

City of Tulsa, Oklahoma

Page 1 of 46

NOTICE is hereby given that the CITY OF TULSA, OKLAHOMA will receive sealed Bids for the following:

BID # IFB 20-830

**DESCRIPTION: 4 Wheel Drive Backhoe** 

(Commodity Code(s): 760-04)

You are invited to submit a Bid to supply the Goods and/or Services specified above. Invitations for Bid (IFB) will be posted on the City's website at <a href="https://www.cityoftulsapurchasing.org">www.cityoftulsapurchasing.org</a> or a hardcopy may be obtained at:

City of Tulsa-Purchasing Division 175 East 2<sup>nd</sup> Street, 15<sup>th</sup> Floor Tulsa Oklahoma 74103

Bids must be received no later than 5:00 PM (CST) on Wednesday, May 27, 2020, and delivered to:

City Clerk's Office

175 East 2<sup>nd</sup> Street, Suite 260

Use this checklist to ensure you have properly read and completed all Forms

Tulsa Oklahoma 74103

Bids must be sealed and either mailed or delivered. No faxed or emailed Bids will be considered. Bids received after the stated date and time will not be accepted and will be returned to the Bidder unopened.

The Bid Packet consists of (1) this Notice of Invitation for Bid, (2) the Summary Sheet, (3) Form #1, (4) Form #2, (5) Form #3, (6) Form #4, (7) Form #5, (8) Form #6, (9) the Instructions, Terms and Conditions for Bidders, (10) Special Requirements, (11) Technical Specifications and (12) Exhibit A.

 Notice of Invitation for Bid
 Summary Sheet
 Form #1: Bidder Information Sheet. Must be completed.
 Form #2: Purchase Agreement. Complete legal name in first paragraph and Notice provision in Section 17.i.  Original signature required.
 Form #3: Interest Affidavit. Original signature and notarization required.
 Form #4: Non-Collusion Affidavit. Original signature and notarization required.
 Form #5: Affidavit of Claimant. Original signature and notarization required.
 Form #6: Acknowledgment of Receipt of Addenda/Amendments. Must be completed and signed.
 Instructions, Terms and Conditions for Bidders
 Special Requirements (Offer Period; Insurance and Bonding; References)
 Technical Specifications
 Exhibit A: Bid Form including Delivery and Pricing. This is your Bid. It must be completed or your Bid will be

IMPORTANT NOTE: Write the Bid Number, Bid Description (as listed above), and Bid Opening Date on the lower left corner of the outside of your Bid envelope. You must return the entire <u>completed</u> Bid Packet.



Oklahoma Page 2 of 46

City of Tulsa,

#### SUMMARY SHEET

#### **Project Buyer**

If you have any questions or need additional information, contact the assigned Project Buyer:

Ashleigh McCarn

amccarn@cityoftulsa.org

City of Tulsa

175 E. 2nd Street, 15TH Floor

Tulsa, OK 74103

Include IFB 20-830 on the subject line

#### Bidder's Notice of Intent to Submit a Bid

Email the Project Buyer indicating your intent to Bid. Include 4 Wheel Drive Backhoe IFB 20-830 on the subject line of the email. You will receive an email response verifying your notice of intent to bid was received. This same procedure should be followed to request clarification, in writing, of any point in the IFB. Bidders are encouraged to contact the Project Buyer by email if there is anything in these specifications that prevents you from submitting a Bid, or completing the Bid Packet.

Questions and concerns must be received no later than ten (10) days prior to the Bid Packet due date.

#### Issuing of Addenda

If you received the notice of this IFB from the City as a result of being registered to sell the commodity code(s) on this Bid, you should also receive notice of any addenda issued. If you are not registered with the City to sell the commodities listed herein, you must register as a supplier on the City of Tulsa Purchasing website (www.cityoftulsapurchasing.org) to receive notice of any addenda, or to receive notice of any future IFBs.

#### **Pre-Bid Conference**

If a pre-Bid conference will be held for this IFB, information on that conference will be inserted below:

No pre-Bid conference will be held for this IFB.

#### **Bid Packet Submission**

The City requires two completed Bid packets: 1 Original and 1 Copy. Each must be clearly labeled on the front sheet indicating "Original" or "Copy". If a copy on electronic media is also required, the line below will be checked. Electronic USB Copy also required.

Responses to this Invitation for Bid must be made on the forms listed on page 1. The entire completed Bid Packet must be returned or your Bid may be rejected. Do not take exception to any portion of this Bid Packet. Do not make any entries except where required. Do not insert any other documents into the Bid Packet.

#### **Bid Opening**

All Bid openings are public and take place at 8:30 a.m. Thursday, the day after Bids are due. The Bid openings are held in the City of Tulsa Council Meeting Room, 175 East 2<sup>nd</sup> Street, 2<sup>nd</sup> Floor, Tulsa, Oklahoma.



City of Tulsa, Oklahoma

Page 3 of 46

# FORM #1 BIDDER INFORMATION SHEET

tate of Organization.	
State of Organization:	***
Bidder's Type of Legal Entity: (check ( ) Sole Proprietorship ( ) Partnership ( ) Corporation ( ) Limited Partnership	( ) Limited Liability Company ( ) Limited Liability Partnership ( ) Other:
Bidder's Address:	City State Zip Code
sidder's Website Address:	*
ales Contact:	Legal or Alternate Sales Contact:
lame:	Name:
treet:	Street:
	Street: City:
Street:Street:State:State:	
City:Citate:	City:
City:	City: State:
City:Citate:Chone:	City:  State: Phone:



**Issued: April 23, 2020** 

City of Tulsa, Oklahoma

Page 4 of 46

#### FORM #2 (Page 1 of 4) PURCHASE AGREEMENT

INSTRUCTIONS: This document must be properly signed and returned or your Bid will be rejected. This form constitutes your offer and if accepted by the City of Tulsa will constitute the Purchase Agreement under which you are obligated to perform. Your signature on this document indicates you have read and understand these terms and agree to be bound by them.

THIS PURCHASE AGREEMENT is between the CITY OF TULSA, OKLAHOMA, a municipal corporation, 175 East 2<sup>nd</sup> Street, Tulsa, Oklahoma, 74103-3827 (the "City") and:

(Bidder's company name as reflected on its organizational documents, filed with the state in which bidder is organized; not simply a DBA) (the "Seller").

#### WITNESSETH:

WHEREAS, the City has approved certain specifications and advertised for or solicited Bids on the following goods or services:

#### IFB 20-830 4 Wheel Drive Backhoe

(the "Goods and/or Services"); and

WHEREAS, Seller desires to provide such Goods and/or Services to City, acknowledges that this document constitutes Seller's offer to provide the Goods and/or Services specified below, and further acknowledges that if executed by the City's Mayor, this document will become the Purchase Agreement for such Goods and/or Services.

NOW, THEREFORE, for and in consideration of the terms, covenants and conditions hereinafter set forth, the parties hereto agree as follows:

- 1. Documents Comprising the Agreement. The Bid Packet includes the Notice of Invitation to Bid, the Summary Sheet, Form #1, Form #2, Form #3, Form #4, Form #5, Form #6, the Instructions, Terms and Conditions for Bidders, the Special Requirements, the Technical Specifications, Exhibit A and any addenda or amendments to the Bid Packet. The Bid Packet is incorporated herein by this reference. In the event of conflicting or ambiguous language between this Purchase Agreement and any of the other Bid Packet documents, the parties shall be governed first according to this Purchase Agreement and second according to the remainder of the documents included in the Bid Packet. Seller may submit as part of its Bid additional materials or information to support the Bid. Additional materials or information submitted by Seller which are not ambiguous and which do not conflict with this Purchase Agreement or the other Bid Packet documents are incorporated herein by this reference.
- Purchase and Sale. Seller agrees to sell City the Goods and/or Services for the price and upon the delivery terms set forth in Exhibit A 2. hereto. City agrees to pay Seller the price as set forth in Exhibit A based on (a) the quantity actually purchased in the case of goods or services priced by unit, or (b) the total price for a stated quantity of goods or services, upon (i) delivery of the Goods and/or Services to the City, (ii) the City's Acceptance thereof, and (iii) Seller's submission and City's approval of a verified claim for the amount due. City shall not pay any late charges or fees.
- Irrevocable Offer. Seller understands and acknowledges that its signature on this Agreement constitutes an irrevocable offer to provide 3. the Goods and/or Services. There is no contract unless and until City's Mayor/Mayor Pro Tem executes this Agreement accepting Seller's Bid. No City officer, employee or agent except the Mayor (or Mayor Pro Tem) has the authority to award contracts or legally obligate the City to any contract. Seller shall not provide any Goods and/or Services to City pursuant to this Agreement before this Agreement is executed by City. If Seller provides any Goods and/or Services to City pursuant to this Agreement before this Agreement is executed by City, such Goods and/or Services are provided at Seller's risk and City shall have no obligation to pay for any such Goods and/or Services.
- Term. The term of this Agreement shall be effective commencing on the date of execution of this Agreement by the Mayor/Mayor Pro 4. Tem of the City of Tulsa and terminating one year from that date. Seller understands and acknowledges that any future contracts or renewals are neither automatic nor implied by this Agreement. The continuing purchase by City of the Goods and/or Services set forth in this Agreement is subject to City's needs and to City's annual appropriation of sufficient funds in City's fiscal year (July 1st to June 30th) in which such Goods and/or Services are purchased. In the event City does not appropriate or budget sufficient funds to perform this Agreement, this Agreement shall be null and void without further action by City.
- 5. Warranties. Seller shall assure that the Goods and/or Services purchased hereunder are covered by all available and applicable manufacturers' warranties for such Goods and/or Services. Seller expressly agrees that it will be responsible for performing all warranty obligations set forth in the Technical Specifications for the Goods and/or Services covered in this Agreement. Seller also warrants that the Goods and/or Services will conform to the Technical Specifications and Special Requirements, and further warrants that the Goods and/or Services shall be of good materials and workmanship and free from defects for either a minimum of one (1) year from the date of Acceptance or installation by City, whichever is later, or as specified in the Technical Specifications, whichever is later. In no event shall Seller be allowed to disclaim or otherwise limit the express warranties set forth herein.
- Warranty Remedies. City shall notify Seller if any of the Goods and/or Services fails to meet the warranties set forth above, and Seller 6. shall promptly correct, repair or replace such Goods and/or Services at Seller's sole expense. Notwithstanding the foregoing, if such Goods and/or Services shall be determined by City to be defective or non-conforming within the first thirty (30) days after the date of Acceptance by City, then City at its option shall be entitled to a complete refund of the purchase price and, in the case of Goods, shall promptly return such Goods to Seller. Seller shall pay all expenses related to the return of such Goods to Seller.



