

WILDLIFE CONSERVATION COMMISSION

John D. Groendyke	Robert S. Hughes II
CHAIRMAN	MEMBER
Bill Brewster	Bruce Mabrey
VICE CHAIRMAN	MEMBER
Leigh Gaddis	Dan Robbins
SECRETARY	MEMBER
James V. Barwick	John P. Zelbst
MEMBER	MEMBER



J. KEVIN STITT, GOVERNOR

J. D. STRONG, DIRECTOR

P.O. Box 53465 Oklahoma City, OK 73152 PH. (405) 521-3851

**Bid Solicitation Cover Page**

Date: April 4, 2019

**Solicitation Information**

Solicitation Number: 117P

Project Name: Removal & Replacement Of 4 Water Control Structures – Hackberry Flat

Project Address: Hackberry Flat WMA

Project City: Near Frederick, Oklahoma

Project Zip Code: 73542

**Bids Due (Date):** April 24, 2019

**Bids Due (Time):** 4:00 PM CST

**Agency Contact Information**

Agency Name: Oklahoma Department of Wildlife Conservation

Contact Name: Paul Proctor

Mailing Address: P.O. Box 53465, Oklahoma City, OK, 73152

Delivery Address: 1801 N. Lincoln Blvd.

Contact City: Oklahoma City

Contact Zip Code: 73105

Contact Phone: 405-522-5762

Contact Fax: 405-521-6898

Contact Email: paul.proctor@odwc.ok.gov

The Oklahoma Department of Wildlife Conservation is inviting written bids for all labor and materials described by this solicitation.

Bids will be accepted until the Date and Time specified above. Late Bids will not be accepted.

Method of Responding to this Solicitation: Bids will be accepted by mail, fax, email or hand delivered to the Agency Contact specified above.

The requirements of the proposed contract for construction are described within this Solicitation, and the Solicitation will become a part of any resultant Contract. Bidder will perform work in compliance with all applicable codes, standards, ordinances and laws. The issuance of this Solicitation does not guarantee that the State of Oklahoma will enter into a contract and the State reserves the right to reject any and all bids.

In preparing your bid, please review the attached documents and comply with instructions given:

- Bid Form: Submit your Bid using the form provided.
- Statutory Bid Affidavit: Complete this affidavit and return with your Bid.
- Sample Agreement Between Owner and Contractor: This is an example of the contract that will be used.
- Invoice Affidavit for Construction: After contract award, this document must be submitted with the Contractor's Invoice for Payment
- Scope of Work (SOW): Description and Requirements of the proposed construction contract.

**[MANDATORY]** A mandatory onsite pre-bid walk-through has been scheduled for **Friday, April 12, 2019 at 10:00 AM CST**. Please see the scope of work for further details and directions.

If an interested bidder has any questions about this solicitation, please contact the Agency Contact listed above.

This Solicitation and any resulting Contract for Construction is in accordance with 61 O.S. §101- 138, and specifically 61 O.S. §103(B) regarding projects under the statutory amount mandated therein. Any resultant contract will be awarded by the Oklahoma Office of Management and Enterprise Services, Division of Capital Assets Management, Construction and Properties Department.

The Oklahoma Department of Wildlife Conservation is the state agency responsible for managing fish and wildlife. The Wildlife Department receives no general tax appropriations and is supported by hunting and fishing license fees and federal excise taxes on hunting and fishing equipment.

## WILDLIFE CONSERVATION COMMISSION

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MEMBER



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J. D. STRONG, DIRECTOR

## DEPARTMENT OF WILDLIFE CONSERVATION

P.O. Box 53465 Oklahoma City, OK 73152 PH. (405) 521-3851

## Bid Form

To: Oklahoma Department of Wildlife  
Conservation  
P.O. Box 53465  
Oklahoma City, OK 73152

Attn: Paul Proctor

RE: Solicitation Number #117P

From:

Firm Name

Address

City/State/Zip

Telephone No.

FEI No.

Email Address:

1. The undersigned, being familiar with the local conditions affecting the cost of the work, with the Solicitation for Bids and in accordance with the provisions thereof, hereby proposes to furnish all labor, materials and equipment necessary for the sums listed herein.
2. By submitting a bid for services, the bidder certifies that they, and any proposed subcontractors, are in compliance with 25 O.S. §1313 and participate in the Status Verification System. The Status Verification System is defined in 25 O.S. §1312 and includes but is not limited to the free Employment Verification Program (E-Verify) available at <https://www.e-verify.gov/>
3. The bidder also certifies that they are in compliance with the State of Oklahoma Governor's Executive Order 2012-01, filed February 6, 2012 and effective July 1, 2012, that the use of any tobacco product shall be prohibited on any and all properties owned, leased or contracted for use by the State of Oklahoma, including but not limited to all buildings, land and vehicles owned, leased or contracted for use by agencies or instrumentalities of the State of Oklahoma.
4. In submitting the bid, it is agreed that this bid may not be withdrawn for a period of thirty (30) days after the date bids are due. Due to several competing variables, actual work start date will be negotiated and determined after contract award.
5. If awarded a contract, we propose to complete this work within \_\_\_\_\_ calendar days from the date of receipt of the Notice to Proceed.
6. Price Schedule: Fill out the requested rates and apply that rate to the estimated quantities to establish a comparative basis for total contract award. The quantities are estimates only and may not reflect actual contract usage. The State will only assign work based upon need and makes no warranty or guarantee as to any minimum or maximum amount that may be authorized under the contract.

<u>Category</u>	<u>Unit</u>	<u>Totals</u>
Removal & Replacement of 4 Water Control Structures	Lump Sum	\$ _____
Total Estimate of Contract Cost and Basis of Award		\$ _____
Signature _____		
Name/Title _____		
Date _____		

The Oklahoma Department of Wildlife Conservation is the state agency responsible for managing fish and wildlife. The Wildlife Department receives no general tax appropriations and is supported by hunting and fishing license fees and federal excise taxes on hunting and fishing equipment.



**State of Oklahoma**  
**Office of Management and Enterprise Services**  
**Capital Assets Management**  
**Construction and Properties**

**Bid Affidavits**

In accordance with 61 O.S. § 108 and § 115, a sworn statement shall accompany any competitive bid submitted for a public construction contract.

STATE OF \_\_\_\_\_ )  
 \_\_\_\_\_ ) ss Project Name: REMOVAL & REPLACEMENT OF 4 WATER  
 COUNTY OF \_\_\_\_\_ ) CAP Project No.: CONTROL STRUCTURES – HACKBERRY FLAT

**NON-COLLUSION STATEMENT**

**A.** For the purposes of a competitive bid for a public construction contract, the undersigned, being first duly sworn, certifies that

1. I am the duly authorized agent of

\_\_\_\_\_,  
 the bidder submitting the competitive bid which is attached to this statement, for the purpose of certifying the facts pertaining to the existence of collusion among bidders and between bidders and state officials or employees, as well as facts pertaining to the giving or offering of things of value to government personnel in return for special consideration in the letting of any contract pursuant to the bid to which this statement is attached;

2. I am fully aware of the facts and circumstances surrounding the making of the bid to which this statement is attached and have been personally and directly involved in the proceedings leading to the submission of such bid; and

3. Neither the bidder nor anyone subject to the bidder's direction or control has been a party:

a. to any collusion among bidders in restraint of freedom of competition by agreement to bid at a fixed price or to refrain from bidding,

b. to any collusion with any state official or employee as to quantity, quality or price in the prospective contract, or as to any other terms of such prospective contract, nor

c. in any discussions between bidders and any state official concerning exchange of money or other thing of value for special consideration in the letting of a contract.

**B.** I certify, if awarded the contract, whether competitively bid or not, neither the contractor nor anyone subject to the contractor's direction or control has paid, given or donated or agreed to pay, give or donate to any officer or employee of the State of Oklahoma any money or other thing of value, either directly or indirectly, in procuring the contract to which this statement is attached.

**BUSINESS RELATIONSHIPS STATEMENT**

**A.** I further certify that the nature of any partnership, joint venture or other business relationships presently in effect or which existed within one (1) year prior to the date of this statement with the Architect, Engineer, or other party of the project is:

*(If none, so state; use additional sheet if necessary.)*

**B.** That any such business relationship presently in effect or which existed within one (1) year prior to the date of this statement between any officer or director of the bidding company and any officer or director of the architectural or engineering firm or other party to the project is:

*(If none, so state; use additional sheet if necessary.)*

**C.** And that the names of all persons having any such business relationships and the positions they hold with their respective companies or firms are:

*(If none of the business relationships herein above mentioned exist, then a statement to that effect. Use additional sheet if necessary.)*

If awarded a contract, the bidder affirms that the work will be carried out in conformance with the contract requirements and that all invoices submitted for payment will reflect a true and accurate accounting of the work completed.

\_\_\_\_\_  
 (Bidder Signature) Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
 (Bidder Printed Name)

\_\_\_\_\_  
 (Bidder Printed Title)

\_\_\_\_\_  
 (Signature of notarial officer)

My Commission Expires: \_\_\_\_\_

(Seal)

My Commission #: \_\_\_\_\_





State of Oklahoma  
Office of Management and Enterprise Services  
Capital Assets Management  
Construction and Properties

Standard Form of Agreement  
Between Owner and Contractor  
Minor Projects under the Statutory Amount or  
No Design Consultant

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion.

