# OKLAHOMA WILDLIFE CONSERVATION

## Oklahoma Department of Wildlife Conservation

## **Amendment of Solicitation**

Date of Issuance: April 17, 2025	Solicitation No. 011S	
Requisition No.	Amendment No2	
Hour and date specified for receipt of offers is changed:		pril 29, 2025 <u>3:00</u> <u>PM</u> CST
Pursuant to OAC 260:115-7-30(d), this document shall sidentified above. Such notice is being provided to all sup Suppliers submitting bids or quotations shall acknowledge and date specified in the solicitation as follows:	pliers to which the original so	olicitation was sent.
Sign and return a copy of this amendment with the s If the supplier has already submitted a response, this act solicitation deadline. All amendment acknowledgements bid opening date in the subject line of the email. Bid Fo	knowledgement must be sign	ed and returned prior to the
ISSUED FROM:		
Susan Mecham 405-522-6137		m@odwc.ok.gov
Contracting Officer Phone Number	E-Mail Add	ress
RETURN TO: susan.mecham@odwc.ok.gov  Description of Amendment:  a. This is to incorporate the following:		
Question: Would aluminum framed floating docks be ac	ceptable?	
Answer: We are open to bids using aluminum frames follong as the bid includes the following: BABA Compliant material thickness static, side, & impact load capacities torsional resistance	r the courtesy dock and gang	way as
Supplier Company Name (PRINT)	Date	
Authorized Representative Name (PRINT) Title	Authoriz	zed Representative Signature



## Oklahoma Department of Wildlife Conservation

## **Amendment of Solicitation**

Date of Issuance: April 14, 20	025	Solicit	ation No.	<u>011S</u>			
Requisition No.	Amendment No 1						
Hour and date specified for re	ceipt of offers is changed:	□X No	Yes, to:	April 29, 2025	<u>5</u> 3:0	00	PM CST
Pursuant to OAC 260:115-7-3 identified above. Such notice Suppliers submitting bids or q and date specified in the solic	is being provided to all sup uotations shall acknowledg	oliers to whi	ich the orig	inal solicitation v	was sent.		
Sign and return a copy of the supplier has already subsolicitation deadline. All amen bid opening date in the subject	omitted a response, this ack dment acknowledgements	nowledgen	ent must b	e signed and re	turned pri		
ISSUED FROM:							
Susan Mecham	405-522-6137			mecham@odwc.d	ok. <u>g</u> ov		
Contracting Officer	Phone Number		E-Ma	il Address			
RETURN TO: susan.mechar	m@odwc.ok.gov						
Description of Amendment:							
a. This is to incorporate the fo	ollowing:						
Last Date for Questions: wa	s Friday, April 11, 2025 at	11AM Cent	ral Standar	d Time.			
Question: Under Dock Decki		npers, it mei	ntions a dia	gram B for refer	ence, but t	here	is no

Answer: The attached Specs have been updated from the original and added the Drawings, as Attachments A, B &

OMES FORM CP 011 Rev. 04/2020

C for reference.

Solicitation for the ODWC courtesy dock at Jap Beaver lake Amendment Continued:

- Are there to be any gaps in the dock handrail for people to get on and off of their boats, and if so where should they be located?
  - Yes, there should be at least one opening in the handrails with a minimum width of 5ft on each side of the courtesy
    - Please reference Design #6 in Attachment A of the for the location of the openings.
    - Please reference the handrail specifications for the Recreational Boating Facilities checklist on <a href="https://www.adachecklist.org/checklist.html">https://www.adachecklist.org/checklist.html</a>
- Does the dock Handrail need to meet ADA requirements, or just the gangway handrail?
  - Yes, the handrails on the courtesy dock and the gangway need to comply with ADA requirements
    - Please reference the handrail specifications for the Recreational Boating Facilities checklist on <a href="https://www.adachecklist.org/checklist.html">https://www.adachecklist.org/checklist.html</a>
- "Anchor pipe sleeves shall be placed inward of the handrail a minimum of 6 inches to avoid contact between anchor pipes and railings under any water level elevation or wave conditions."
  - O Does this mean that the anchors need to be within the footprint of the dock's 8' x 26'? Or can the anchors be on all 4 corners outside the handrail and 8' x 26' footprint?
    - The anchors should be within the footprint of the courtesy dock
      - Please reference Design #6 in Attachment A of the

for the location of the openings

Solicitation for the ODWC courtesy dock at Jap Beaver lake Amendment Continued: 8ft x 26ft Courtesy Dock Specifications have been updated from the original and added drawings as reference.