**Issued: April 23, 2020** 

City of Tulsa, Oklahoma

Page 5 of 46

#### FORM #2 (Page 2 of 4) PURCHASE AGREEMENT

- 7. Seller Bears Risk. The risk of loss or damage shall be borne by Seller at all times until the Acceptance of the Goods or Services by City.
- 8. No Indemnification by City. Seller understands and acknowledges that City is a municipal corporation that is funded by its taxpayers to operate for the benefit of its citizens. Accordingly, and pursuant to Oklahoma law, City shall not indemnify nor hold Seller harmless for loss, damage, expense or liability arising from or related to this Agreement, including any attorneys' fees and costs. In addition, Seller shall not limit its liability to City for actual loss or direct damages for any claim based on a material breach of this Agreement and the documents incorporated herein. City reserves the right to pursue all legal and equitable remedies to which it may be entitled.
- Indemnification by Seller. Seller agrees to indemnify, defend, and save harmless City and its officers, employees and agents from all 9. suits and actions of any nature brought against them due to the use of patented appliances, products or processes provided by Seller hereunder. Seller shall pay all royalties and charges incident to such patents.
- 10. No Insurance by City. If City is leasing Goods herein, City shall not be required to obtain insurance for Seller's property. Seller shall be solely responsible for any insurance it deems necessary. City is self-insured for its own negligence, subject to the limits of the Governmental Tort Claims Act (51 O.S. § 151 et seq.).
- No Confidentiality. Seller understands and acknowledges that City is subject to the Oklahoma Open Records Act (51 O.S. §24A.1 et 11. seq.) and therefore cannot assure the confidentiality of contract terms or other information provided by Seller pursuant to this Agreement that would be inconsistent with City's compliance with its statutory requirements thereunder.
- Non-Responsive Bids. Seller understands and acknowledges that if it adds terms and conditions to its Bid that are different from the 12. terms set forth herein that its Bid may be rejected as non-responsive. Furthermore, if City accepts Seller's Bid and awards a contract to Seller based on such Bid, City shall not be bound to any exceptions, changes or additions made by Seller, and any terms and conditions added by Seller which are not expressly agreed to by City in writing will be void and of no force and effect and the parties will be governed according to the document precedence set forth in Section 1 above.
- Compliance with Laws. Seller shall be responsible for complying with all applicable federal, state and local laws, regulations and 13. standards. Seller is responsible for any costs of such compliance. Seller certifies that it and all of its subcontractors to be used in the performance of this Purchase Agreement are in compliance with 25 O.S. Sec. 1313 and participate in the Status Verification System. The Status Verification System is defined in 25 O.S. Sec. 1312 and includes but is not limited to the free Employee Verification Program (E-Verify) available at www.dhs.gov/E-Verify.
- Termination. City, by written notice, may terminate this Agreement, in whole or in part, when such action is in the best interest of City. If 14. this Agreement is so terminated. City shall be liable only for payment for Goods accepted and Services rendered prior to the effective date of termination. City's right to terminate this Agreement is cumulative to any other rights and remedies provided by law or by this
- 15. Price Changes. The parties understand and agree that the variables in Seller's cost of performance may fluctuate, but any change in Seller's cost of performance will not alter its obligations under this Agreement, nor excuse performance or delay on Seller's part. If the IFB provides that Seller may include a price escalation provision in its Bid, Seller's price escalation provision will be evaluated by City as part of Seller's Bid price when awarding the Bid.
- 16. Right to Audit. The parties agree that Seller's books, records, documents, accounting procedures, practices, price lists or any other items related to the Goods and/or Services provided hereunder are subject to inspection, examination, and copying by City or its designees. Seller is required to retain all records related to this Agreement for the duration of the term of this Agreement and a period of three years following completion and/or termination of the Agreement. If an audit, litigation or other action involving such records begins before the end of the three year period, the records shall be maintained for three years after 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.
- Notice. Any notice, demand, or request required by or made pursuant to this Agreement shall be deemed properly made if personally 17. delivered in writing or deposited in the United States mail, postage prepaid, to the address es specified below.

To Seller:		
To CITY:	City Clerk	
	CITY OF TULSA, OKLAHOMA	
	175 E. 2 <sup>nd</sup> Street, Suite 260	
	Tulsa, Oklahoma 74103	
With a copy to:	Ashleigh McCarn, Senior Buyer	
	City of Tulsa	
	175 E. 2nd Street, 15TH Floor	
	Tulsa OK 74103	

i.



Issued: April 23, 2020

City of Tulsa, Oklahoma

Page 6 of 46

# FORM #2 (Page 3 of 4) PURCHASE AGREEMENT

- Relationship of Parties. The Seller is, and shall remain at all times, an independent contractor with respect to activities and conduct while engaged in the performance of services for the City under this Agreement. No employees, subcontractors or agents of the Seller shall be deemed to be employees of the City for any purpose whatsoever, and none shall be eligible to participate in any benefit program provided by the City for its employees. The Seller shall be solely responsible for the payment of all employee wages and salaries, taxes, withholding, payments, fringe benefits, insurance premiums, continuing education courses, materials or related expenses on behalf of its employees, subcontractors, and agents. Nothing in this Agreement shall be construed to create a partnership, joint venture, or agency relationship among the parties. No party shall have any right, power or authority to act as a legal representative of another party, and no party shall have any power to obligate or bind another party, or to make any representations, express or implied, on behalf of or in the name of the other in any manner or for any purpose whatsoever.
- 19. **Third Parties.** This Agreement is between City and Seller and creates no right unto or duties to any other person. No person is or shall be deemed a third party beneficiary of this Agreement.
- 20. Time of Essence. City and Seller agree that time is deemed to be of the essence with respect to this Agreement.
- 21. **Binding Effect.** This Agreement shall be binding upon City and Seller and their respective successors, heirs, legal representatives and permitted assigns.
- 22. Headings. The headings used herein are for convenience only and shall not be used in interpreting this Agreement
- 23. **Severability Provision.** If any term or provision herein is determined to be illegal or unenforceable, the remainder of this Agreement will not be affected thereby. It is the intention of the parties that if any provision is held to be illegal, invalid or unenforceable, there will be added in lieu thereof a provision as similar in terms to such provision as is possible to be legal, valid and enforceable.
- 24. Governing Law And Venue. This Agreement is executed in and shall be governed by and construed in accordance with the laws of the State of Oklahoma without regard to its choice of law principles, which shall be the forum for any lawsuits arising under this Agreement or incident thereto. The parties stipulate that venue is proper in a court of competent jurisdiction in Tulsa County, Oklahoma and each party waives any objection to such venue. City does not and will not agree to binding arbitration of any disputes.
- 25. **No Waiver.** A waiver of any breach of any provision of this Agreement shall not constitute or operate as a waiver of any other provision, nor shall any failure to enforce any provision hereof operate as a waiver of the enforcement of such provision or any other provision.
- 26. **Entire Agreement/No Assignment.** This Agreement and any documents incorporated herein constitute the entire agreement of the parties and supersede any and all prior agreements, oral or otherwise. This Agreement may only be modified or amended in a writing signed by both parties. Notwithstanding anything to the contrary stated herein or in the attachments to this Agreement, no future agreements, revisions or modifications that may be required under this Agreement are effective or enforceable unless such terms, revisions or modifications have been reduced to writing and signed by City and Seller. Seller may not assign this Agreement or use subcontractors to provide the Goods and/or Services without City's prior written consent. Seller shall not be entitled to any claim for extras of any kind or nature.
- 27. **Multiple Counterparts.** This Agreement may be executed in several counterparts, each of which shall be deemed an original, but which together shall constitute one and the same instrument.
- 28. Interpretive Matters and Definitions. The following interpretive matters shall be applicable to this Agreement:
  - 28.1 Unless the context otherwise requires: (a) all references to Sections are to Sections of or to this Agreement; (b) each term defined in this Agreement has the meaning assigned to it; (c) "or" is disjunctive but not necessarily exclusive; (d) words in a singular include the plural and vice versa. All references to "\$" or to dollar amounts shall be in lawful currency of the United States of America;
  - 28.2 No provision of this Agreement will be interpreted in favor of, or against, any of the parties hereto by reason of the extent to which such party or its counsel participated in the drafting thereof or by reason of the extent to which any such provision is inconsistent with any prior draft hereof or thereof;
  - 28.3 Any reference to any applicable laws shall be deemed to refer to all rules and regulations promulgated thereunder and judicial interpretations thereof, unless the context requires otherwise:
    - 28.4 The word "including" means "including, without limitation" and does not limit the preceding words or terms; and
    - 28.5 All words used in this Agreement shall be construed to be of such gender, number or tense as circumstances require.
- 29. **Equal Employment Opportunity.** Each bidder agrees to comply with all applicable laws regarding equal employment opportunity and nondiscrimination.
- 30. Authority to Bind. The undersigned individual states that s/he has authority to bind Seller to this Agreement, that s/he has read and understands the terms of this Agreement, and that Seller agrees to be bound by this Agreement and its incorporated documents.