**AGREEMENT** made as of the \_\_\_\_ day of \_\_\_\_ in the year 20\_\_.

**BETWEEN** the Owner: **State of Oklahoma**  
**Office of Management and Enterprise Services**  
**Division of Capital Assets Management**  
**Construction and Properties Department**  
**Will Rogers Building**  
**2401 N. Lincoln, Suite 106**  
**Oklahoma City, OK 73105**

On behalf of  
Using Agency: **[Name]**

And the Contractor: **[Name]**  
**[Address]**

For the Project: Solicitation No:  
CAP Project No: **[CAP Proj#]**  
Project Name: **[CAP Proj Name]**  
Project Location:

The Owner and Contractor agree as follows:

#### ARTICLE 1. THE CONTRACT DOCUMENTS

1.1 The Contract Documents consist of this Agreement and the Solicitation, as referenced, inclusive of any stated Conditions, Requirements, Provisions, Scope of Work, Plans, Specifications, Addenda and the Contractor's Bid Form as may be contained therein, included as an attachment. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral.

#### ARTICLE 2. THE WORK OF THIS CONTRACT

2.1 The Contractor shall fully execute the Work described in the Contract Documents, except to the extent specifically indicated in the Contract Documents to be the responsibility of others.

#### ARTICLE 3. CONTRACT SUM AND PAYMENTS

3.1 The date of commencement of the Work shall be the date of the Work Order issued by the Owner and affixed to the State's separate Purchase Order issued to encumber the cost of the Work. The Contract Time shall be measured from the date of Work Order.

3.2 The Contractor shall achieve Final Completion of the entire Work not later than **[Insert Number Of Days or "N/A" for 1+ FY Projects]** days from the date of commencement, or as follows: **[Insert "N/A" or FY year info]**, subject to adjustments of this Contract Time as provided in the Contract Documents.

3.3 If provided for in the Solicitation, in regard to as-needed maintenance or trade services, the Contract Time may be extended for additional annual renewal periods by amendment to the Agreement.

#### ARTICLE 4. CONTRACT SUM AND PAYMENTS

*(The clause selected with an "X" shall be the valid 4.1 contractual clause)*

☐ 4.1 This Contract is for a firm fixed price in the amount of **[Insert Amount in Words]** Dollars (\$ **[Insert Amount in Numbers]**). Projects with duration of one month or less shall be invoiced upon final completion. Projects with a duration exceeding one month may be incrementally invoiced on a monthly basis. Final payment will not be made until Owner's Representative has verified that all work has been completed. No payment will be made to the Contractor after the Final Completion Date until all work is complete.

☐ 4.1 This Contract is non-binding. The Owner may or may not purchase the quantities stated in the Solicitation. Work authorized under this agreement shall be invoiced at the rates stated on the Contractor's Bid Form. Invoices will be accepted for payment monthly for the Work completed in the previous month.

#### ARTICLE 5. OTHER TERMS AND CONDITIONS



**5.1 OWNER'S REPRESENTATIVE:** For the purposes of this Contract, the Administrator of DCAM/CAP or a designated person shall serve as the Owner's Representative, and serve as the Supervisory Official for the purposes of accepting the work and approving Invoices for Payment. No work will be accepted, nor any payments made without approval by the Owner or the Owner's Representative.

**5.2 CONTRACT CHANGES:** Contract Changes shall be provided only upon prior written authorization by the Owner, and are subject to the statutory limits set forth in 61 O.S. § 121. Upon request by the Owner's Representative, Contractor shall prepare an itemized cost proposal for the requested contract change and submit to Owner's Representative for review and approval. If accepted by Owner, a Change Order will be processed and returned to Contractor, authorizing the change in the work and providing a notice to proceed.

**5.3 AUDITS AND RECORDS CLAUSE:** As used in this clause, "records" includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form. In accepting any contract with the State, the Contractor agrees any pertinent State or Federal agency will have the right to examine and audit all records relevant to execution of the resultant contract. The contractor is required to retain all records relative to this contract for the duration of the contract term and for a period of three years following completion and/or termination of the contract. If an audit, litigation, or other action involving such records are started before the end of the three year period, the records are required to be maintained for three years from the date that all issues arising out of the action are resolved or until the end of the three year retention period, whichever is later

**5.4 OWNERSHIP OF DOCUMENTS:** All documentation generated as an instrument of service is and shall remain the property of the Owner, including shop drawings, equipment manuals, equipment warranties and as-built drawings. Contractor shall deliver said documents to Owner's Representative or as otherwise stated in the Solicitation upon final completion of the work.

**5.5 SUCCESSORS AND ASSIGNS:** The Owner and the Contractor each binds themselves, partners, successors, assigns and legal representatives to the other party to this Agreement and to the partners, successors, assigns and legal representatives of such other party with respect to all covenants of this Agreement. The Contractor shall not assign, sublet or otherwise transfer its interest in this Agreement without the written consent of the Owner.

**5.6 DISPUTES AND CLAIMS:** The Owner and Contractor shall endeavor to resolve claims, disputes and other matters in question between them by participating in good faith in a settlement meeting to obtain a mutual agreement that resolves the claim or dispute. If an agreement cannot be attained, the Contractor may appeal to the Administrator of the Division of Capital Assets Management, by submitting written notice of a protest to the Administrator within twenty-one (21) days of the previous settlement meeting. The Administrator may hear the protest or may assign the Contractor's appeal to an administrative law judge the Division retains. If the appeal is assigned to an administrative law judge, the administrative law judge shall review the protest for legal authority and jurisdiction. If legal authority and jurisdictional requirements are met, the administrative law judge shall conduct an administrative hearing in accordance with the Administrative Procedures Act, 75 O.S. § 309 et seq., and provide findings of fact and conclusions of law to the Administrator. The Administrator shall send written notice to the Contractor of the final decision sustaining or denying the Contractor's appeal. If the Administrator denies Contractor's appeal, the Contractor may appeal pursuant to provisions of 75 O.S., § 309 et seq. of the Administrative Procedures Act.

## **5.7 TERMINATION**

**5.7.1** This Agreement may be terminated by the Owner upon mailing notice of termination to the Contractor at least seven (7) working days in advance of the date of termination if the Contractor substantially fails to perform according to the terms and conditions of this Agreement in the opinion of the Owner or funds for the Project are insufficient to proceed with the Project. In the event of termination, the Contractor shall be paid compensation for services performed up until the date of termination subject to amounts withheld to satisfy any rightful claim or set off by the Owner.

**5.7.2** This Agreement may be terminated by either party upon not less than seven days' written notice should the other party fail substantially to perform in accordance with the terms of this Agreement through no fault of the party initiating the termination.

**5.7.3** This Agreement may be terminated by the Owner upon not less than seven days' written notice to the Contractor for the Owner's convenience and without cause.

**5.8 INSURANCE:** Insurance meeting the minimum limits of coverage listed below shall be maintained in full force by Contractor for the duration of the Contract. Certificates of Insurance shall be furnished naming the Owner as the Certificate Holder prior to acceptance of the Contract or issuance of a Work Order. The following are minimum limits of insurance coverage. If higher limits or additional insurance provisions are stated in the Bid Solicitation, the requirements of the Solicitation shall be the minimum required

**5.8.1** Workers' Compensation and Employers' Liability meeting statutory limits mandated by state and federal laws. (Companies exempt from the Workers' Compensation Act may substitute DCAM/CAP Form A321D in lieu of a Certificate of Coverage).

**5.8.2** Commercial General Liability shall be \$100,000 (Each Occurrence) and \$300,000 (General Aggregate).

**5.8.3** Automobile Liability (owned, non-owned and hired vehicles) shall be \$100,000 (Each Occurrence) and \$300,000 (General Aggregate), for bodily injury and property damage

**5.8.4** Property Damage (for projects under \$50,000) shall be \$50,000 (Each Occurrence) and \$100,000 (General Aggregate).

**5.8.5** Builder's Risk (for projects \$50,000.00 and above) shall be \$50,000 (Each Occurrence) and \$100,000 (General Aggregate).

## 5.9 BONDS

**5.9.1** Bonds are required for any contract where the firm, fixed price contract sum equals or exceeds fifty thousand dollars (\$50,000), or where an individual work order under a non-binding service or maintenance contract exceeds fifty thousand dollars (\$50,000).

**5.9.1.1** Performance Bond for 100% of the value of the Contract to insure completion of the Work.

**5.9.1.2** Defect Bond for 100% of the value of the Contract to provide correction of defects in the construction and equipment for one year after acceptance of the Work; and

**5.9.1.3** Payment Bond for 100% of the Contract to assure that the Owner is protected from the action of Subcontractors, suppliers and employees for unpaid debts of the Contractor.

**5.9.2** All bonds shall be on the forms prescribed and issued by the Owner as attached to this Agreement

**5.9.3** Irrevocable Letters of Credit may be used as a substitute for the required bonds, on the forms prescribed and provided by the Owner and issued by a financial institution insured by the Federal Deposit Insurance Corporation or the Federal Savings and Loan Insurance Corporation.

**5.10 JURISDICTION:** This Agreement shall be governed by the laws of the State of Oklahoma.

## ARTICLE 6. OTHER CONDITIONS OF THE CONTRACT

**6.1** The Contractor certifies that it and all proposed subcontractors, whether known or unknown at the time this contract is executed or awarded, are in compliance with 25 O.S. §1313 and participate in the Status Verification System. The Status Verification System is defined in 25 O.S. §1312 and includes but is not limited to the free Employee Verification Program (E-Verify) available at [www.dhs.gov/E-Verify](http://www.dhs.gov/E-Verify).

