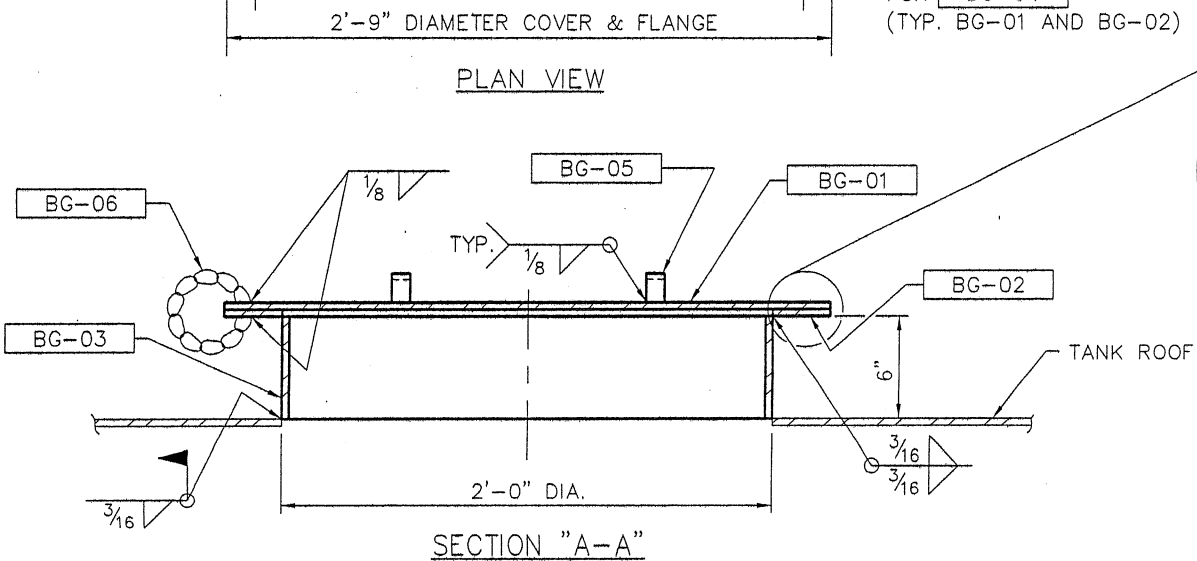
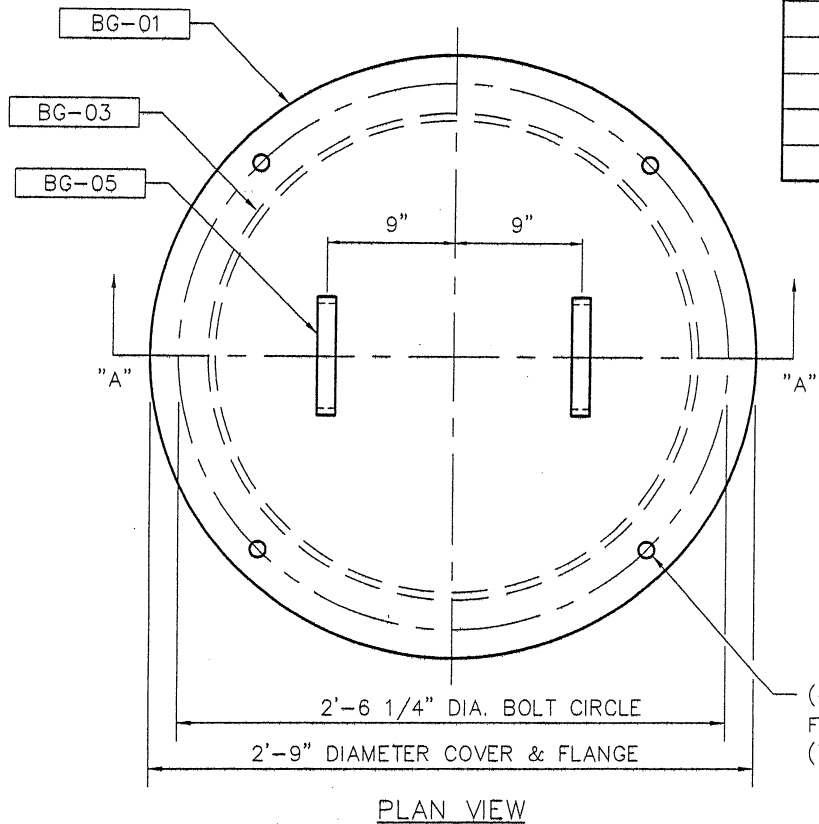
CALDWELL TANKS, INC.  
LOUISVILLE, KY. NEWNAN, GA.