Oklahoma

Page 7 of 46

City of Tulsa,

# FORM #2 (Page 4 of 4) PURCHASE AGREEMENT

IMPORTANT NOTE: This document must be signed by the proper person as set forth in Instructions, Terms and Conditions for Bidders, paragraph 4. FAILURE TO SUBMIT PROPERLY AUTHORIZED SIGNATURE MAY RESULT IN YOUR BID BEING REJECTED AS NONRESPONSIVE.

recited above.	Seller Company Name:	ates set forth below to be effective during the period
	Sign Here ▶	***
		X X
ATTEST:	Printed Name:	1
	Title:	\^.^.
Corporate Secretary	Date:	
Company Name/Address [Please Print]	Address	City State Zip Code
( ) -	( ) -	
Telephone Number	Fax Number  CITY OF TULSA, OKLAH a municipal corporation	Email Address HOMA,
ATTEST:	<u>By:</u> Mayor	
City Clerk	Date:	
APPROVED:		
Assistant City Attorney		



**Issued: April 23, 2020** 

City of Tulsa, Oklahoma

Page 8 of 46

**FORM #3** 

#### **INTEREST AFFIDAVIT**

STATE OF)	
)ss.	
indirectly owns a five percent (5%) interest or	, of lawful age, being first duly sworn, state that I am the agent authorized her states that no officer or employee of the City of Tulsa either directly or more in the Bidder's business or such a percentage that constitutes a e following officers and/or employees of the City of Tulsa own an interest strolling interest, either direct or indirect.
	By:
Subscribed and sworn to before me this	day of, 20
Notary Public	
My Commission Expires:	
Notary Commission Number:	
County & State Where Notarized:	

The Affidavit must be signed by an authorized agent and notarized



**Issued: April 23, 2020** 

#### City of Tulsa, Oklahoma

Page 9 of 46

#### FORM #4 **NON-COLLUSION AFFIDAVIT**

(Required by Oklahoma law, 74 O.S. §85.22-85.25)

STATE OF	
	)ss.
COUNTY OF_	**
I.	, of lawful age, being first duly sworn, state that:
(Seller's	s Authorized Agent)
1.	I am the authorized agent of Seller herein for the purposes of certifying facts pertaining to the existence of collusion between and among Bidders and municipal 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 Seller's Bid to which this statement is attached, and I have been personally and directly involved in the proceedings leading to the submission of such Bid; and
3.	<ul> <li>Neither the Seller nor anyone subject to the Seller's direction or control has been a party:</li> <li>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,</li> <li>b. to any collusion with any municipal official or employee as to quantity, quality, or price in the prospective contract, or as to any other terms of such prospective contract, nor</li> <li>c. in any discussions between Bidders and any municipal official concerning exchange of money or other thing of value for special consideration in the letting of a contract.</li> </ul>
	By:
	Signature
	Title:
Subscribed and	sworn to before me thisday of, 20
Notary Public	
My Commission	Expires:
Notary Commiss	sion Number:
County & State \	Where Notarized:

The Affidavit must be signed by an authorized agent and notarized



City of Tulsa, Oklahoma Page 10 of 46

**FORM #5** 

#### **AFFIDAVIT OF CLAIMANT**

STATE OF)	
)ss.	
COUNTY OF)	
work, services or materials will be completed or supplied furnished the affiant. Affiant further states that (s)he has m	bath says that this contract is true and correct. Affiant further states that the in accordance with the contract, plans, specifications, orders or requests ade no payment directly or indirectly of money or any other thing of value to or any public trust of which the City is a beneficiary to obtain or procure the
	By:
Subscribed and sworn to before me this day of  Notary Public	, 20
My commission expires:	
My commission number:	

The Affidavit must be signed by an authorized agent and notarized



City of Tulsa, Oklahoma

Page 11 of 46

FORM #6

#### **ACKNOWLEDGMENT OF RECEIPT OF ADDENDA/AMENDMENTS**

incorporated into the Bid Packet and will become a part of ar List Date and Title/Number of all addenda or amendments: (	
***	RYA TEXA
* *	52 × ×
/ * */	
* *   18	1098 1
*	* * * * * * * * * * * * * * * * * * *
	Sign Hore
	Sign Here ▶  Printed Name:
	Title:
	Date:



City of Tulsa, Oklahoma

Page 12 of 46

#### INSTRUCTIONS, TERMS AND CONDITIONS FOR BIDDERS

- 1. **PURCHASING AUTHORITY.** City issues this Invitation For Bid pursuant to Tulsa City Charter, Art. XII, §14 and Tulsa Revised Ordinances, Title 6, Ch. 4, the provisions of which are incorporated herein.
- DEFINITIONS. The following terms have the following meanings when used in the documents comprising this Bid Packet.
   A. "Acceptance" with respect to a Bid shall mean the City's selection of a Bid, and award of a contract to the Bidder/Seller.
  - **B**. "**Acceptance**" with respect to delivery of Goods and/or Services provided under a Purchase Agreement shall mean City's written acknowledgement that Seller has satisfactorily provided such Goods and/or Services as required.
  - **C**. "Addenda" "Addendum" or "Amendment(s)" shall mean a clarification, revision, addition, or deletion to this Invitation For Bid by City which shall become a part of the agreement between the parties.
  - **D.** "Authorized Agent" means an agent who is legally authorized to bind the Seller under the law of the State in which the Seller is legally organized. An Authorized Agent must sign all documents in the Bid Packet on behalf of the Seller. Under Oklahoma law, the Authorized Agent for each of the following types of entities is as stated below:
  - Corporations the president, vice president, board chair or board vice chair can sign; others can sign if they have and provide the City with (i) a corporate resolution giving them authority to bind the Seller, <u>and</u> (ii) a recent corporate secretary's certificate indicating the authority is still valid.
  - General Partnerships any partner can sign to bind all partners.
  - Limited Partnerships the general partner must sign.
  - o Individuals no additional authorization is required, but signatures must be witnessed and notarized.
  - Sole Proprietorship the owner can sign. Any other person can sign if s/he provides a recent Power of Attorney, signed by the owner, authorizing him/her to bind the sole proprietorship.
  - Limited Liability Company (LLC) The manager as named in the Operating Agreement can sign. Any person
    authorized by the Operating Agreement or a member can sign providing the person submits a copy of the authorization
    with a certificate of the members indicating the authorization is still valid.

Entities organized in States other than Oklahoma must follow the law of the State in which they are organized.

- **E.** "Bid" means the Seller's offer to provide the requested Goods and/or Services set forth in Exhibit A and any additional materials or information the Seller chooses to submit to support the Bid.
- **F.** "Bidder" means the legal entity which submits a Bid for consideration by City in accordance with the Invitation For Bid.
- **G.** "Bid Packet" consists of the following documents (1) the Notice of Invitation for Bid, (2) the Summary Sheet, (3) Form #1, (4) Form #2, (5) Form #3, (6) Form #4, (7) Form #5, (8) Form #6, (9) the Instructions, Terms and Conditions for Bidders, (10) Special Requirements, (11)Technical Specifications, and (12) Exhibit A.
- H. "Bid Submission Date" shall mean the last date by which the City will accept Bids for an Invitation For Bid.
- I. "City" shall mean the City of Tulsa, Oklahoma.
- J. "Days" shall mean calendar days unless specified otherwise.
- **K.** "Primary Seller" shall mean the Seller whose Bid City selected as the principal supplier of the Goods and/or Services required under this Agreement.
- **L.** "**Project Buyer**" shall mean the City's employee assigned to serve as the contact person for Bidders/Sellers responding to Invitations For Bid or completing contracts herein.
- **M.** "Purchasing Division or Office" shall mean the City of Tulsa's Purchasing Division, located at 175 East 2<sup>nd</sup> Street, Suite 865, Tulsa, Oklahoma 74103
- **N.** "Secondary Seller" shall mean the Seller whose Bid City selected as a back-up supplier in the event the Primary Seller is unable to provide all the Goods and/or Services required.