## **Design Overview**

The dock system will consist of a 40ft x 4ft gangway and an 8ft x 26ft courtesy dock with four (4) telescoping pencil anchors (see Design #6 in Attachment A).

## **Design Specifications**

#### **Vertical Loads**

- Dead loads shall consist of the entire weight of the floating structure, including railings, gangways, anchor sleeves, rub rails, and other accessories and appurtenances.
- The deck surface and structural frame live load shall be equal to 50 PSF applied to the full surface area of the deck.
- Substructure designed to support full live load across a 30-foot span, calculated to the maximum wave, crest to crest, on most inland lakes.
- Gangways and ramps shall be designed to support 50 PSF live load and full deck load. Handrails shall be designed for a 200-pound load applied in any direction and at any point along the length of the handrail.
- Flotation for boat docks shall be designed to support the dead load plus 30 PSF live load applied to the deck area.

#### **Horizontal Loads**

- A uniform horizontal wind loading from any direction shall be calculated in accordance with ASCE 7-05 for exposure category "D" on all project surfaces, assuming 100% boat occupancy. Boat profile heights shall be determined from ASCE Report No. 50, current edition.
- A horizontal load due to impact on the boat dock shall be the result of the largest boat normally
  using the lake striking the end of the finger 10 degrees (10°) off the center line of the boat dock.
  For purposes of calculation, the weight of the craft shall be 12 times the length squared (12L2).
  For analysis of impact, craft speed shall be considered moving at a speed of 3 FPS.

#### **Torsional Resistance**

- The system shall be designed to resist torsional forces to the extent that there shall be no more than three (3) inches of freeboard variation per 100-feet length as measured in any direction and under any combination of specified vertical and horizontal load conditions except wave action loads.
- The floating structures shall be designed to resist a 400-pound vertical point load at any point on the dock without violation of the freeboard torsion design requirement.

#### **Steel Frames**

- Box truss steel frames shall be all-welded trusses, with main structural side chords and ends fabricated from 2"  $\times$  2"  $\times$  3/16" angle, all other angles to be 1  $\frac{1}{2}$ "  $\times$  1  $\frac{1}{2}$ "  $\times$  3/16", and rounds of sufficient size and strength to withstand design stresses.
- The alternate design is high tensile steel welded trusses of a minimum of ten (10) inches x 10 gauge formed channel steel, with a center beam W10" x 12#, of sufficient strength to withstand design stresses. Frame cross members shall be spaced on a minimum of two (2) foot centers.

- Steel components in structural frames shall be notched and fitted prior to welding. Overlapping in corners will not be permitted. All notched connections shall be welded both on the inside and outside, and the outside welds shall be ground smooth prior to galvanizing.
- All bolt holes shall be standard-sized round holes to fit standard bolts. Holes may be reamed to remove excess galvanizing and shall be indicated clearly on plans, and must be treated with an approved cold-galvanizing spray.
- All steel frames shall be hot-dipped galvanized after fabrication in accordance with ASTM 123. Field welds shall be limited and shall be indicated clearly on plans, and must be treated with an approved cold-galvanizing spray.
- If necessary, the steel frames shall be designed for field connection with Grade 5 (ASTM-A325) galvanized bolts. The bolt diameter shall be ½" minimum. Connections shall be designed so that units may be disconnected and moved.
- All structural steel, except flotation protection, anchorage, and pencils shall be above the operating water level.