**6.2** The Contractor certifies that they are in compliance with the State of Oklahoma Governor's Executive Order 2012-01, filed February 6, 2012 and effective July 1, 2012, the use of any tobacco product shall be prohibited on any and all properties owned, leased or contracted for use by the State of Oklahoma, including but not limited to all buildings, land and vehicles owned, leased or contracted for use by agencies or instrumentalities of the State of Oklahoma.

**6.3** Other documents, if any, forming part of the Contract Documents are as follows:

**Purchase Order**  
**[Select]**

This Agreement entered into as of the day and year written above.

STATE OF OKLAHOMA  
Office of Management and Enterprise Services  
Division of Capital Assets Management

[NAME]

\_\_\_\_\_  
(Owner Signature)

\_\_\_\_\_  
(Date Signed)

\_\_\_\_\_  
(Contractor Signature)

\_\_\_\_\_  
(Date Signed)

Mickerl Jones  
Director  
Construction and Properties Department

\_\_\_\_\_  
(Printed Name and Title)

\_\_\_\_\_  
(EIN/TIN Number)

### ATTACHMENTS:

1. Contractor's Bid Form
2. Contractor's Bid Affidavit
3. Contractor's Insurance Certificate(s)
4. Contractor's Bonds (if applicable)
5. Copy of Solicitation for Bids
6. n/a



**State of Oklahoma  
Office of Management and Enterprise Services  
Division of Capital Assets Management  
Construction and Properties**

**Non-Collusion Affidavit**

The statement below must be signed and notarized before this contract will become effective

STATE OF \_\_\_\_\_ )  
\_\_\_\_\_) ss  
COUNTY OF \_\_\_\_\_ )

Project Name: \_\_\_\_\_

CAP Project #: \_\_\_\_\_

\_\_\_\_\_, of lawful age, being first duly sworn, on oath states, (S)he is the duly authorized agent of \_\_\_\_\_, the Company under the contract which is attached to this statement, for the purpose of certifying the facts pertaining to the giving of things of value to government personnel in order to procure said Contract;.

(S)he is fully aware of the facts and circumstances surrounding the making of the Contract to which this statement is attached and has been personally and directly involved in the proceedings leading to the procurement of said Contract: and

Neither the Company nor anyone subject to the Company's direction or control has paid, given or donated or agreed to pay, give or donate to any office or employee of the State of Oklahoma any money or other thing of value, either directly or indirectly, in procuring the Contract to which this statement is attached.

\_\_\_\_\_  
(Company Printed Name)

\_\_\_\_\_  
(Authorized Representative Signature) Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
(Authorized Representative Printed Name)

\_\_\_\_\_  
(Authorized Representative Printed Title)

\_\_\_\_\_  
(Signature of notarial officer)

My Commission Expires: \_\_\_\_\_

My Commission #: \_\_\_\_\_

(Seal)





State of Oklahoma  
Office of Management and Enterprise Services  
Capital Assets Management  
Construction and Properties

Invoice Affidavit for Construction  
(For Minor Projects under the Statutory  
Amount or No Design Consultant)

- ☐ Progress Payment  
☐ Final Payment

Date of Progress Invoice: \_\_\_\_\_  
Date of Final Invoice: \_\_\_\_\_

STATE OF \_\_\_\_\_ )  
COUNTY OF \_\_\_\_\_ )

Project Name: REMOVAL & REPLACEMENT OF 4 WATER  
CONTROL STRUCTURES – HACKBERRY FLAT  
CAP Project No.: \_\_\_\_\_

**CONTRACTOR OR SUPPLIER – COMPLETE THIS SECTION** (Choose Appropriate Option)

- ☐ Option 1: Contract Award is Less than \$50,000 and Affidavit Provided in lieu of Statutory Bonds

Affidavit: The undersigned Contractor or Supplier hereby affirms under oath that to the best of my knowledge, information and belief, the Work or Materials covered by this Invoice for Payment has been completed or materials delivered in accordance with the Contract Documents, that all amounts have been paid by the Contractor or Supplier for Work or Materials for which previous Invoices for Payment, if any, were issued and payments received from the Owner, and that current payment shown herein is now due. In accordance with 61O.S., § 1.(C), the Contractor acknowledges that the execution of this affidavit with knowledge that any of the contents of the affidavit are false, upon conviction, shall constitute perjury, punishable as provided for by law.

- ☐ Option 2: Contract Award is Greater than \$50,000 and Statutory Bonds have been provided

Certification: The undersigned Contractor or Supplier hereby certifies that to the best of my knowledge, information and belief, the Work or Materials covered by this Invoice for Payment has been completed or materials delivered in accordance with the Contract Documents, that all amounts have been paid by the Contractor or Supplier for Work or Materials for which previous Invoices for Payment, if any, were issued and payments received from the Owner, and that current payment shown herein is now due.

\_\_\_\_\_  
(Company Printed Name)

\_\_\_\_\_  
(Authorized Representative Printed Name)

\_\_\_\_\_  
(Authorized Representative Printed Title)

\_\_\_\_\_  
(Authorized Representative Signature)

**(NOTARIZE ONLY IF OPTION 1 ABOVE IS CHECKED)**

Subscribed and sworn to (or affirmed) before me on \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_

\_\_\_\_\_  
(Signature of notarial officer)

(Seal)

My Commission Expires: \_\_\_\_\_

My Commission #: \_\_\_\_\_

**CERTIFICATION OF SUPERVISORY OFFICIAL** (Owner's Representative)

In accordance with the Contract Documents, based on on-site observations and the data comprising the Invoice for Payment, the Supervisory Official certifies to the Owner that to the best of the Supervisory Official's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the Amount Certified. Attach Copy of Approved Invoice.

\_\_\_\_\_  
(Using Agency Name)

\_\_\_\_\_  
(Authorized Representative Signature)

\_\_\_\_\_  
(Representative Printed Name)

\_\_\_\_\_  
(Representative Title)

\_\_\_\_\_  
(Date)

If this Affidavit is for Final Payment, forward one copy with final Invoice to DCAM/CAP to close out project.

# SCOPE OF WORK

## Equipment & Labor – Removal & Replacement of 4 Water Control Structures

Hackberry Flat Wildlife Management Area (WMA), near Frederick, Oklahoma

### 1. GENERAL REQUIREMENTS

The proposed contract is the removal and replacement of 4 existing water control structures on the Hackberry Flat WMA near Frederick, Oklahoma in Tillman County.

Project work will include: Removal of 4 existing water control structures - 2 sets of 2, 54" (inch) corrugated pipe, 63' (feet) and 69' (feet) long respectively, 9'X9' (feet) flashboard riser boxes, concrete footer. See attached plans. Old material will be collected and set to the side. Approximately 1,128 cy (490 cy for one, 638 for the other) of excavation needed to remove old structures.

New Structures will be set according plans (attached) and dirt-fill (spoils from excavation of old structures) replaced on top. Fill around pipes will need to be placed in short lifts and compacted. Water may need to be hauled to ensure adequate soil moisture at compaction. Rip rap stabilization will be placed at outlet of structures (approximately 67 tons – 39 tons at one location, 29 tons at the other).

Additional Details: All materials for installation will be provided and onsite for use. This solicitation is for the equipment and labor portion only to complete the project. See the attached design plans at the end of the solicitation.

Location of the job site will be on the Hackberry Flat WMA, located near Frederick, Oklahoma in Tillman County. Rough directions are as follows: 1 Mile south of Frederick, OK on SH 183 to E1830 Rd, turn east and travel 3 miles, turn south on to N2240 Rd. and travel 5 miles, then turn east on to E1880 Rd. and travel 0.75 miles, and finally turn south on to drive way to Hackberry Flat WMA Barn. Address is 22467 CREW 188. Additional directions will be provided to awarded vendor as needed. All work will be done as directed by the ODWC area biologist.

**\*\*PLEASE NOTE\*\*** Due to the potentially complex nature of the work, this project will have a **mandatory pre-bid meeting** at the jobsite beginning at the Hackberry Flat WMA office (see directions above). The meeting will take place on **April 12, 2019 at 10:30 AM CST**. The project managers will be onsite to fully brief those interested in the project and to answer any questions. **Any vendors who are interested in submitting a bid for this project must attend the meeting. Any bids received by vendors who did not attend the pre-bid meeting will be considered to be non-responsive and will not be a part of the evaluation.** A sign in sheet will be provided onsite, and this will serve as the official method for tracking attendance (copy attached at the end of the solicitation). Vendors must sign the sheet in order to receive credit for attending the pre-bid meeting. If additional directions to the jobsite/meeting location are needed, please contact the project manager/area biologist, Kelvin Schoonover.

Vendors must submit their bid price based on a lump sum-total project cost. Vendors are expected to supply all needed equipment and tools for proper construction and installation. Also, while not required for bid consideration, vendors are encouraged to supply an itemized quote for a breakdown of their submitted price.

Bids are invited as stated on the solicitation cover sheet and must be returned by the date and time specified. Late bids will not be considered. All bids must be accompanied by the Affidavit, attached.

Insurance: The successful bidder will be required to provide certificates of insurance for general liability, vehicles and worker compensation in the amounts specified in the contract (attached) immediately upon notification that they are the successful bidder. A contract will not be issued without the required proof of insurance.

Basis of Contract: The proposed contract will be a lump sum award, and will be awarded to one vendor only. Determination of Lowest Responsible Bidder will be made based on the lowest price, the proposed time to complete the work, and attendance of the mandatory pre-bid meeting. Vendors are expected to supply all needed equipment and tools for proper construction and installation.