City of Tulsa, Oklahoma

Page 13 of 46

- "Seller" shall mean the Bidder whose Bid City selected and awarded a contract.
- **P.** "You" or "Your" shall mean the Bidder responding to this Invitation For Bid or the Seller whose Bid the City selected and awarded a contract.
- Q. "Website" shall mean the City of Tulsa's website for the Purchasing Division: www.cityoftulsapurchasing.org.
- 3. QUESTIONS REGARDING INVITATION FOR BID. Questions regarding any portion of this Invitation For Bid must be submitted in writing (sent by mail, fax or email) to the Project Buyer indicated on the Summary Sheet herein. You should submit questions as early as possible and preferably before the pre-Bid conference. Questions and concerns must be received no later than ten (10) days prior to the Bid Packet due date. Any oral responses to questions before the contract is awarded are not binding on City. At City's discretion, any information or clarification made to you may be communicated to other Bidders that notified City of their intent to Bid if appropriate to ensure fairness in the process for all Bidders. You must not discuss questions regarding the Invitation For Bid with anyone other than the Project Buyer or other Purchasing Division staff or your Bid may be disqualified, any contract recommendation or Acceptance may be rescinded, or any contract may be terminated and delivered Goods returned at your expense and City refunded any payments made.
- **4. ORAL STATEMENTS.** No oral statements by any person shall modify or otherwise affect the provisions of this Invitation For Bid and/or any contract resulting therefrom. All modifications, addenda or amendments must be made in writing by City's Purchasing Division.
- 5. **EXAMINATION BY BIDDERS.** You must examine the specifications, drawings, schedules, special instructions and the documents in this Bid Packet prior to submitting any Bid. Failure to examine such documents and any errors made in the preparation of such Bid are at your own risk.
- 6. ADDENDA OR AMENDMENTS TO INVITATIONS FOR BID. City may addend or amend its Invitation For Bid at any time before the Bid Submission Date, and any such addenda or amendments shall become a part of this Agreement. City will attempt to send a notification (by fax or email) of any addenda or amendments to those Bidders who have responded to the City's Project Buyer of their intent to respond to the Invitation For Bid. However, it is your responsibility to inquire about any addenda or amendments, which will be available from the City's Purchasing Division and its website. You must acknowledge receipt of any addenda or amendments by signing and returning the Acknowledgment of Receipt of Addenda/Amendments form and attaching it to this Invitation For Bid with your Bid. City may reject any Bid that fails to acknowledge any addenda or amendments.
- 7. SPECIFICATIONS/DESCRIPTIVE TERMS/SUBSTITUTIONS. Unless the term "no substitute" is used, the City's references to a brand name, manufacturer, make, or catalogue designation in describing an item in this Bid Packet does not restrict you to that brand or model, etc. The City may make such references to indicate the type, character, quality and/or performance equivalent of the item desired. However, you are required to furnish the exact item described in your Bid unless a proposed substitution is clearly noted and described in the Bid.

The parties recognize that technology may change during the period Bids are solicited and subsequent contracts are performed. Therefore, City may at its option accept changes or substitutions to the specifications for Goods of equal or better capabilities at no additional cost to City. In the case of existing contracts, you shall give City 30 days advance notice in writing of any such proposed changes or substitutions. City shall determine whether such items are acceptable as well as any proposed substitute.

All Goods shall be new unless otherwise so stated in the Bid. Any unsolicited alternate Bid, or any changes, insertions, or omissions to the terms and conditions, specifications, or any other requirements of this Bid, may be considered non-responsive and the Bid rejected.

- **8. PRICES/DISCOUNTS.** Prices shall be stated in the units and quantity specified in the Bid Packet documents. In case of discrepancy in computing the Bid amount, you guarantee unit prices to be correct and such unit prices will govern. Prices shall include transportation, delivery, packing and container charges, prepaid by you to the destination specified in the Specifications. Discounts for prompt payment will not be considered in Bid evaluations, unless otherwise specified. However, offered discounts for prompt payment will be taken if payment is made within the discount period.
- **9. DELIVERY.** All prices quoted shall be based on delivery F.O.B. Tulsa, Oklahoma or to any other points as may be designated in the Technical Specifications, with all charges prepaid by Seller to the actual point of delivery. Bids must state the number of days required for delivery under normal conditions.



City of Tulsa, Oklahoma

Page 14 of 46

- 10. TAXES. City is exempt from federal excise and state sales taxes and such taxes shall not be included in the Bid prices.
- 11. BID SUBMISSION. The Bid Packet forms must be prepared in the name of Bidder and properly executed by an Authorized Agent with full knowledge and acceptance of all provisions, in ink and notarized. Bids may not be changed or withdrawn after the deadline for submitting Bids (the "Bid Submission Date"). A Bid is an irrevocable offer and when accepted by City (as evidenced by City's execution of the Purchase Agreement) shall constitute a firm contract.
  - A. <u>BIDS MUST BE SUBMITTED ONLY ON THE BID PACKET FORMS AND SIGNED BY AN AUTHORIZED AGENT.</u>
    THE ENTIRE BID PACKET MUST BE RETURNED AS RECEIVED WITH ALL FORMS COMPLETED. YOU MAY ATTACH, AFTER EXHIBIT A, ANY DOCUMENTS NECESSARY TO COMPLETELY AND ACCURATELY RESPOND TO THE REQUEST. BIDS MUST BE IN STRICT CONFORMANCE WITH ALL INSTRUCTIONS, FORMS. AND SPECIFICATIONS CONTAINED IN THIS BID PACKET.
  - B. Sealed Bids may be either mailed or delivered, but must be received at:

City of Tulsa - Office of City Clerk

175 East 2<sup>nd</sup> Street, Suite 260

Tulsa, Oklahoma 74103

- **C.** Bids will be accepted at the above address from 8:00 a.m. to 5:00 p.m., Monday thru Friday except for City holidays. City is not responsible for the failure of Bids to be received by the City Clerk's Office prior to the due date and time.
- D. Late Bids will be rejected. The Purchasing Agent, in his sole discretion, may make exceptions only for the following reasons:
  - 1. City Hall closed for business for part or all of the day on the date the response was due;
  - 2. If the City deems it appropriate due to large-scale disruptions in the transportation industry that may have prevented delivery as required.
  - 3. If documented weather conditions caused the late delivery. You must provide documentation of such weather to the satisfaction of the Purchasing Agent.
- E. City will not accept faxed Bids, nor will City accept Bids faxed to the City Clerk, Purchasing Division or Office, or any other City office or employee.
- **F.** City is not responsible for any of your costs in preparing the Bid response, attending a pre-Bid conference, or any other costs you incur, regardless of whether the Bid is submitted, accepted or rejected.
- **G.** All Bids must be securely sealed and plainly marked with the Bid Number, Bid Title, and Bid Opening Date on the lower left corner of the outside of the Bid envelope. Your name and address must also be clearly indicated on the envelope.
- H. If submitting multiple options ("Option(s)") to the Invitation for Bid, each will be considered separately requiring each response to be complete and accurate. Each Option must be clearly marked as Option 1 of 3, Option 2 of 3, etc.
- I. The number of copies you must submit is listed on the Summary Sheet in the front of the Bid Packet. However, at a minimum, there will be (1) an original, clearly labeled as such in 1" red letters on the Bid Packet cover page, and (2) a copy for City's Purchasing Division, clearly labeled as such in 1" red letters on the Bid Packet cover page. If binders are used, they must also be labeled.
- J. Multiple boxes or envelopes are permissible, but must not weigh more than 50 pounds. Each box must be labeled as instructed herein and numbered (i.e., Box 1 of 3; Box 2 of 3). The original must be in Box #1.
- K. The original and all copies (either paper or electronic) must be identical in all respects. Bids must be completed and submitted in ink or typewritten. Bids written in pencil will be rejected. Any corrections to the Bids must be initialed in ink.