TITLE: 24" DIA. HINGED MANHOLE

DRAWING NO.: A2



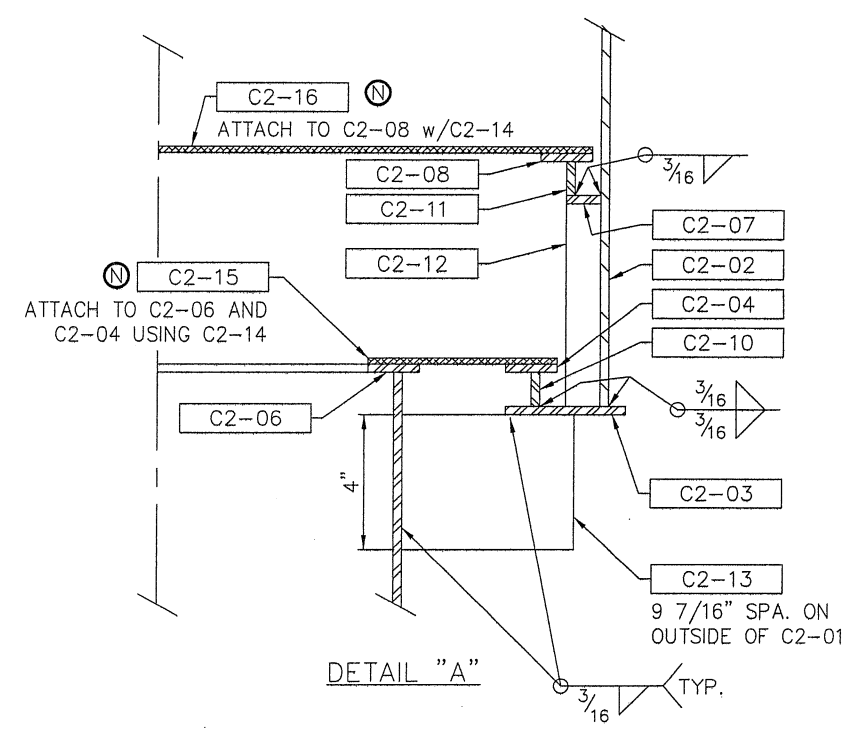
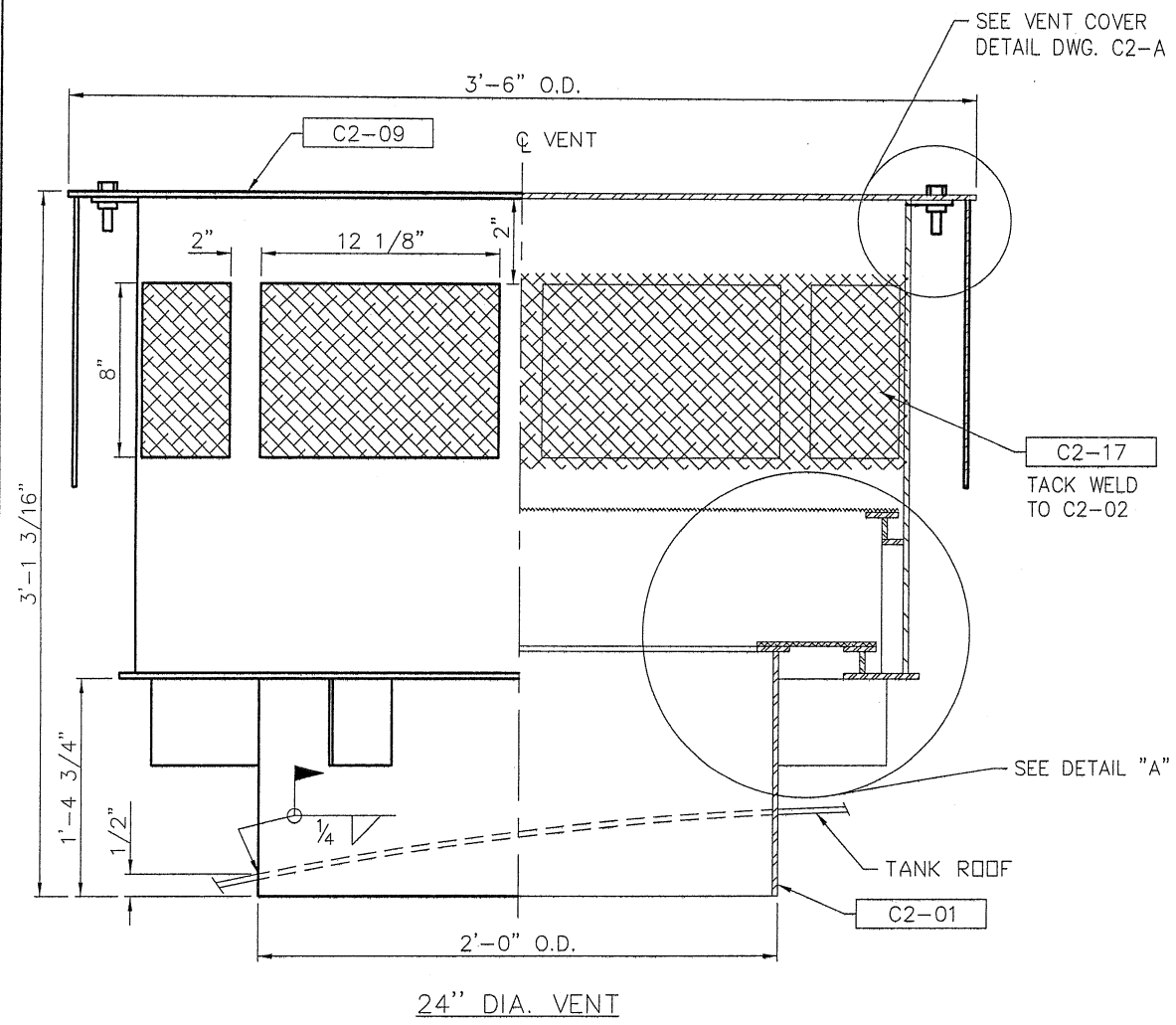
SHIPPING ITEM	QTY.	PC. MK.	QTY.	MATERIAL REQ'D	DESCRIPTION	UNIT WT.
BG-MF-24	1			24" DIA. EXHAUST FAN MANHOLE		115
		BG-01	1	PL 11 GA. x 33" DIA. (w/ HOLES)	COVER	
		BG-02	1	PL 1/4" x 33" O.D. x 24" I.D. (w/ HOLES)	FLANGE	
		BG-03	1	PI 24" O.D. x 1/4" x 6" LG.	NECK	
		BG-04	4	BY 3/4" DIA. x 1 1/2" (ZINC. PL.)	M. BOLT w/ NUT	
		BG-05	2	FB 1/8" x 2" x 12" (BENT)	HANDLE	
		BG-06	1	BY 1/4" ELECTROGALVANIZED CHAN x 1'-0" LG.	CHAIN	
		BG-07	1	BY 1/8" x 2'-9" O.D. x 2'-0" I.D.	GASKET	



CALDWELL TANKS, INC.  
 LOUISVILLE, KY.      NEWNAN, GA.