Failure to submit a complete bid, inclusive of affidavits and requested information, may disqualify the bidder. ODWC reserves the right to make any inquiries to ensure that the lowest bidder is actually capable to complete the work in a satisfactory manner.

The contract will be issued by the Office of Management and Enterprise Services, Construction and Properties Division (OMES/CAP). The Contractor shall not begin work until the contract is in place and written notice to proceed has been issued by OMES/CAP.

Terms and conditions: As stated in the contract.

Change Orders: Changes in the work shall not be undertaken without prior written authorization. Field personnel are not authorized to modify the scope of work in any way or to issue change orders to this contract. Contractor shall submit a written request for a proposed change, the reason for the proposed change and the increase or decrease in price and time required as a result of the change. Cumulative changes that exceed the original contract price by more than 15% are prohibited by Oklahoma law.

Invoicing and Project Communication: All work-execution related communications must go through the Agency Representative. Project invoices, including the attached Form G109, Affidavit for Payment, shall be sent to the Agency Representative at the following address and attention:

Oklahoma Department of Wildlife Conservation  
Attn: Kelvin Schoonover  
PO Box 53465  
Oklahoma City, OK 73152  
Ph: 405-823-8425  
[kelvin.schoonover@odwc.ok.gov](mailto:kelvin.schoonover@odwc.ok.gov)



## 2. EXECUTION

Scheduling: Provide Agency Representative with proposed work schedule prior to beginning work.

Hour Meter: None. Total lump sum award.

Travel: Operator will not be compensated for travel to and from sites.

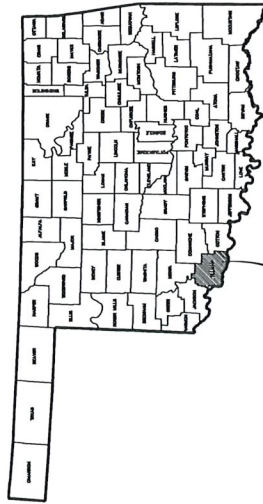
Closeout: At completion of the work, conduct final inspection with Agency Representative. Complete any corrective work as directed.

**\*\*\*End of Scope of Work\*\*\***



# DUCKS UNLIMITED, INC. HACKBERRY FLAT STRUCTURE REMEDIATION

TILLMAN COUNTY  
IN COOPERATION WITH  
OKLAHOMA DEPARTMENT OF  
WILDLIFE CONSERVATION

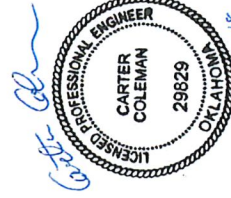


PROJECT LOCATION




## INDEX

- 1 COVER SHEET
- 2 DR1 & DR2 STRUCTURE CROSS SECTION
- 3 DR3 & DR4 STRUCTURE CROSS SECTION
- 4 STRUCTURE DETAILS
- 5 WALKWAY DETAILS
- 6 CATHODIC PROTECTION DETAILS



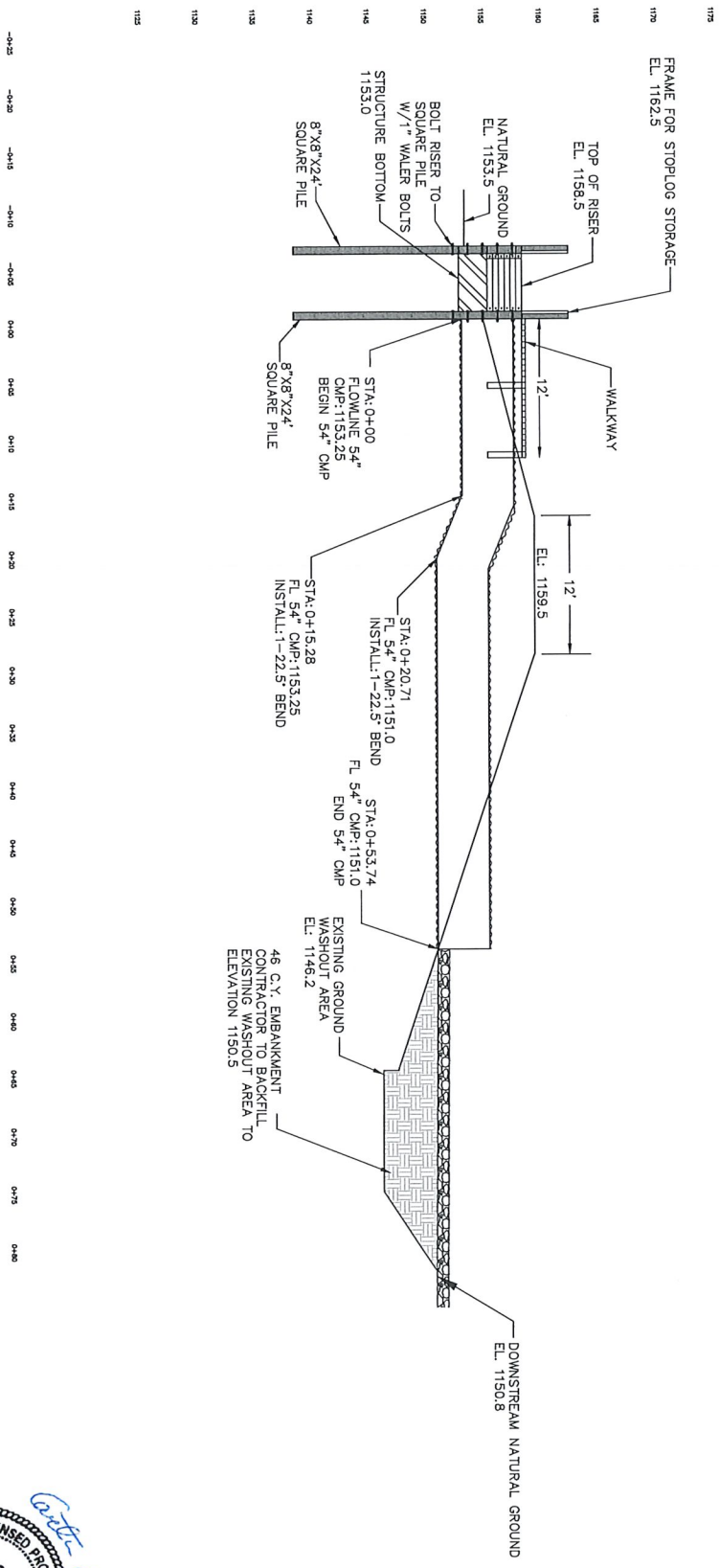
**CAUTION:**  
The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes to the plans must be in writing and must be approved by the preparer of these plans.

DUCKS UNLIMITED INC. 1220 Main Street, Suite 100 Tulsa, Oklahoma 74103 Phone: (918) 436-1111 Fax: (918) 436-1112 Email: info@ducksunlimited.com		PROJECT NO. HACKBERRY FLAT STRUCTURE REMEDIATION COVER	DESIGNED BY: CAC	
			DRAWN BY: CAC	
			CHECKED BY: RCT	
			APPROVED BY:	
			DATE	
4/18		SHEET NO. 1 OF 7	CONTRACT #	