#### **Floatation**

- Flotation units shall be of seamless, one-piece polyethylene rotational molded structure with a nominal thickness of 0.125 inches. The shell shall have a minimum guaranteed life expectancy of ten (10) years against defects, cracking, peeling, sloughing, and deterioration from ultraviolet rays, and shall be impervious to petrochemicals and shall be of fire-resistant construction, while retaining its resiliency against ice and impacts by watercraft.
- The polyethylene flotation containers shall be completely filled with modified polystyrene expanded in place (0.9 lb/cf density). Water absorption shall not exceed five (5) percent by volume. Flotation units shall be designed to maintain their desired buoyancy and dock freeboard even if structurally damaged (i.e., broken in half).
- Flotation units shall be firmly secured to the bottom frame with a minimum of six (6) galvanized bolts (minimum of ½" diameter), such that the entire floating dock acts as a unit (i.e., one unit does not deflect without adjacent units deflection).
- Substructure on docks and gangways shall be designed to prevent grounding of floats during low water elevations or lake drawdowns. This substructure shall be galvanized and of sufficient strength to support the dock during dry periods.

### Dock Decking, Handrails, Fenders, and Bumpers

- Fendering materials of gangways and dock surfaces shall be constructed of 2" x 6" or 2" x 8" (nominal) wood polymer composite produced from 100% recycled materials with a 10-year warranty. Fendering shall be attached with 5/16" x 2 ¼"flat head, Type F, self-tapping screws coated with 0.005 zinc-yellow dichromate and three coats of magni 599, recessed minimum of 3/8".
- Fenders shall be without gaps and extend from the deck to no less than 8 inches above the water surface (see Attachment B).
- A bumper of recycled plastic lumber with UV inhibitors shall be centered along the fender (2" x 8" nominal Markstarr #28144 or equal) attached with 5/16" x 2 1/4" flat head, Type F, self-tapping screws coated with 0.005 zinc-yellow dichromate and three coats of magni 599, recessed minimum of 1/2". Hollow bumpers will not be accepted.
- Column Bumpers-External vertical dock rails exposed to docking boats shall be protected with column bumpers constructed of wood polymer composite produced from 100% recycled materials with a 10-year warranty. Protection shall extend at least 40 inches vertically from the water surface, and above the dock mid-rail. Bumpers shall be attached with 5/16" x 2 1/4" flat head, Type F, self-tapping screws coated with 0.005 zinc-yellow dichromate and three coats of

- magni 599, recessed minimum of 1/2". Hollow bumpers will not be accepted. Vertical column bumpers shall be flush with horizontal fenders (above).
- Galvanized 8" dock cleats shall be installed under the handrails 2 feet and 14 feet from the terminal end of the dock
- Dock handrails shall be a 2-inch diameter top rail at 42-inch height, with a mid-rail at 20 inches above the deck (see Attachment B), and shall be located per Design #6 in Attachment A.
- Dock handrails shall not extend beyond the boat dock substructure.

#### Gangways

- Between the gangway and the concrete pad shall be a ¼" x 4' x 4' x 4' galvanized steel transitional tread plate with continuous "piano" hinge to the ramp for wheelchair access. Changes in level> ¼" at the transitional plate shall comply with ADA standard 303.3 (beveled). A 2-inch high curb for edge protection shall border the tread plate on each side. Vertical joints from transitional plate to concrete slab and dock shall not be more than¼".
- Gangway decking shall be the same material and construction as the dock. The access ramp walkway will have a center support under the walkway deck material. The width of gangway decks shall be 4 feet (minimum).
- Additional flotation shall be added to the floating dock and/or gangways where needed to support the combined dock and gangway loads without producing undue distortion or changing of the floating surface level.
- Wheels or rollers shall be heavy-duty constructed of molded rubber or galvanized steel rollers and be non-seizing type due to rust or ice. Rollers should raise gangway approximately 6 inches above the notch in the connecting abutment described above (see Attachment C).
- Gangways shall be level laterally, and designed for a vertical live load of 50 PSF.
- Connections between gangway and dock shall be designed such that units may be disconnected and moved. All connections shall safely resist loads from docked boats, wave action or wind up to #12 on the Beaufort Scale without damage or deformation of the dock system.
- Gangways shall be steel trusses with handrails, hot-dipped galvanized after fabrication. Pivot connections to the dock shall be by solid hardened steel rod no less than ¾" diameter, or (preferred) "fifth wheel" design, with rollers provided on the shore end. Top handrails, ADA rails, and floor edge protection at least 2" above gangway deck shall be provided on both sides.
- Ganaway rollers shall be located two (2) feet from the end of a dock abutment
- All handrails shall be welded (not bolted) to the dock or gangway substructure, then hot-dipped galvanized. Welding of handrails to the dock must be done prior to galvanizing of entire unit. Handrails may not be welded to the exterior of the dock.
- All handrails shall be designed for a 200-pound load applied in any direction at any point along the rail.
- Gangway handrails must be constructed with a 2-inch diameter top rail at 42-inch height, an ADA-compliant handrail, and a curb rail at least two (2) inches above the deck.
- An ADA-compliant handrail on the gangway (only) shall meet the following specifications, per ADA:
  - 1. The clear space between the handrail and the wall shall be 1 and  $\frac{1}{2}$  inches.
  - 2. Gripping surfaces shall be continuous.
  - 3. The top of the handrail gripping surface shall be mounted between 34 and 38 inches above the ramp surfaces.
  - 4. Ends of handrails shall be either rounded or returned smoothly to the floor, wall, or post.
  - 5. Handrails shall not rotate within their fittings or mountings.