#### 12. BID REJECTION OR WITHDRAWL.

- A. City may reject any or all Bids, in whole or in part.
- B. A Bid may be rejected if it contains additional terms, conditions, or agreements that modify the requirements of this Invitation For Bid or attempts to limit Bidder's liability to the City.
- C. A Bid may be rejected if Bidder is currently in default to City on any other contract or has an outstanding indebtedness of any kind to City.
- D. City reserves the right to waive any formalities or minor irregularities, defects, or errors in Bids.
- E. Bid withdrawal may only be accomplished by an Authorized Agent requesting the withdrawal in person at the City Clerk's office before the City's close of business on the Bid Submission Date.
- **BID RESULTS.** A tabulation of Bids received will be made available on the City's Purchasing Division website generally within 5 working days after the Bid Opening Date. After a contract award is recommended to the Mayor, a copy of the Bid summary will be available in the City Clerk's Office. Bid results are not provided in response to telephone or email inquiries.
- **PURCHASE ORDER.** In the event that the successful Bid is for an amount less than One Hundred Thousand Dollars (\$100,000), and it is determined by the City to be in the best interests of the City, the City, in its sole discretion, may issue a Purchase Order rather than execute the Purchase Agreement to purchase the Goods. If a Purchase Order is issued, however, the terms of the Bid Packet documents, including the Purchase Agreement, will govern the transaction and be enforceable by the City and Bidder/Seller.



City of Tulsa, Oklahoma

Page 15 of 46

- 15. CONTRACT AWARD. If a contract is awarded, it will be awarded to the Bidder that City determines is the lowest secure Bidder meeting specifications. Such Bid analysis will consider price and other factors, such as Bidder qualifications and financial ability to perform the contract, as well as operating costs, delivery time, maintenance requirements, performance data, history of contract relations with City, and guarantees of materials and equipment, as applicable. A complete list of the factors that are considered is set forth in Tulsa Revised Ordinances, Title 6, Ch. 4, §406E. Unless otherwise noted, City reserves the right to award a contract by item, one or more groups of items, or all the items in the Bid, whichever is in City's best interest.
- **16. IRS FORM W-9.** If City selects your Bid and awards a contract to you, you will have ten (10) days from notification of the award to provide City with your complete IRS Form W-9.
- 17. NOTICE TO PROCEED. If City accepts your Bid and executes the Purchase Agreement, you shall not commence work until authorized to do so by the Purchasing Agent or his representative. Receipt of a Purchase Order from the City is notice to proceed.
- **18. PAYMENTS.** Invoices should be e-mailed to City of Tulsa Accounts Payable at:

#### apinvoices@cityoftulsa.org

Payment will be made Net 30 days after receipt of a properly submitted invoice or the City's Acceptance of the Goods and/or Services, whichever is later, unless City decides to take advantage of any prompt payment discount included in the Bid.

国人人

THE REST OF THIS PAGE LEFT INTENTIONALLY BLANK

TULS



City of Tulsa, Oklahoma

Page 16 of 46

#### **SPECIAL REQUIREMENTS**

	Irrevocable Offer Period.			3			- · · · · ·		and irrevoca	able from th	١e
Ci	ty's close of business on the	Bid Submission	Date until	<u> 365</u>	days after	r the Bid C	pening [	Date.			

- 2. General Liability/Indemnification. You shall hold City harmless for any loss, damage or claims arising from or related to your performance of the Purchase Agreement. You must exercise all reasonable and customary precautions to prevent any harm or loss to all persons and property related to the Purchase Agreement. You agree to indemnify and hold the City harmless from all claims, demands, causes of action or suits of whatever nature arising out of the Goods, Services, labor, or materials furnished by you or your subcontractors under the provisions of the Bid Packet documents.
- 3. Liens. Pursuant to City's Charter (Art. XII, §5), no lien of any kind shall exist against any property of City. Bidder shall deliver all goods to City free and clear of liens. Delivery by Seller to City of goods which are subject to liens under the Purchase Agreement shall be a material breach of the Purchase Agreement and all damages and costs incurred by City as a result of the existence of such liens shall be paid to City by Seller. At City's option, City may return such goods to Seller and Seller shall pay the cost of returning such goods and reimburse City for any payments made for such goods.

4. Insurance. 🗈	f checked "Yes,"	the following insurance is <b>required:</b>	Yes: N	lo: _X

Seller and its subcontractors must obtain at Seller's expense and keep in effect during the term of the Purchase Agreement, including any renewal periods, policies of General Liability insurance in the minimum amounts set forth below and Workers' Compensation insurance in the statutory limits required by law.

Personal injury, each person	\$ 175,000.00
Property damage, each person	\$ 25,000.00
Auto Liability, each occurrence	\$ 1,000,000.00
Personal injury and property damage, each occurrence	\$ 1,000,000.00
Workers' Compensation	(Statutory limits)

## SELLER'S INSURER MUST BE AUTHORIZED TO TRANSACT BUSINESS IN THE STATE OF OKLAHOMA.

You will have 10 days after notification that your Bid was selected for contract award by City to provide proof of such coverage by providing the assigned Project Buyer shown on the Summary Sheet of this Bid Packet with a Certificate of Insurance. The Certificate of Insurance must be completed with the following information:

- A. Your name
- B. Insurer's name and address
- C. Policy number
- D. Liability coverage and amounts
- E. Commencement and expiration dates
- F. Signature of authorized agent of insurer
- G. Invitation for Bid number

The Seller shall not cause any required insurance policy to be cancelled or to permit it to lapse. It is the responsibility of Seller to notify City of any change in coverage or insurer by providing City with an updated Certificate of Liability Insurance. Failure of Seller to comply with the insurance requirements herein may be deemed a breach of the Purchase Agreement. Further, a Seller who fails to keep required insurance policies in effect may be deemed to be ineligible to bid on future projects, ineligible to respond to invitations for bid, and/or ineligible to engage in any new purchase agreements

5.	Bonding. A.		is checked "Yes," the Bid Bond is required:
		Yes:	No: _X_
	B.	Performance Bond.	If the box is checked "Yes," the Performance Bond is <b>required:</b>
		Yes:	No: _X_



City of Tulsa, Oklahoma

Page 17 of 46

Yes:X No:  7. Purchase Card: Is the City of Tulsa Purchasing Card acceptable (This is a Visa):  Yes: No:  For each reference, the following information must be included: Company Name, Contact Name, Address, Phone Number, E-Mail Address, and the nature of their relationship with the Bidder.  Company Name: Contact Name: Address: Phone Number: Email Address: Description of Products/Services
Yes: No:  For each reference, the following information must be included: Company Name, Contact Name, Address, Phone Number, E-Mail Address, and the nature of their relationship with the Bidder.  Company Name:  Contact Name:  Address:  Phone Number:  Email Address:
For each reference, the following information must be included: Company Name, Contact Name, Address, Phone Number, E-Mail Address, and the nature of their relationship with the Bidder.  Company Name: Contact Name: Address: Phone Number: Email Address:
Number, E-Mail Address, and the nature of their relationship with the Bidder.  Company Name: Contact Name: Address: Phone Number: Email Address:
Number, E-Mail Address, and the nature of their relationship with the Bidder.  Company Name: Contact Name: Address: Phone Number: Email Address:
Company Name: Contact Name: Address: Phone Number: Email Address:
Contact Name: Address: Phone Number: Email Address:
Contact Name: Address: Phone Number: Email Address:
Phone Number: Email Address:
Email Address:
Description of Products/Services
Provided:
Company Name:
Contact Name:
Address:
Phone Number:
Email Address:
Description of Products/Services
Provided:
Company Name:
Contact Name:
Address:
Phone Number:
Email Address:
Description of Products/Services
Provided:

#### THE REST OF THIS PAGE LEFT INTENTIONALLY BLANK



City of Tulsa, Oklahoma

Page 18 of 46

#### **TECHNICAL SPECIFICATIONS**

It is the intent during the agreement period, as nearly as possible, to purchase all the requirements for two-wheel drive and four-wheel drive backhoe(s) bid from the firm(s) to which the agreement is awarded.

All equipment bid shall be new and the latest production model. Brochures and/or specification literature clearly describing the unit(s) and verifying that the unit(s) meet or exceed the requirements of this specification should accompany each bid proposal. Warranty and delivery information should be provided with the bid proposal. Any Manufacturer's name and model called out in this IFB is intended to set the quality and design of equipment desired and is not meant to limit bidding on products of equal quality. Any exceptions to or deviations from the specifications set forth in the IFB should be clearly described in the bidder's proposal. During a standard warranty period or for any extended warranty no deductibles, upcharges, overtime, mileage, freight or charges for parts and service shall be charged to the City of Tulsa pertaining to warranty repairs.

For the purposes of bid evaluations, all options will be considered in the overall bid award.

#### **SPECIFICATIONS:**

In Section 2 (Bidder's Proposal Column); The bidder shall respond to each minimum requirement (section 1) in the space provided under Section 2 whenever asked to "describe", the description may include details such as size, capacities, dimensions, materials used in construction, etc. A full and complete description is required to reasonably evaluate the bid, so all pertinent information is required. When referring to attached literature as a means of not fully describing items, misinterpretations by the evaluator of the bid may occur and result in not having the bid awarded. Your ability to present the City with enough information to reasonably understand the item being bid and whether it meets the specifications stated relies on the written information provided.