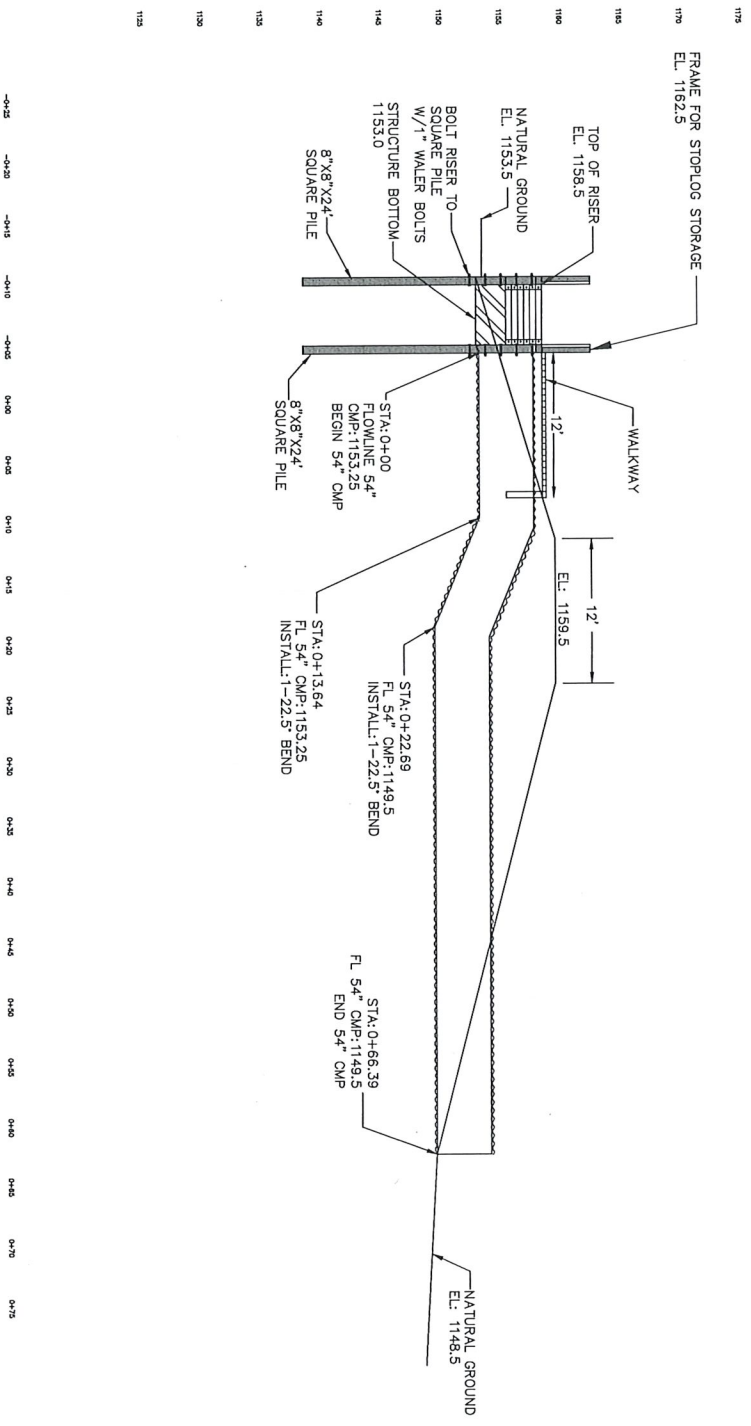




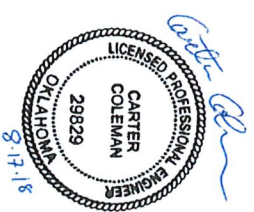
STRUCTURE DR1 AND DR2  
CROSS SECTION  
1"=10' HORIZONTAL AND VERTICAL

DUCKS UNLIMITED INC.		PROJECT NO. HACKBERRY FLAT DRY AND DR2 STRUCTURE CROSS SECTION	DESIGNED BY CALC DRAWN BY CHECKED BY APPROVED BY
4/18		3 OF 7	

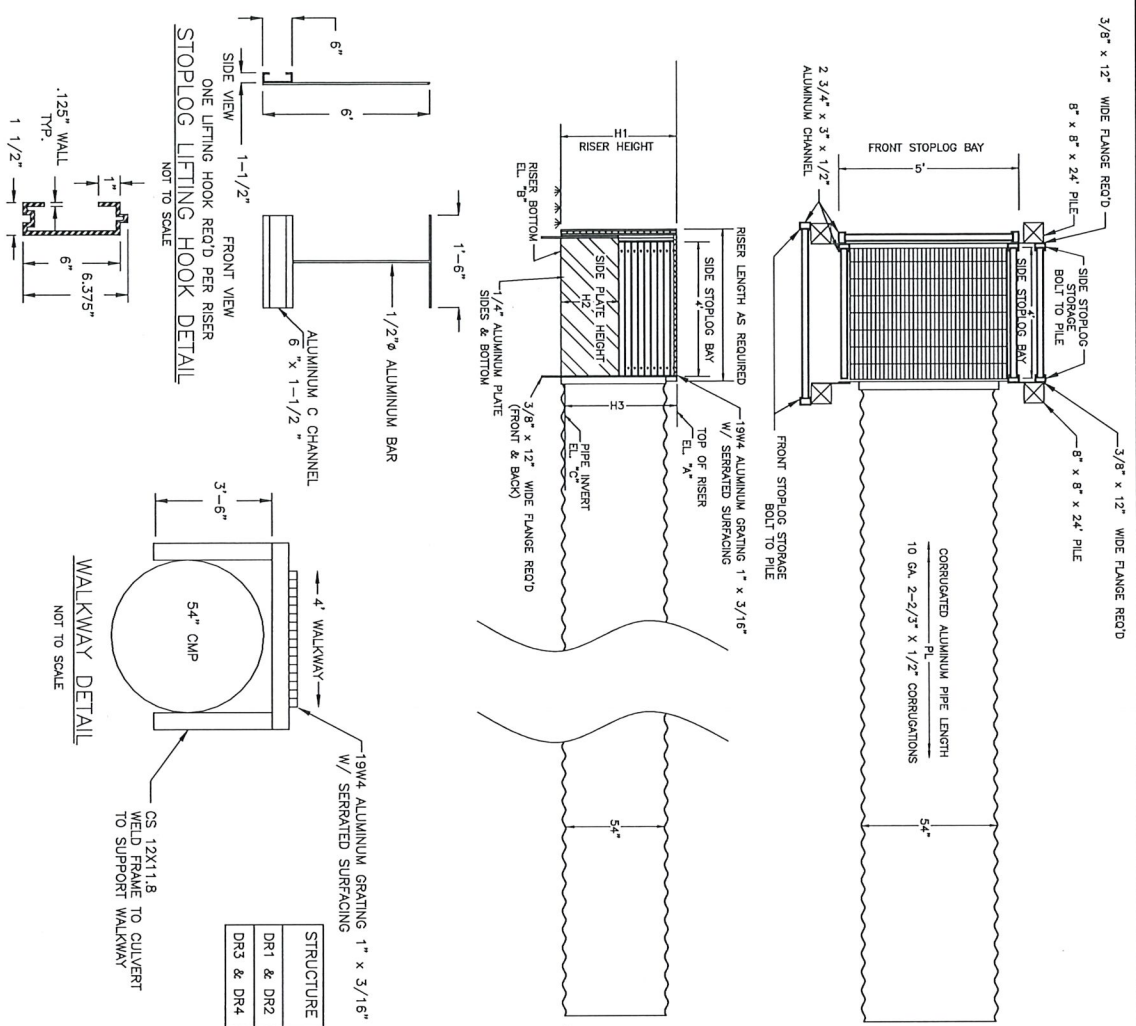




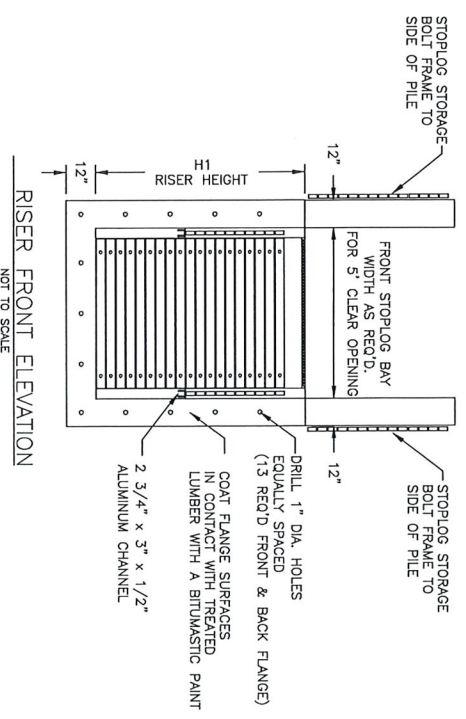
STRUCTURE DR3 AND DR4  
CROSS SECTION  
1"=10' HORIZONTAL AND VERTICAL



DUCKS	PROJECT NO.	DESIGNED BY	CAC
UNLIMITED		DRAWN BY	CAC
INC.	HAUGSBERRY FLAT	CHECKED BY	ELW
INC.	DR3 AND DR4	APPROVED BY	
INC.	STRUCTURE		
INC.	CROSS SECTION		
DATE: 4/18	4 OF 7	CONTRACT #	
		APPROVED BY	



- ALUMINUM RISER FABRICATION**
1. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR REVIEW BY THE ENGINEER PRIOR TO FABRICATION.
  2. RISER STRUCTURE DIMENSIONS SHALL BE AS REQUIRED TO PROVIDE STOPLOG BAYS WITH THE CLEAR WIDTH OPENINGS AS INDICATED IN THE DRAWING DETAILS.
  3. RISER FRAMES ARE TO BE FABRICATED FROM MINIMUM 2 $\frac{1}{2}$ " x 3" x  $\frac{1}{2}$ " 6061-T6 ALUMINUM CHANNEL SECTIONS.
  4. CATHODIC PROTECTION REQUIRED FOR EACH ALUMINUM RISER AND PIPE STRUCTURE. SEE CATHODIC PROTECTION DETAILS SHEET 6.
  5. ALUMINUM SURFACES IN CONTACT WITH TREATED LUMBER SHALL BE COATED WITH A BITUMASTIC PAINT A MINIMUM OF 8 MILS THICKNESS.



STRUCTURE	PIPE DIA.	PIPE GA.	PIPE LENGTH PL	* STOPLOG BAY CLEAR OPENING FRONT SIDES	H1	H2	H3	EL. "A"	EL. "B"	EL. "C"	EL. "D"	NO. OF STOPLOGS FRONT SIDES
DR1 & DR2	54"	10	55'	5'	5'-6"	2'-6"	5'-3"	1158.5	1153.0	1153.25	1151	11
DR3 & DR4	54"	10	67'-3"	5'	4'	5'-6"	2'-6"	1158.5	1153.0	1153.25	1149.5	12

