

32801-11894 Specifications
Tennessee Wildlife Resources Agency (“TWRA”) Duck Blinds

Scope of Work

The work covered by this section consists of furnishing all materials, hardware, piles, step ladders, anchorage system, fasteners and other marina hardware necessary to provide the Duck Blinds as shown in the plans and specifications. The Duck Blind shall be delivered to the site prefabricated as possible with floats attached. The Contractor is responsible for installing each duck blind on site. Each site to be determined by TWRA Personnel.

Each Duck Blind will consist of a (1) Blind (2) Boat House and (3) Support Base. The Duck Blind will be a minimum of ten (10) feet wide by twenty-four (24) feet long with front peak of roof @ seven (7) feet from floor. There will need to be a two (2) percent slope from the front high point to the end of the boat hide roof.

Blind Locations:

TWRA Location	To be Installed
Barkley	3
Gin Creek	2
Camden Unit 1	5
Camden Unit 2	1
Gooch	5
Reelfoot	5
Tigrett	3
West Sandy	2
AEDC	4
Cheatham Lake	4
Haynes Bottoms	2
Old Hickory Unit 1	6
Total	42

Workmanship and Quality

Applicable Standards

American Institute of Steel Construction

American Welding Society

American Iron and Steel Institute-Light Gauge Cold- Frames Steel Design Manual

American Society of Testing Materials

Galvanizing Conforms to ASTM A-123

Steel Conforms to ASTM Designation: A-36

All finished steel members shall be free from twists, bends, distortions, and open joints. All steel construction shall be free of sharp edges and burrs; ends of exposed steel members shall be rounded or beveled. Projecting material and burrs which would prevent bearing of the various members on each other shall be removed. All steel components shall be hot dipped galvanized after fabrication.

All welding shall conform to the requirements of the American Welding Society. Welds shall be a solid and homogenous part of joined metal and shall be free of pits and scale and shall be full areas and length required to develop the required strength for the intended use.

All drilling and cutting of steel done after galvanizing shall be painted with a high zinc dust content paint. All welds over galvanized material shall be thoroughly cleaned and coated with a minimum two coats of cold galvanizing compound. All connections between the modular sections shall occur below deck level. All bolts, nuts and washers shall be Grade 8 or better.

VERTICAL DESIGN LOADS

Dead load shall be the entire weight of the duck blind and platform system.

Deck surface and structural frame Dead load shall be equal to a minimum of 60 lbs. per square foot applied to the full deck surface. Live load shall be designed for 200lb per square foot to the full area of the deck/roof.

HORIZONTAL DESIGN LOADS

Uniform wind load of 20lb per square foot on all projected surfaces.

Prevent torsion, racking and twisting by providing sufficient built-in rotational resistance to prevent no more than 3 inches of rotation in normal freeboard per 25 linear feet of deck under any combination of normal loads.

FLOAT POLYETHELENE SHELL

Poly shells shall be one-piece roto-molded units. Units filled with expanded in place polystyrene or closed cell polyurethane. Flotation units to be shipped securely bolted to bottom of frame. Flotation device shall carry a 10-year limited warranty to the original purchaser.

Flotation Integrity: Flotation units shall be designed to maintain their desired buoyancy and freeboard even if structurally damaged. Connections of flotation units shall be designed for 100 % coverage of total deck area and act as one unit for each duck blind. The flotation units must be built to discourage destruction of the unit by beavers, otters, muskrats, etc.

ANCHORAGE SYSTEM

The duck blind shall be held in position by a minimum of twelve (12) 3-inch Schedule 40 Hot Dipped Galvanized Steel Pipe. The pipe will be driven to refusal or bedrock except for certain duck blinds on Tigrett and Reelfoot Lakes. Designated duck blinds on these lakes will be designed to have fixed boat hides and floating duck blinds. On these designated blinds, there will be a minimum of four (4) 3-inch Schedule 40 Hot Dipped Galvanized Steel Pipe. These pipes will also be driven to refusal or bedrock and they will have attached to them pile guides for the rise and fall of the water elevation.

Contractor Qualifications and Minimum Requirements

- State of Tennessee Contractor License with monetary limits up to \$1,500,000.00 per job.
- Contractor must be able to purchase a Performance Bond and Payment Bond to cover the value of the project.
- Five (5) years minimum experience in building and installing metal fixed or floating structures year-round.

Contractual Requirements

If the Contractor is unable to provide the necessary services in a timely manner, the Contractor may be subject to liability for Liquidated Damages, Contract Attachment A.

Contractor Bidding Requirement

Potential Bidders must provide a package summarizing their Company Organization, building expertise and two (2) examples of similar work completed within the past three (3) years.

SUBMITTALS

The Contractor shall submit to this office for approval before any material is manufactured for this project, 2 sets of plans for construction plans material list within 30 days of being awarded the contract. The plans shall be detailed so as to provide adequate information for the assembly of this dock system. The plan shall have details for the following items:

Duck Blind
Support Platform

Boat Housing
Dog Doors and Ramp
Flotation Units
Wall Structure
Floor Structure
Connections
Cross Bracing
Decking material
Connection details

All drawings shall be sufficient scale for clarity, accurately drawn and dimensioned. Drawing shall indicate size and gauges of structural members, finish, thickness, and other relevant information.

Engineering Calculations showing compliance with the design criteria specified herein. All calculations will be stamped with the seal of a qualified licensed, professional engineer. Computations shall include as a minimum the following:

Compliance with combined live and dead load requirements considering both bending and deflection.

The plans shall be sent to:

**Tennessee Wildlife Resources Agency
P.O. Box 40747
5107 Edmondson Pike (Fed Ex), 37211
440 Hogan Rd (UPS), 37204
Nashville, Tn 37211
Jay McClellan
615/781-6546
Jay.c.mcclellan@tn.gov**

DELIVERY

Installation shall be required within one hundred thirty-six (136) days of award of contract or by October 1, 2021 whichever is earlier. Installation shall be on Monday through Sunday. Contractor must call Jay McClellan at (615) 781-6546 or (615) 351-6611 at least three business days before delivery of any unit/s,

WARRANTY

Contractor shall provide a one (1) year unlimited warranty covering workmanship and materials. Warranty work if necessary, shall include all materials, labor, equipment, and transportation expenses for any needed repair work. Warranty work will be done at the installation site. Also, Contractor will provide thirty (30) year warranty for workmanship defects.