You are requested to describe your proposal in the Bidders column, you may not respond in the space provided as to whether you meet the specifications by responding with terms as "yes", "Meets", "same as", "complies" or "similar" terms. If these terms are utilized, it may result in your bid being considered as Non-Compliant and being rejected.

You must include descriptive manufacturer's literature verifying the information you provided in the bidder's proposal section. Failure to provide such literature may result in your bid being considered as Non-Compliant, and possibly being rejected.

If your bid is an alternate approach and does not fully meet the specifications, completely describe your alternate approach.

The manufacturer shall warrant each piece of equipment and related parts to be of good material and workmanship and to promptly replace any part or parts which by reason of defective materials or workmanship shall fail under normal use, free of negligence or accident, for a minimum of one (1) year from the date of delivery, unless otherwise stated. In addition, if such failures take place outside the dealer's service area, which shall be defined as Tulsa city limits, the seller will be responsible for reimbursing the nearest manufacturer's authorized dealer for services rendered under this warranty.

The seller shall respond within 72 hours, of notification by the City of Tulsa, on when, where and how a warranty issue will be resolved. In the event there is no response within 72 hours, or if the response is not acceptable to the City of Tulsa; the City will provide or arrange for repairs. The seller shall be responsible for reimbursing the nearest manufacturer's authorized dealer in the city of Tulsa for services rendered under this warranty.

The seller shall have the option to authorize the City of Tulsa to perform minor warranty replacement and repairs and then reimburse the City for its labor and parts utilized to enact the repair. The reimbursement for labor will be the same rate as that of the actual work performed. Standard warranty information is to be supplied with the bid.



City of Tulsa, Oklahoma

Page 19 of 46

#### **DELIVERY REQUIREMENTS:**

Unless otherwise agreed to in writing; Seller shall transport the vehicles to and from the Seller's location for mounting of
equipment and accessories with no additional charges to the City. Seller shall bear the cost of all transportation
associated with warranty repairs. If Sellers location is outside of Tulsa County, Seller shall supply the name of the local
factory authorized repair facility. The factory authorized warranty repair facility shall be contacted for verification prior to
awarding the bid. This information shall be part of the bid evaluation process. Failure to comply will affect the award of bid.

The Seller shall deliver all equipment fully assembled and operational with all items such as mounting brackets, fluids
such as oil and fuel, batteries, etc. installed upon delivery. No crated or non-operational equipment requiring assembly or
adjustments of any kind shall be accepted. Seller will be required to operate the equipment and demonstrate all features
and operational modes to the City of Tulsa personnel.

Absolutely no items over 500lbs. may be directly shipped to the City of Tulsa requiring the City personnel to unload from the shipping truck or trailer. The City of Tulsa carries no responsibility for any damages incurred during an unloading occurrence. The City of Tulsa does not have unloading docks or the proper equipment to assist in this area. All unloading shall be the responsibility of the seller and/or shipping entity.

#### **TESTS AND ACCEPTABILITY OF MATERIAL:**

All items included in the bid are subject to a performance demonstration within 30 days of the bid date by the bidder(s) at the discretion of the City of Tulsa. A like item of the type bid that contains all the safety concerns, horsepower ratings, accessories, dimensions or other features as deemed appropriate by the City of Tulsa may be required to be demonstrated to the City of Tulsa personnel prior to award of the bid to establish if the item meets the requirements & specifications of the City of Tulsa. These demonstrations may be held in direct competition with other bidders whom bid the same items and equipment.

Section 1 Item 1	Specifications (Minimum)	Section 2 Bidders Proposal
General		Describe:
	This specification is for a new current year	Make:
	model of Two (2) wheel drive Backhoe/ front	Model:
	end loader	
	1''	
	/////	Describe:
	Type: OSHA. approved ROPS, totally	1
	enclosed, all weather protected cab.	
	2. Fully insulated.	2
Operator	3. Tilt steering.	3
Compartment	4. Windows: Full visibility. Any removable or	4
	sliding windows to have locks.	
	5. Rear view mirror.	5
	6. Seat type: Heavy Duty, vinyl covered air	6
	ride seat, full foam, deluxe, adjustable with	



City of Tulsa, Oklahoma Page 20 of 46

	seat belt.	
	7. Ventilation fan.	7
	8. Heater/defroster: include.	8
	9. Air conditioning: include.	9
	10. Windshield wipers: 2-speed with washer	10
	(front).	4
	11. Controls: manufacturer's standard.	11
	A. Additional instructions include:	<u>A</u>
	Pressurized cab.	***
	B. Sound proofing to OSHA approved	B
	sound level of 85dba.	**
	12. Two (2) cab doors for entry and safety.	12
	13. Two (2) doors with locks, each door	13
	opening size to be a minimum of 35" in	98
	width with safety hand rails on door and	
	cab.	
	14. AM FM Weather radio	14
		Describe:
	Instrument panel shall include the following	
	gauges:	
	1. Fuel level gauge.	1
	2. Coolant temperature.	2
In atm was a set	3. Volt Meter.	3
Instrument Panel	4. Tachometer.	4
	5. Hour-meter.	5
	6. Oil pressure.	6
	Include gauge covers for vandalism protection.	
	All alarms to include both audible and visual	
	warning.	
		Describe:
	1. Fuel; Diesel.	1
	Emissions; Tier IV Final compliant.	2
Engine	3. Cylinders: Four (4).	3
Liigiiie	Net Horsepower; 90 HP turbocharged	4_
	minimum.	
	5. Air Cleaner(s); Dry-type, dual replaceable	5
	( ), ) )   -   -   -   -   -   -   -   -   -	



City of Tulsa, Oklahoma Page 21 of 46

	element(s), with restriction indicator.	
	6. Oil Filter(s); Full flow, spin-on type, with	6
	pressurized lubrication.	
	7. Fuel Filter(s); Primary and secondary.	7
	8. Water Separator; In-line.	8
	9. Starting Aid; 110 Volt, 1000-Watt electric	9
	block heater.	( ) X
	10. Exhaust System: vertical with spark	10
	arresting muffler.	T × *
	/ * * / K 3	**
	/ * * / S · ·	Describe:
	Transmission type: power shift or auto shift	1
	w/ shuttle.	**
	2. Forward speeds: Four (4).	2
Powertrain	3. Reverse speeds: Three (3) or four (4).	3
	4. Torque converter: Required.	4
	5. Reversing unit: Hydraulic.	<u>5</u>
	6. Final drive: Inboard or outboard planetary.	6
		Describe:
Operating	16,000 – 17,000 LB. approx.	Describe:
Weight	10,000 – 17,000 св. арргох.	
	141 41 1	Describe:
	Radiator capacity: largest capacity	1
	available from the manufacturer.	/ 2/
Cooling System	2. Coolant recovery system: to be included.	2
	Include: Anti-freeze protection to -30	
	degrees fahrenheit.	
		Describe:
	1. Voltage: 12 Volt system.	1
	2. Battery(s) quantity: Manufacturer's	2
	standard.	
□ otvice!	3. Battery(s) CCA: 1500 total minimum.	3
Electrical System	4. Alternator: 100 Amp hours minimum.	4
,	5. Head lamps: Two (2).	5
	6. Tail lights: Two (2) LED.	6
	7. Turn signals: Two (2) LED.	7
	8. Flashing lights: Include (2).	8



## City of Tulsa, Oklahoma

Page 22 of 46

	<ol> <li>Working lights: Include (4) adjustable work lights on front and rear of cab and side lighting for a 360-degree lighting of work area. All work lights to be LED.</li> <li>Strobe lights: include One (1) Code 3, Part number L1200 low profile 4 ½" high amber strobe-light, or equivalent, mounted on top of cab with dash mounted switch. Beacons not acceptable.</li> </ol>	10
Brake System	<ol> <li>Service brakes: fully enclosed wet disk.</li> <li>Parking brakes: must neutralize reverser when applied and automatically apply when engine is stopped to prevent machine roll off if hand applied brake is disengaged &amp; to prevent operator drive thru on machine start up. No cable brakes or manual neutralizer.</li> </ol>	Describe: 1 2
Steering	Type: Hydrostatic power.	Describe: 1
Tires	1. Front: 12.5/80-18 10 Ply. 2. Rear: 19L-24 8 Ply.	Describe: 1 2
Hydraulic	<ol> <li>Hydraulic pump: Gear driven or variable piston.</li> <li>Hydraulic pump capacity: 35 gpm. @ 2200 rpm.</li> <li>Filtration: Spin on type.</li> <li>Hydraulic lines: Steel &amp; rubber.</li> <li>Additional instructions:         <ul> <li>Hydraulic system shall be as required to sufficiently operate loader and backhoe Simultaneously.</li> <li>Backhoe boom and crowd cylinders:</li> </ul> </li> </ol>	Describe: 1 2 3 4 5



# Invitation For Bid IFB 20-830 4 Wheel Drive Backhoe Water & Sewer Issued: April 23, 2020 Must be equipped with safety holding