\* STOPLOGS SHALL BE A MINIMUM OF 2" WIDER THAN THE BAY WIDTH

**STRUCTURE & STOPLOG DIMENSIONS**

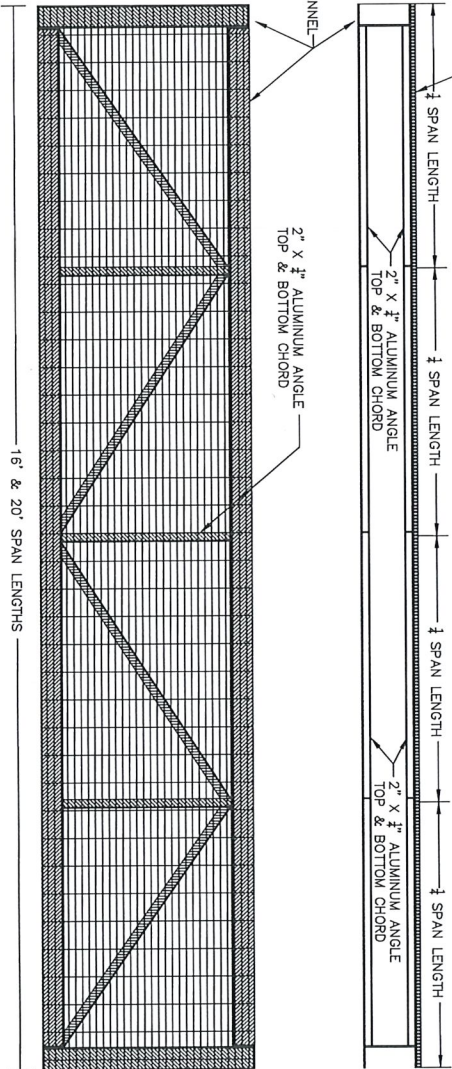
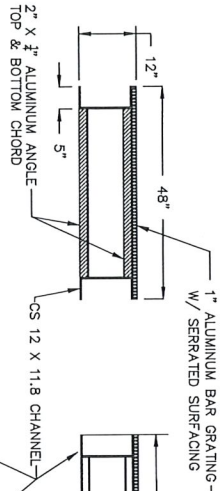
*Carter Coleman*  
 OKLAHOMA  
 29829  
 8-12-18

**ALUMINUM TONGUE & GROOVE STOPLOG**

**3 BAY ALUMINUM RISER STRUCTURE DETAILS**

DUCKS UNLIMITED INC. 1000 N. W. 10th St. Oklahoma City, OK 73102 PHONE: (405) 241-1111 FAX: (405) 241-1112 DATE: 4/18	PROJECT NO. HUCKBERRY FLAT DR1, DR2, DR3, DR4 DETAILS (1 OF 2)	DESIGNED BY: CAC DRAWN BY: CAC CHECKED BY: SEB APPROVED BY:
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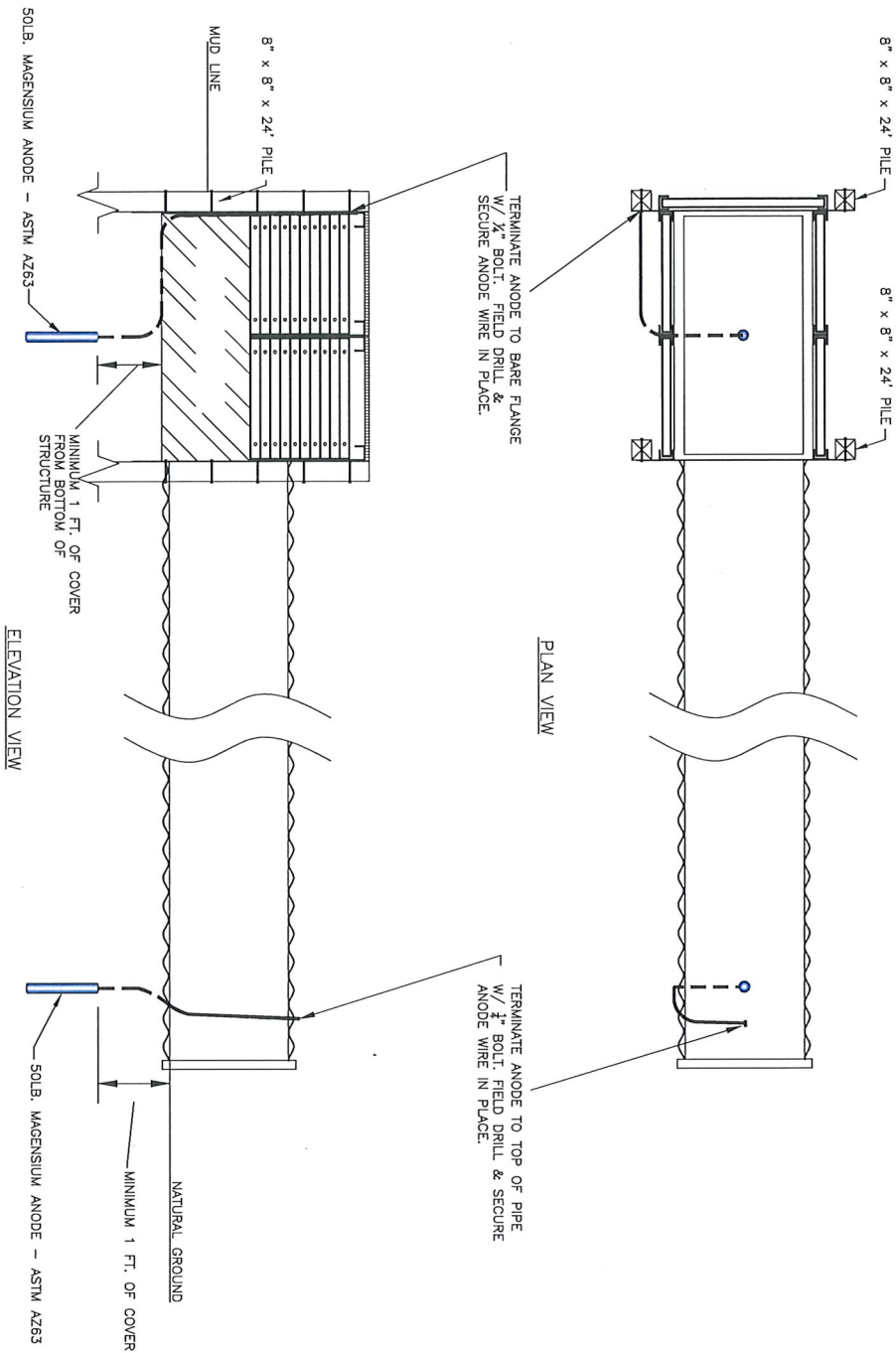


ALUMINUM WALKWAY DETAIL

NOT TO SCALE

DUCKS	PROJECT NO.	DESIGNED BY	CAC
UNLIMITED		DRAWN BY	CAC
INC.		CHECKED BY	ELW
DESIGN RESPONSIBILITY		DATE	4/18
REGISTERED PROFESSIONAL ENGINEER			
NO. 29829			
STATE OF OKLAHOMA			
DATE	4/18		
SHEET NO.	6 OF 7		
CONTRACT #			
DETAILS (2 OF 2)			
APPROVED BY:			





- CATHODIC PROTECTION GENERAL NOTES:
1. CONTRACTOR TO SUBMIT PRODUCT DATA SHEET ON SELECTED ANODE FOR ENGINEER APPROVAL PRIOR TO CONSTRUCTION.
  2. ANODE CONNECTION WIRE SHALL BE #6 AWG COPPER LEAD WIRE/THWN.
  3. CONTRACTOR TO BURY ANODE TO THE MINIMUM DEPTH SHOWN ON THE DRAWINGS PRIOR TO INSTALLATION OF PIPE AND RISER. PROTECT ANODE AND WIRE IN PLACE.
  4. ALL BOLTED ANODE CONNECTIONS SHALL BE CLEANED PRIOR TO INSTALLATION OF ANODE WIRE. AFTER CONNECTION IS DEEMED COMPLETE BY THE ENGINEER, CONTRACTOR SHALL COAT ALL ANODE CONNECTIONS WITH BITUMASTIC PAINT.

# CATHODIC PROTECTION DETAILS

NOT TO SCALE

DUCKS UNLIMITED		PROJECT NO.	
1000 N. W. 10th Ave. Suite 100 Ocala, FL 34476 Tel: 352.236.1111 Fax: 352.236.1112 Email: info@ducksunlimited.com		HACKBERRY FLAT	
CATHODIC PROTECTION DETAILS		DR1, DR2, DR3, AND DR4	
4/18		7 OF 7	
DESIGNED BY: CAC		CHECKED BY: RBT	
APPROVED BY:		APPROVED BY:	



TECHNICAL SPECIFICATIONS  
FOR  
HACKBERRY FLAT WMA  
STRUCTURE REMEDIATION

TILLMAN COUNTY, OK

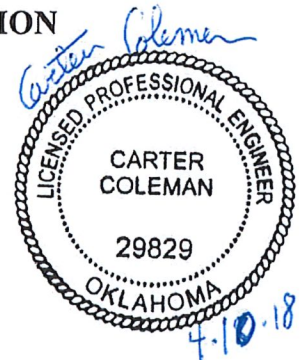
DU PROJECT NUMBER  
DU-OK-6-5



**DUCKS UNLIMITED, INC.**

TEXAS FIELD OFFICE  
915 FRONT ST.  
RICHMOND, TEXAS 77469  
CERTIFICATE OF AUTHORIZATION NO. F-001112

IN COOPERATION WITH  
OKLAHOMA DEPARTMENT OF WILDLIFE CONSERVATION





# CONSTRUCTION SPECIFICATION

## 206 –WATER CONTROL STRUCTURES

### 206.1 SCOPE

The work of this section shall include the supply of all labor, materials, and equipment required to complete the fabrication and installation of the water control structures with appurtenances as called for on the drawings and/or specified herein. The work shall include:

- Fabrication of aluminum water control structures.
- Bed preparation and installation of lumber and timber supports where required or as detailed in the plans.
- Field assembly, if required, of: pipe to structure; installation of water control gates on structures; installation of stop logs; and any other associated hardware as shown on the plans.
- Installation of Cathodic Protection.
- Placement of backfill and compaction of material around pipe and structures.