TITLE:  
 24" DIA. EXHAUST FAN MANHOLE

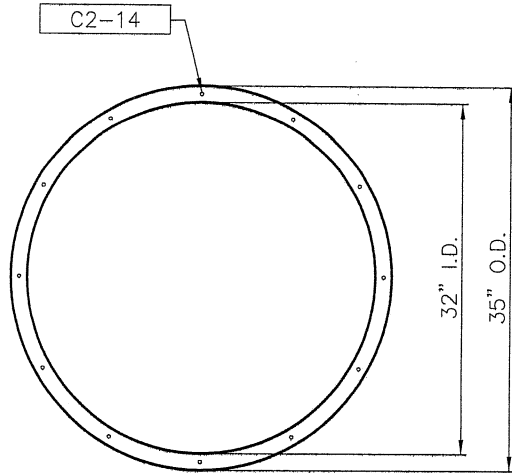
DRAWING NO.:  
 BG



NOTE:  
SEE DWG. C2-A FOR ADDITIONAL DETAILS

<b>CALDWELL TANKS, INC.</b>	
LOUISVILLE, KY.	NEWMAN, GA.
TITLE:	SCOTT COUNTY, MISSOURI (N) 24" DIA. VENT
DRAWING NO.:	E-6854
	C2

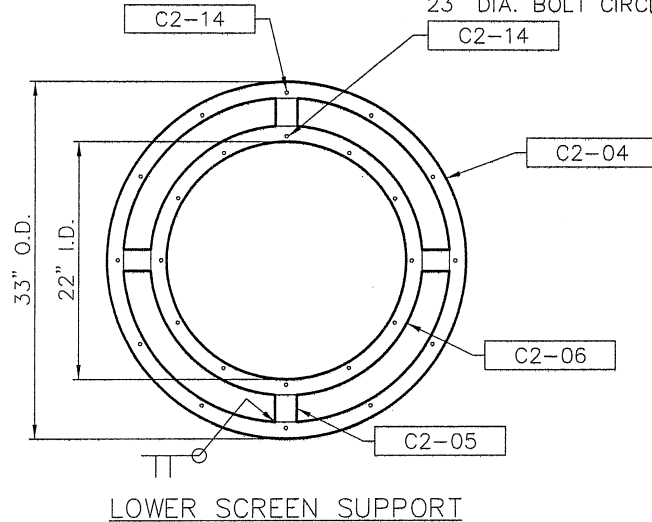
(12) 5/16" DIA. HOLES ON  
33" DIA. BOLT CIRCLE FOR