### **Anchorage Systems**

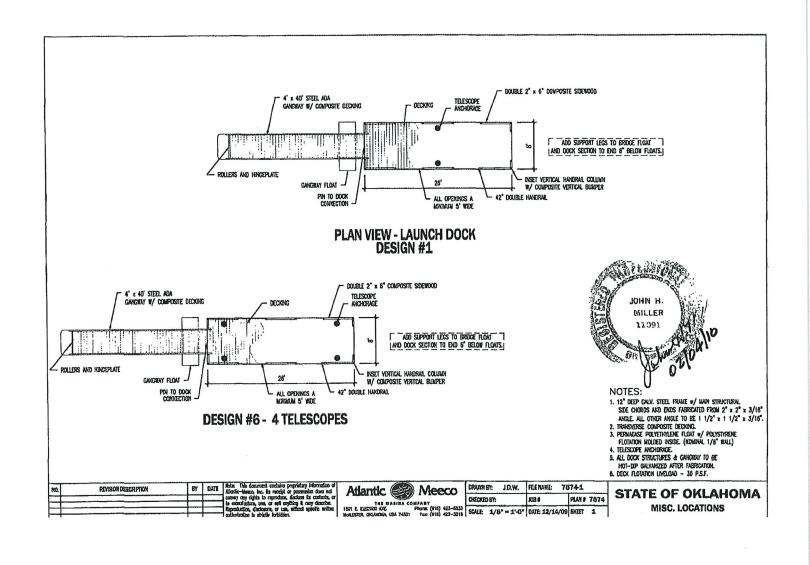
Anchorage shall be for the specific location and exposure. Water level fluctuation, water depth, and substrate condition and contours shall determine the appropriate application. Anchorage shall be designed to resist the specified loads at the maximum design water level. Anchoring devices for the floating dock shall be of sufficient strength and number to restrain the forces and shall allow free movement of the dock while minimizing damage due to movement caused by boat wakes, water fluctuation, and seasonal wind and wave action. The manufacturer's contact person will also be responsible for conducting a pre-installation site visit, at least two (2) weeks in advance of installation to determine water depth, proper length of pencils, and recommend any specific site preparation alterations to ensure proper dock installation.