### 206.2 MATERIALS

All materials shall be handled and stored in careful and workmanlike manner to the satisfaction of the Engineer. The Contractor shall be responsible for any damages to the pipe or water control structure caused by the Contractors operations. Repairs to or replacement of damaged materials shall be at the Contractors expense. Methods of repairs or decision to replace damaged materials shall be at the discretion of the Engineer.

#### 206.21 CORRUGATED ALUMINUM PIPE (CAP)

Corrugated aluminum pipe and fittings shall conform to the requirements of ASTM B744, ASTM B745, or ASTM B790 for the specified pipe sheet thickness, shape type, fabrication methods.

Fittings shall be fabricated from sheet aluminum meeting the requirements contained in ASTM B744 and ASTM B745. The coating for fittings shall be the same as that specified for the corrugated aluminum pipe.

Fabricated, welded fittings shall result in a continuous smooth surface finish. Aluminum welding electrodes used shall conform to the requirements of American Welding Society (AWS) specification AWS A5.10, "Specification for Aluminum and Aluminum Alloy Welding Rods and Bare Electrodes." Welded surfaces and adjacent surfaces damaged during welding shall be treated by removing all weld splatter. The affected surface shall be cleaned to bright metal by sand blasting, power disk sanding, or wire brushing. The cleaned area shall extend at least 0.5 inch into the undamaged section of coated area. Within 24 hours of completion of surface, preparation all treated surfaces shall be painted with two

coats of a chromate rich primer and allowed to fully dry before exposure to weathering conditions.

Aluminum pipe or fabricated aluminum fittings that will have contact with steel, iron, other metals, or chemically treated wood products shall be isolated from direct contact by coating potential contact surfaces with a zinc-chromate primer and allowed to fully dry before final installation.

Aluminum pipe or fittings embedded or attached to concrete or masonry structures shall be coated with a bituminous paint or other approved methods to prevent contact between the concrete and aluminum surfaces.

#### 206.23 RISER STRUCTURES- ALUMINUM

Riser structures shall be fabricated to the dimensions shown in the plan drawings to provide the clear width openings required for weir flow. Frames for the riser shall be fabricated from 6061-T6 aluminum alloy channel sections of the sizes shown. Plate aluminum shall be 5086 H116 alloy of the thickness shown in the plan details. Stop logs shall be extruded from 6061-T6 aluminum alloy with a tongue and groove profile as detailed in the plans. Bar grating shall be manufactured from 6063-T6 aluminum alloy with swaged bars spaced on 4" centers and bearing bars spaced on 1 3/16" centers. Bar grating shall be supplied with serrated or other non-slip surfacing.

The corrugated aluminum pipe shall be shop welded to the riser structure or if requested, the contractor may field weld the pipe to the riser structure. Lifting lugs shall be provided as required for safe loading and installation and to prevent damage to the structure during handling.

Shop drawings for the riser fabrication shall be submitted to the Engineer for review and approval prior to fabrication.

#### 206.24 MAGNESIUM ANODE AND CATHODIC PROTECTION MATERIAL

Anodes shall be 50lb Magnesium Anodes (ASTM AZ63) with wire and terminations per anode manufacturer recommendations. Contractor to submit product data sheets on selected anode for engineer approval prior to construction.

Bolted terminations shall consist of one 1/4" stainless steel bolt per each magnesium anode.

Anode connection wire shall be #6 AWG Copper Lead Wire/THWN.

### 206.3 CONSTRUCTION METHODS

#### 206.31 SUPPORT STRUCTURE

Installation of timber pilings, lumber and timber support structures shall be in accordance



with specification section 411- TIMBER STRUCTURES.

#### **206.32 BACKFILL**

Backfill for structures shall be in accordance with specification section 204- EMBANKMENT.

#### **206.33 CONTROL OF SURFACE/SUBSURFACE WATER**

The Contractor is responsible for control of surface water, subsurface water and drainage during the construction period. All temporary fills and culverts necessary to promote or divert drainage will be installed and removed at the Contractor's expense prior to acceptance of the work. Any claims arising from upstream or downstream damages as a result of the construction or failure of these temporary works will be the Contractors responsibility.

#### **206.4 METHOD OF MEASUREMENT**

Water Control Structures shall be measured in the following manner:

Each (EA): Water Control Structures shall be measured on a unit basis. Measurement shall be made for each Water Control Structure consisting of a pipe, sluice gate, riser structure with stoplogs and associated parts supplied and installed as detailed or specified in the plans. Where multiple riser structures are installed in the same location, each individual structure will be measured for payment.

Magnesium Anodes shall be measured in the following manner:

Each (EA): Magnesium anodes shall be measured on an individual basis. Measurement shall be made for each anode/wire/termination fastener supplied and installed as detailed or specified in the plans. Where multiple anodes are installed on a single water control structure, each individual anode/wire/termination fastener will be measured for payment.

No separate measurement shall be made for the installation or removal of cofferdams, dewatering, excavation, backfill, compaction, or other incidental items necessary to complete the water control structure installation.

#### **206.5 METHOD OF PAYMENT**

“WATER CONTROL STRUCTURES” shall be paid for at the unit price bid per each and measured as specified herein. The unit price bid for the work shall be payment in full for supplying all materials, equipment, labor and any incidental items necessary for performing the fabrication and installation of the pipe and riser structure as described in this specification.

“MAGNESIUM ANODES” shall be paid for at the unit price bid per each and measured

as specified herein. The unit price bid for the work shall be payment in full for supplying all materials, equipment, labor and any incidental items necessary for performing the installation and testing of the magnesium anode as described herein.

# CONSTRUCTION SPECIFICATION

## 411 –TIMBER STRUCTURES

### 411.1 DESCRIPTION

Work under this section shall consist of furnishing all labor, materials, tools, equipment and supplies to install piling and lumber as indicated on the drawings and as specified herein. This subdivision includes furnishing and installing materials and items of timber piling, lumber and fasteners associated with this construction.

### 411.2 QUALITY ASSURANCE

Driven piles shall be installed by a contractor that is thoroughly experienced in setting and driving piles.

Timber Piles shall conform to ASTM D25.

Lumber shall conform to the American Softwood Lumber Standards PS 20-70. All lumber shall be grade marked in accordance with the Southern Pine Inspection Bureau (SPIB) grading rules or Western Wood Products Association (WWPA) grading rules.

Wood preservative shall comply with the American Wood Preservers Association (AWPA) Standard C18, treated with waterborne salts for marine (saltwater) use.

Treated lumber shall bear the mark of the American Wood Preservers Bureau (AWPB).

Nailing Standards: Table 1705.1 – “Fastening Schedule” of (Southern) Standard Building Code.

### 411.3 SUBMITTALS

The Contractor shall submit certification that all timber piling meets ASTM D25 specifications and have been pressure treated in accordance with American Wood Preservers' Association (AWPA) Standard C18 with the preservative retention as required in these specifications. The Contractor shall submit certification by treating plant, stating type of preservative solution and pressure process used, net amount of preservative retained and conformance with applicable standards. The Contractor shall submit certification by treatment plant that moisture content of treated materials was reduced to levels indicated prior to shipment to project site.

The Contractor shall submit copies of driving record of each pile including project name and number, name of Contractor, pile location and number.

For driven piles: Type and size of hammer used, type of pile, rate of operation of pile



driving equipment, pile dimensions, elevation of pile tip, elevation of butt before cut-off, ground elevation, record of number of blows for each foot of penetration, computed pile capacity (if applicable), pile deviation, and any unusual occurrences identified during pile driving.

For jetted or excavated piles: Pile dimensions, elevation of pile tip, elevation of butt before cut-off, ground elevation, computed pile capacity (if applicable), pile deviation, and any unusual occurrences identified during pile driving.

#### **411.4 PRODUCT STORAGE AND HANDLING**

The Contractor shall store material above ground and protect with waterproof covering. The Contractor shall provide air circulation within and around stacks of material.

#### **411.5 PROJECT CONDITIONS**

Piles may be driven, jetted, or excavated at the Contractor's option.

Piles shall not be installed until all excavation has been completed. Minimum pile depth shall be measured from finished grade at the pile.

The Contractor shall fit carpentry work to other work; the Contractor shall scribe and cope as required for accurate fit. The Contractor shall coordinate location of timber piles, posts, nailers, blocking, grounds and similar supports to allow attachment of other work.

#### **411.6 MATERIALS**

##### **411.61 LUMBER**

Lumber and timbers are specified in nominal dimensions. The Contractor shall provide actual sizes as required by American Lumber Standards Committee (ALSC) Standard PS-20.

Grade Stamps: The Contractor shall factory-mark each piece of lumber with grade stamp of inspection agency evidencing compliance with grading rule requirements and identifying grading agency, grade, species, moisture content at time of surfacing, and mill. For exposed lumber apply grade stamps to ends or back of each piece, or omit grade stamps entirely and issue certification of grade compliance from inspection agency in lieu of grade stamp.

Treated pilings, timbers and lumber shall be in conformance with applicable AWWA treatment standards and identified by label, stamp or certification the type of preservative treatment used and the retention levels stated in pounds preservative per cubic foot of wood.

Moisture Content: 19% maximum at time of dressing and shipment for sizes 2" to 4" in

nominal thickness, kiln dried 20% or less for timbers 5"x5" and larger, round piles kiln dried 25% or less.