C2-08

(12) 5/16" DIA. HOLES ON  
31" DIA. BOLT CIRCLE FOR

(12) 5/16" DIA. HOLES ON  
23" DIA. BOLT CIRCLE FOR

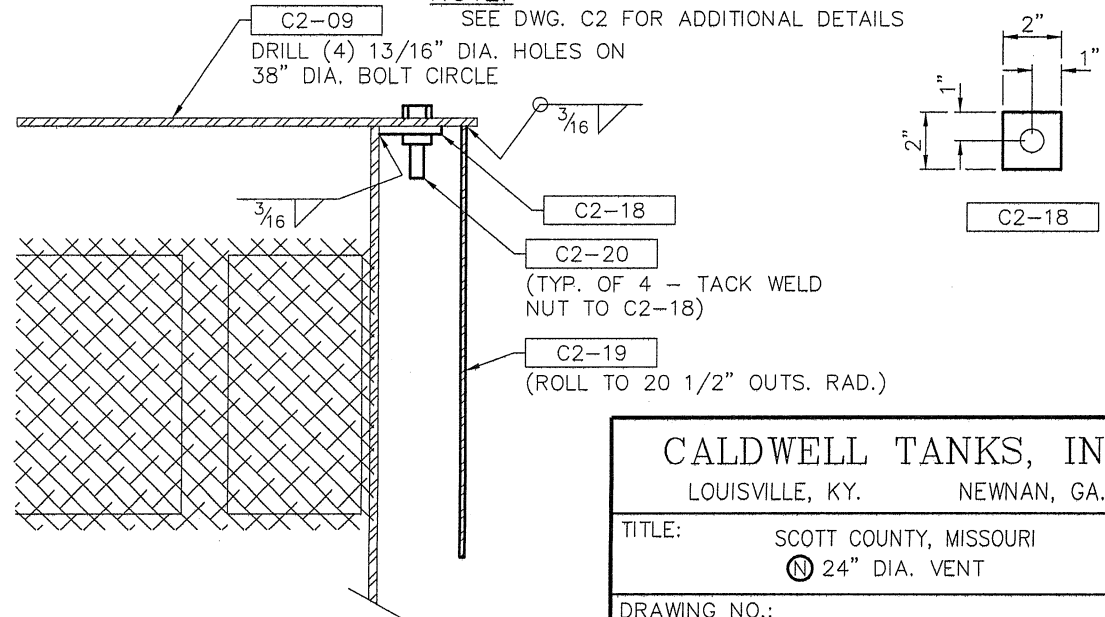


SHIPPING ITEM	QTY.	PC. MK.	QTY.	MATERIAL REQ'D	DESCRIPTION	UNIT WT.
C2-PV-24	1			24" DIA. VENT		500
		C2-01	1	PI 1/4" x 24" O.D. x 1'-6" LG.	VENT NECK	
		C2-02	1	PI 1/4" x 36" O.D. x 1'-8" LG.	VENT BODY	
		C2-03	1	PL 1/4" x 37" O.D. x 30" I.D.	PLATE RING	
		C2-04	1	PL 3/16" x 33" O.D. x 30" I.D.	OUTSIDE PALLET RING	
		C2-05	4	FB 3/16" x 1" x 2 1/2" LG.	RING SPACER	
		C2-06	1	PL 3/16" x 25" O.D. x 22" I.D.	INSIDE PALLET RING	
		C2-07	1	PL 1/4" x 35 1/2" O.D. x 33 1/2" I.D.	PLATE RING	
		C2-08	1	PL 3/16" x 35" O.D. x 32" I.D.	PALLET RING	
		C2-09	1	PL 3/16" x 42" DIA.	COVER PLATE	
		C2-10	1	FB 3/16" x 1" x 99 3/4" LG. (ROLLED TO 32" O.D.)	PALLET SUPPORT	
		C2-11	1	FB 3/16" x 1" x 106" LG. (ROLLED TO 34" O.D.)	PALLET SUPPORT	
		C2-12	4	FB 1/4" x 1" x 6" LG.	BAR RING SUPPORT	
		C2-13	8	FB 1/4" x 4" x 5" LG.	VENT GUSSET	
		C2-14	36	BY 1/4" DIA. x 1" (ZINC PL.)	M. BOLT w/NUT	
		C2-15	1	BY #18 MESH S.S x 33" O.D. x 22" I.D.	SCREEN	
		C2-16	1	BY #18 MESH S.S x 35" DIA.	SCREEN	
		C2-17	1	FB 9" x 9'-6" FLATTENED EXP. METAL	SCREEN	
		C2-18	4	FB 1/4" x 2" x 2" w/HOLE	LATCH BAR	
		C2-19	1	FB 3/16" x 12" x 10'-8 1/4" LG.	SCREEN SHIELD	
		C2-20	4	BY 3/4" DIA. x 1 1/2" (ZINC PL.)	LATCH BOLT w/NUT	

NOTE:

SEE DWG. C2 FOR ADDITIONAL DETAILS

DRILL (4) 13/16" DIA. HOLES ON  
38" DIA. BOLT CIRCLE



VENT COVER ATTACHMENT DETAIL

**CALDWELL TANKS, INC.**  
 LOUISVILLE, KY.      NEWNAN, GA.

TITLE:      SCOTT COUNTY, MISSOURI  
 Ⓝ 24" DIA. VENT

DRAWING NO.:      E-6854      C2-A