## City of Tulsa, Oklahoma

Page 23 of 46

	must be equipped with safety flording
	valves to prevent release of load in event of
	hydraulic line failure. As per attached City
	of Tulsa standard no. 000081 & ISO
	standard 8643. Bidder must state if the unit
	is equipped with the holding valves as
	outlined per the attached regulations and
	standards. Bidder must demonstrate
	that the unit is equipped with the holding
	valves as outlined per the attached
	regulations and standards. The
	demonstration shall be performed
	before award of the bid. If the type of
	machine with the holding valves has
	been previously demonstrated to the
	City of Tulsa and shown to meet the city
	standard and the iso 8643 regulations
	another demonstration will not be
	required.
	7. Hydraulics with quick-disconnects shall be 7
	plumbed to middle of dipper for mounted
	tools.
	Describe:
	1. Bucket type: heavy-duty general 1
	purpose. 2. Bucket capacity heaped: 1.25 cubic yard
	minimum. 3 3. Bucket width: 92 inches approx. 4
	4. Lift capacity full height: 7000 lbs. approx. 5
Loader	5. Height to bucket hinge pin raised: 11 ft.
	approx. 6
	6. Bucket roll back at ground-line 37-40
	degrees approx.
	7. Breakout force: 10,000 lbs. approx.
	8. Digging depth below ground line bucket
	flat: 3 - 5.0 inches approx.
	5 5.5 monos approxi