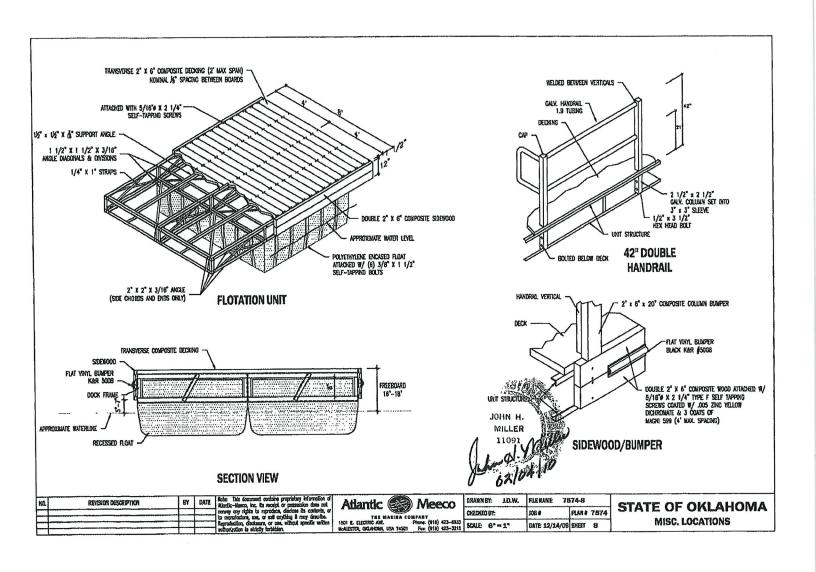
### • Telescopic Pencil Anchorage System

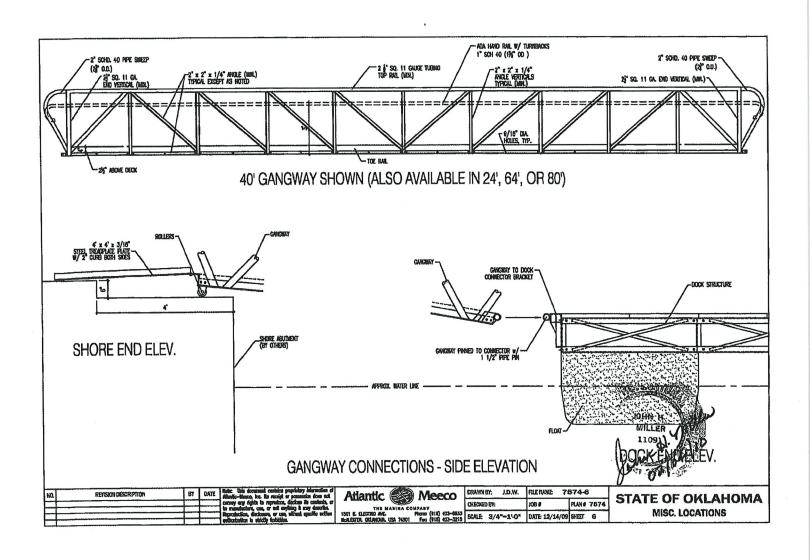
- 1. The telescopic pencil anchorage system is designed to provide anchorage through fluctuating water levels up to 25 feet in elevation/depth, or the maximum design of depth of record at a specific lake.
- 2. Anchor frames shall be designed with 6-inch diameter pipe sleeves and structural bracing attached to the dock structure to transmit loads from the dock to the anchor. Anchor frames must be attached to the dock prior to galvanizing the entire structure, and anchor frames shall be hot-dipped galvanized after fabrication.
- 3. Telescoping anchor pipes shall be a minimum of 80,000-pound yield strength, one at  $5" \times 14"$  and one at  $4" \times 21"$  (minimum sizes). Anchor pipes shall be galvanized.
- 4. Anchor pipes shall not extend upward above the railing after installation when the water level is at normal pool elevation. Adjustments required to the anchorage system will be made by the vendor during a warranty period of two years.
- 5. Anchor pipe sleeves shall be placed inward of the handrail a minimum of 6 inches to avoid contact between anchor pipes and railings under any water level elevation or wave conditions.
- 6. Gaps between anchor sleeve and pipe openings shall not exceed ¼" on each side to prevent finger injury to dock users. Pipes shall slide freely during water level fluctuations and design live loads.

#### **Abutment**

- A level concrete slab with dimensions of 6 feet wide x 12 feet long, set on a footing 12" wide and a minimum of 18" deep. Slab and footing shall be reinforced with #4 rebar at 16" O.C. tied each way at crossing on 2" chairs. Concrete shall be Class A, 3000 PSI poured on 6" minimum compacted fill at 95% compaction.
- A "notch" of 6" deep and four (4) feet long shall be formed from the lakeward end of the slab to accommodate the gangway. The gangway shall be centered on the abutment.







Supplier Company Name PRINT	Date			
Authorized Representative Name PRINT Title	Authorized Representative Signature			