#### 411.62 TIMBER STRUCTURE COMPONENT SPECIFICATION

Piling, lumber and timbers shall be provided as specified in the table below:

COMPONENT	NOMINAL DIMENSION	GRADE	SURFACING	PRESERVATIVE TREATMENT Retention min. lbs/cu ft
Square Piles	8" X 8"	No. 1 SYP Marine Grade	S4S	2.5 pcf Chromated Copper Arsenate (CCA)
Round Piles	12" Dia.	ASTM D25	N/A	2.5 pcf CCA
Walers	4" x 12"	No. 1 SYP Marine Grade	Rough	2.5 pcf CCA
Bulkhead Wall Cap	2" x 12"	No. 1 SYP Marine Grade	Rough	2.5 pcf CCA
Wakefield Piling	2" x 12" or 3" x 12"	No. 1 SYP Seawall Grade	Rough	2.5 pcf CCA
Walkway Lumber	2" x 6" 2" x 10" 3"x12"	No. 1 SYP Marine Grade	Rough	2.5 pcf CCA

#### 411.63 FASTNERS AND ANCHORAGES

The Contractor shall provide size, type, material and finish as indicated on the drawings and as recommended by applicable standards and building codes, complying with applicable Federal Specifications for nails, staples, screws, bolts, nuts, washers, and anchoring devices.

All fasteners, bolts, nuts, washers, hangars and deck screws shall be Grade 304 or 316 stainless steel. Ogee washers and plate washers shall be hot-dipped galvanized per ASTM A153 at the rate of 20 ounces of zinc per square foot of surface area. Neoprene washers shall be provided at all locations where aluminum is exposed to steel.

Ogee washers shall be coated with a generous amount of heavy grease to deter corrosion.

#### 411.64 GEOTEXTILE FABRIC

The geotextile fabric shall be placed as detailed on the plans or as directed by the Engineer. It shall be a Class 1, nonwoven fabric placed at the locations indicated on the plans. Test data from the identified production run of the geotextile fabric shall be required for each



of the tests shown below.

<u>Property</u>	<u>Test Method</u>	<u>Class I</u>
Tensile Strength- lbs. 1/	ASTM-D4632 Grab Test Method	200 min.
Tensile Strength- Psi 1/	ASTM-D4595 Wide Strip Method	400 min.
Bursting Strength- psi 1/	ASTM-D3786 Diaphragm Tester	320 min.
Elongation-% 1/	ASTM-D4632	<50
Puncture - lbs. 1/	ASTM-D3787	90 minimum
Ultraviolet Light Resistance	ASTM-D4355 150 hrs. exposure	70 % tensile strength retained
Apparent Opening Size (AOS) 2/	ASTM-D4751	Size < or = #70 max.
Permittivity - sec <sup>-1</sup>	ASTM-D4491	0.10

1/ Minimum average roll value (weakest principal direction)

2/ U.S. Standard Sieve

The Contractor shall supply all items necessary to fasten the geotextile to the bulkhead so it will not slide or form gaps when placing backfill behind the bulkhead. Geotextile fabric shall be nailed to the soil side of the bulkhead with galvanized square head cap nails or other suitable fastener. Adjacent ends of geotextile fabric shall be overlapped a minimum of 12". Geotextile fabric is to extend from the top waler to a point at least 2' below the finished grade located on the water side or as detailed in the plans.

Prior to use, the geotextile shall be stored in a clean dry place, out of direct sunlight, not subject to extremes of either hot or cold, and with the manufacturer's protective cover in place.

#### 411.65 FIBERGLASS REINFORCED PLASTIC GRATING

Grating for fishing pier structures shall be a molded fiberglass reinforced plastic grating (FRP) manufactured with a vinyl ester resin and have nominal grid dimensions of 1.5"x1.5"x1.5", length, width and depth respectively. FRP grating shall be gray in color and supplied with stainless steel mounting clips as recommended by the manufacturer. Fiberglass grating shall be manufactured by Seasafe, Inc. model GG-1515, North American Grating model MG1515, AMD, Inc. fiberglass grating or an approved equal.

#### 411.66 DRIVING EQUIPMENT

Contractor shall use pile driving equipment of type generally used in standard pile driving practice, operated at manufacturer's specified rate, to develop required rated energy per blow or driving frequency.

#### 411.7 CONSTRUCTION METHODS

Verify site conditions and determine if any situations exist which would have an adverse effect on the work.

Use driving method, which will not cause damage to vegetation, water quality or nearby structures.

#### 411.71 DRIVING PILES

The Contractor shall notify the Engineer 48 hours in advance of beginning pile driving operations.

The Contractor shall layout pile location using a template or by any other method necessary to assure that piling will be in proper alignment.

The Contractor shall continuously drive piling to the minimum depth indicated on the drawings. Should refusal be reached or should some other reason occur that prevents setting piles at this minimum depth, the Contractor shall notify the Engineer immediately. The Engineer should also be notified if driven piles fail to set firm and meet required load capacity.

The Contractor shall ensure that there is adequate pile length to obtain full embedment plus required top elevation after any damage to driving end has been removed. Contractor is responsible for protecting piles by providing pile caps and/or driving shoes which may be required to ease driving and to assure proper embedment and pile alignment.

The Contractor shall drive piles with tip end down and butt end up. All piles shall be driven plumb, maintaining center of gravity for each pile to conform to locations shown on the drawings.

The Contractor shall carefully plumb leads and pile before driving. The Contractor shall take care during driving to prevent and to correct any tendency of piles to twist or rotate. Piles shall be driven within 2 inches of plan location and be plumb within 1" in 10' from the vertical.

Damaged piles and piles driven outside required driving tolerances will not be accepted. Rejected piles shall be withdrawn and replace with new piles. The Engineer may approve the abandonment and cut-off of rejected piles. Additional piles shall be driven to replace rejected units at designated locations.



The Contractor shall solidly fill spaces left by withdrawn piles using cohesion less soil material such as gravel, broken stone, and gravel-sand mixtures. The Contractor shall place and compact throughout length of space.

The Contractor shall cut-off tops of driven piles, square with pile axis and at elevations indicated. The Contractor shall dispose of excess materials off site in an acceptable manner.

#### 411.72 CUTTING AND DRILLING

All cuts, notches and drilled holes in lumber, timbers and piling shall be coated with a waterborne copper based solution in accordance with AWWA Standard M4.

#### 411.73 GENERAL CARPENTRY

The Contractor shall discard units of material with defects, which might impair the quality of work, and units, which are too small to fabricate the work with minimum joints or the optimum joint arrangement.

The Contractor shall set carpentry work accurately to required levels and lines, with members plumb and true and accurately cut and fitted.

The Contractor shall securely attach carpentry work to substrates by anchoring and fastening as shown and as required by recognized standards. The Contractor shall use hot-dipped galvanized common wire nails and finishing nails, except as otherwise indicated. The Contractor shall use finishing nails for finish work.

The Contractor shall select fasteners of the size that will not penetrate members where opposite side will be exposed to view or will receive finish materials. The Contractor shall make tight connections between members. The Contractor shall install fasteners without splitting of wood and predrill as required. Anchors and nails shall comply with the "Fastening Schedule" of the (Southern) Standard Building Code.

The Contractor shall install preservative-treated wood products using non-corrosive fasteners.

No splicing of wood framing members between bearing piles will be permitted unless specifically detailed.

#### Blocking:

- a. Install as required.
- b. Wedge, align, and anchor blocking with nails and other fasteners as required.
- c. Locate blocking to facilitate installation of finishing materials, fixtures, specialty items, and trim as required

#### **411.8 METHOD OF MEASUREMENT**

Bid items under the Timber Structure heading shall be measured as specified below and as shown in the Unit Price Table of the Standard Bid Form.

Timber Piling shall be measured as follows:

Linear Foot - Plan Quantity (LF-P): Timber piling shall be measured on a plan quantity basis. This quantity shall be the length of piling installed and accepted as calculated from the construction plans for each size and type of pile specified. Piles furnished and driven at the option of the contractor will not be measured for payment. No measurement will be made for piles furnished or driven to replace piles lost or damaged before the completion of the contract while in stockpile or during handling and driving.

No separate measurement will be made for walers, lumber, cross bracing, timber supports, fasteners, or incidental items required for a complete installation.

Wakefield Piling shall be measured as follows:

Square Foot - Plan Quantity (SF-P): Wakefield Piling shall be measured on a plan quantity basis. This quantity shall be the square footage of piling installed and accepted as calculated from the construction plans. Piles furnished and driven at the option of the contractor will not be measured for payment. No measurement will be made for piles furnished or driven to replace piles lost or damaged before the completion of the contract while in stockpile or during handling and driving.

No separate measurement will be made for walers, lumber, timber supports, fasteners, or incidental items required for a complete installation.

FRP Grating shall be measured as follows:

Square Foot - Plan Quantity (SF-P): FRP Grating shall be measured on a plan quantity basis. This quantity shall be the square footage of FRP Grating installed and accepted as calculated from the construction plans.

No separate measurement will be made for lumber, cross bracing, timber supports, fasteners, or incidental items required for a complete installation.

#### **411.9 METHOD OF PAYMENT**

Bid items under the Timber Structure heading shall be paid for at the unit price bid and measured as specified herein. The unit prices bid shall be payment in full for the supply of all equipment, materials, labor, appurtenances, and any other incidental items needed for a complete installation as described in this specification or as shown on the plans.





Oklahoma Department of Wildlife Conservation	Mandatory Pre-bid Meeting: Solicitation #117P Sign in Sheet
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Date: Friday, April 12, 2019	10:00 AM CST	Hackberry Flat WMA
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Project: Solicitation #117P - Removal & Replacement of Water Control Structures
Project Manager: Kelvin Schoonover

#	Company Name	Representative Name (Please Print)	Signature	Phone & Email Address
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