City of Tulsa, Oklahoma

Page 24 of 46

degree dump: 8 feet minimum.  10. Dump reach at full height 45-degree dump: 32-36 inches approx.  11. Loaded bucket rose to a maximum height: 4.9 seconds approx.  12. Additional instructions to include: A. Single lever control. B. Bucket self-leveling w/level indicator and auto return to dig. C. Nitrogen shock absorber system on front loader for roading equipment safely from one location to another.  1. Bucket type: heavy-duty trenching with four (4) replaceable teeth. 2. Bucket width: 24 inches. 3. Bucket connection: Rigid type, universal quick coupler compatible with older Caterpillar, Case, & Deere. 4. Digging depth: 18 feet approx. 5. Overall reach from rear axle centerfine: 25 feet. 6. Loading height: 14 ft. approx. 7. Swing arc: 180 degrees. 8. Loading reach: 7 feet approx. 9. Bucket rotation: 190 degrees. 10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions. A. Operating position: 10 feet approx. B. Transport position: 7 feet to 7-½ feet approx. C. Stabilizer pads to be flip over style with rubber on one side. 11. Digging force: 11.		9. Dump clearance at full height approx. 45-	9
dump: 32-36 inches approx.  11. Loaded bucket rose to a maximum height: 4.9 seconds approx.  12. Additional instructions to include:  A. Single lever control.  B. Bucket self-levelling wlevel indicator and auto return to dig.  C. Nitrogen shock absorber system on front loader for roading equipment safely from one location to another.  1. Bucket type: heavy-duty trenching with four (4) replaceable teeth.  2. Bucket width: 24 inches.  3. Bucket connection: Rigid type, universal quick coupler compatible with older Caterpillar, Case, & Deere.  4. Digging depth: 18 feet approx.  5. Overall reach from rear axile centerline: 25 feet.  6. Loading height: 14 ft. approx.  7. Swing are: 180 degrees.  8. Loading reach: 7 feet approx.  9. Bucket rotation: 190 degrees.  10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions.  A. Operating position: 10 feet approx.  B. Transport position: 7 feet to 7-½ feet approx.  C. Stabilizer pads to be flip over style with rubber on one side.		·	
11. Loaded bucket rose to a maximum height: 4.9 seconds approx.  12. Additional instructions to include: A. Single lever control. B. Bucket self-levelling wilevel indicator and auto return to dig. C. Nitrogen shock absorber system on front loader for roading equipment safely from one location to another.  1. Bucket type: heavy-duty trenching with four (4) replaceable teeth. 2. Bucket width: 24 inches. 3. Bucket connection: Rigid type, universal quick coupler compatible with older Caterpillar, Case, & Deere. 4. Digging depth: 18 feet approx. 5. Overall reach from rear axle centerline: 25 feet. 6. Loading height: 14 ft. approx. 7. Swing are: 180 degrees. 8. Loading reach: 7 feet approx. 9. Bucket rotation: 190 degrees. 10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions. A. Operating position: 10 feet approx. B. Transport position: 7 feet to 7-½ feet approx. C. Stabilizer pads to be flip over style with rubber on one side.			10
height: 4.9 seconds approx.  12. Additional instructions to include: A. Single lever control. B. Bucket self-leveling wilevel indicator and auto return to dig. C. Nitrogen shock absorber system on front loader for roading equipment safely from one location to another.  1. Bucket type: heavy-duty trenching with four (4) replaceable teeth. 2. Bucket width: 24 inches. 3. Bucket connection: Rigid type, universal quick coupler compatible with older Caterpillar, Case, & Deere. 4. Digging depth: 18 feet approx. 5. Overall reach from rear axle centerline: 25 feet. 6. Loading height: 14 ft. approx. 7. Swing arc: 180 degrees. 8. Loading reach: 7 feet approx. 9. Bucket rotation: 190 degrees. 10. Stabilizer spread with hydraulic lockouts to prevent driff in work & transport positions. A. Operating position: 10 feet approx. B. Transport position: 7 feet to 7-½ feet approx. C. Stabilizer pads to be flip over style with rubber on one side.			
12. Additional instructions to include:  A. Single lever control.  B. Bucket self-leveling wlevel indicator and auto return to dig.  C. Nitrogen shock absorber system on front loader for roading equipment safely from one location to another.  1. Bucket type: heavy-duty trenching with four (4) replaceable teeth. 2. Bucket width: 24 inches. 3. Bucket connection: Rigid type, universal quick coupler compatible with older Caterpillar, Case, & Deere. 4. Digging depth: 18 feet approx. 5. Overall reach from rear axle centerline: 25 feet. 6. Loading height: 14 ft. approx. 7. Swing arc: 180 degrees. 8. Loading reach: 7 feet approx. 9. Bucket rotation: 190 degrees. 10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions. A. Operating position: 10 feet approx. B. Transport position: 7 feet to 7-½ feet approx. C. Stabilizer pads to be flip over style with rubber on one side.			11
A. Single lever control. B. Bucket self-leveling w/level indicator and auto return to dig. C. Nitrogen shock absorber system on front loader for roading equipment safely from one location to another.  1. Bucket type: heavy-duty trenching with four (4) replaceable teeth. 2. Bucket width: 24 inches. 3. Bucket connection: Rigid type, universal quick coupler compatible with older Caterpillar, Case, & Deere. 4. Digging depth: 18 feet approx. 5. Overall reach from rear axle centerline: 25 feet. 6. Loading height: 14 ft. approx. 7. Swing arc: 180 degrees. 8. Loading reach: 7 feet approx. 9. Bucket rotation: 190 degrees. 10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions. A. Operating position: 10 feet approx. B. Transport position: 10 feet approx. C. Stabilizer pads to be flip over style with rubber on one side.			* *
B. Bucket self-leveling wilevel indicator and auto return to dig.  C. Nitrogen shock absorber system on front loader for roading equipment safely from one location to another.  1. Bucket type: heavy-duty trenching with four (4) replaceable teeth. 2. Bucket width: 24 inches. 3. Bucket connection: Rigid type, universal quick coupler compatible with older Caterpillar, Case, & Deere. 4. Digging depth: 18 feet approx. 5. Overall reach from rear axle centerline: 25 feet. 6. Loading height: 14 ft. approx. 7. Swing arc: 180 degrees. 8. Loading reach: 7 feet approx. 9. Bucket rotation: 190 degrees. 10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions. A. Operating position: 10 feet approx. B. Transport position: 7 feet to 7-½ feet approx. C. Stabilizer pads to be flip over style with rubber on one side.		T V T	
and auto return to dig.  C. Nitrogen shock absorber system on front loader for roading equipment safely from one location to another.  1. Bucket type: heavy-duty trenching with four (4) replaceable teeth. 2. Bucket width: 24 inches. 3. Bucket connection: Rigid type, universal quick coupler compatible with older Caterpillar, Case, & Deere. 4. Digging depth: 18 feet approx. 5. Overall reach from rear axle centerline: 25 feet. 6. Loading height: 14 ft. approx. 7. Swing arc: 180 degrees. 8. Loading reach: 7 feet approx. 9. Bucket rotation: 190 degrees. 10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions. A. Operating position: 10 feet approx. B. Transport position: 7 feet to 7-% feet approx. C. Stabilizer pads to be flip over style with rubber on one side.			T ×
C. Nitrogen shock absorber system on front loader for roading equipment safely from one location to another.  1. Bucket type: heavy-duty trenching with four (4) replaceable teeth. 2. Bucket width: 24 inches. 3. Bucket connection: Rigid type, universal quick coupler compatible with older Caterpillar, Case, & Deere. 4. Digging depth: 18 feet approx. 5. Overall reach from rear axle centerline: 25 feet. 6. Loading height: 14 ft. approx. 7. Swing are: 180 degrees. 8. Loading reach: 7 feet approx. 9. Bucket rotation: 190 degrees. 10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions. A. Operating position: 10 feet approx. B. Transport position: 7 feet to 7-1/2 feet approx. C. Stabilizer pads to be flip over style with rubber on one side.		DY A	В
front loader for roading equipment safely from one location to another.  1. Bucket type: heavy-duty trenching with four (4) replaceable teeth. 2. Bucket width: 24 inches. 3. Bucket connection: Rigid type, universal quick coupler compatible with older Caterpillar, Case, & Deere. 4. Digging depth: 18 feet approx. 5. Overall reach from rear axle centerline: 25 feet. 6. Loading height: 14 ft. approx. 7. Swing arc: 180 degrees. 8. Loading reach: 7 feet approx. 9. Bucket rotation: 190 degrees. 10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions. A. Operating position: 10 feet approx. B. Transport position: 7 feet to 7-1/4 feet approx. C. Stabilizer pads to be flip over style with rubber on one side.		and auto return to dig.	**
safely from one location to another.  1. Bucket type: heavy-duty trenching with four (4) replaceable teeth. 2. Bucket width: 24 inches. 3. Bucket connection: Rigid type, universal quick coupler compatible with older Caterpillar, Case, & Deere. 4. Digging depth: 18 feet approx. 5. Overall reach from rear axle centerline: 25 feet. 6. Loading height: 14 ft. approx. 7. Swing arc: 180 degrees. 8. Loading reach: 7 feet approx. 9. Bucket rotation: 190 degrees. 10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions. A. Operating position: 10 feet approx. B. Transport position: 7 feet to 7-½ feet approx. C. Stabilizer pads to be flip over style with rubber on one side.		C. Nitrogen shock absorber system on	<u>C</u>
1. Bucket type: heavy-duty trenching with four (4) replaceable teeth. 2. Bucket width: 24 inches. 3. Bucket connection: Rigid type, universal quick coupler compatible with older Caterpillar, Case, & Deere. 4. Digging depth: 18 feet approx. 5. Overall reach from rear axle centerline: 25 feet. 6. Loading height: 14 ft. approx. 7. Swing arc: 180 degrees. 8. Loading reach: 7 feet approx. 9. Bucket rotation: 190 degrees. 10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions. A. Operating position: 10 feet approx. B. Transport position: 7 feet to 7-½ feet approx. C. Stabilizer pads to be flip over style with rubber on one side.		front loader for roading equipment	
1. Bucket type: heavy-duty trenching with four (4) replaceable teeth. 2. Bucket width: 24 inches. 3. Bucket connection: Rigid type, universal quick coupler compatible with older Caterpillar, Case, & Deere. 4. Digging depth: 18 feet approx. 5. Overall reach from rear axle centerline: 25 feet. 6. Loading height: 14 ft. approx. 7. Swing arc: 180 degrees. 8. Loading reach: 7 feet approx. 9. Bucket rotation: 190 degrees. 10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions. A. Operating position: 10 feet approx. B. Transport position: 7 feet to 7-½ feet approx. C. Stabilizer pads to be flip over style with rubber on one side.		safely from one location to another.	38 \**\
1. Bucket type: heavy-duty trenching with four (4) replaceable teeth. 2. Bucket width: 24 inches. 3. Bucket connection: Rigid type, universal quick coupler compatible with older Caterpillar, Case, & Deere. 4. Digging depth: 18 feet approx. 5. Overall reach from rear axle centerline: 25 feet. 6. Loading height: 14 ft. approx. 7. Swing arc: 180 degrees. 8. Loading reach: 7 feet approx. 9. Bucket rotation: 190 degrees. 10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions. A. Operating position: 10 feet approx. B. Transport position: 7 feet to 7-½ feet approx. C. Stabilizer pads to be flip over style with rubber on one side.		* 13 0	Describe
(4) replaceable teeth.  2. Bucket width: 24 inches.  3. Bucket connection: Rigid type, universal quick coupler compatible with older Caterpillar, Case, & Deere.  4. Digging depth: 18 feet approx.  5. Overall reach from rear axle centerline: 25 feet.  6. Loading height: 14 ft. approx.  7. Swing arc: 180 degrees.  8. Loading reach: 7 feet approx.  9. Bucket rotation: 190 degrees.  10. Stabilizer spread with hydraulic lockouts to prevent driff in work & transport positions.  A. Operating position: 10 feet approx.  B. Transport position: 7 feet to 7-½ feet approx.  C. Stabilizer pads to be flip over style with rubber on one side.		1. Rucket type: heavy-duty tranching with four	
2. Bucket width: 24 inches. 3. Bucket connection: Rigid type, universal quick coupler compatible with older Caterpillar, Case, & Deere. 4. Digging depth: 18 feet approx. 5. Overall reach from rear axle centerline: 25 feet. 6. Loading height: 14 ft. approx. 7. Swing arc: 180 degrees. 8. Loading reach: 7 feet approx. 9. Bucket rotation: 190 degrees. 10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions. A. Operating position: 10 feet approx. B. Transport position: 7 feet to 7-½ feet approx. C. Stabilizer pads to be flip over style with rubber on one side.			
3. Bucket connection: Rigid type, universal quick coupler compatible with older Caterpillar, Case, & Deere. 4. Digging depth: 18 feet approx. 5. Overall reach from rear axle centerline: 25 feet. 6. Loading height: 14 ft. approx. 7. Swing arc: 180 degrees. 8. Loading reach: 7 feet approx. 9. Bucket rotation: 190 degrees. 10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions. A. Operating position: 10 feet approx. B. Transport position: 7 feet to 7-½ feet approx. C. Stabilizer pads to be flip over style with rubber on one side.		, ,	2
quick coupler compatible with older Caterpillar, Case, & Deere.  4. Digging depth: 18 feet approx. 5. Overall reach from rear axle centerline: 25 feet. 6. Loading height: 14 ft. approx. 7. Swing arc: 180 degrees. 8. Loading reach: 7 feet approx. 9. Bucket rotation: 190 degrees. 10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions. A. Operating position: 10 feet approx. B. Transport position: 7 feet to 7-½ feet approx. C. Stabilizer pads to be flip over style with rubber on one side.			
Caterpillar, Case, & Deere.  4. Digging depth: 18 feet approx.  5. Overall reach from rear axle centerline: 25 feet.  6. Loading height: 14 ft. approx.  7. Swing arc: 180 degrees.  8. Loading reach: 7 feet approx.  9. Bucket rotation: 190 degrees.  10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions.  A. Operating position: 10 feet approx.  B. Transport position: 7 feet to 7-½ feet approx.  C. Stabilizer pads to be flip over style with rubber on one side.			5
4. Digging depth: 18 feet approx. 5. Overall reach from rear axle centerline: 25 feet. 6. Loading height: 14 ft. approx. 7. Swing arc: 180 degrees. 8. Loading reach: 7 feet approx. 9. Bucket rotation: 190 degrees. 10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions. A. Operating position: 10 feet approx. B. Transport position: 7 feet to 7-½ feet approx. C. Stabilizer pads to be flip over style with rubber on one side.			
5. Overall reach from rear axle centerline: 25 feet. 6. Loading height: 14 ft. approx. 7. Swing arc: 180 degrees. 8. Loading reach: 7 feet approx. 9. Bucket rotation: 190 degrees. 10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions. A. Operating position: 10 feet approx. B. Transport position: 7 feet to 7-½ feet approx. C. Stabilizer pads to be flip over style with rubber on one side.			4
feet. 6. Loading height: 14 ft. approx. 7. Swing arc: 180 degrees. 8. Loading reach: 7 feet approx. 9. Bucket rotation: 190 degrees. 10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions. A. Operating position: 10 feet approx. B. Transport position: 7 feet to 7-½ feet approx. C. Stabilizer pads to be flip over style with rubber on one side.			
To Swing arc: 180 degrees.  8. Loading reach: 7 feet approx.  9. Bucket rotation: 190 degrees.  10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions.  A. Operating position: 10 feet approx.  B. Transport position: 7 feet to 7-½ feet approx.  C. Stabilizer pads to be flip over style with rubber on one side.			5
8. Loading reach: 7 feet approx.  9. Bucket rotation: 190 degrees.  10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions.  A. Operating position: 10 feet approx.  B. Transport position: 7 feet to 7-½ feet approx.  C. Stabilizer pads to be flip over style with rubber on one side.		6. Loading height: 14 ft. approx.	6
8. Loading reach: 7 feet approx.  9. Bucket rotation: 190 degrees.  10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions.  A. Operating position: 10 feet approx.  B. Transport position: 7 feet to 7-½ feet approx.  C. Stabilizer pads to be flip over style with rubber on one side.	Backhoe	7. Swing arc: 180 degrees.	7
10. Stabilizer spread with hydraulic lockouts to prevent drift in work & transport positions.  A. Operating position: 10 feet approx.  B. Transport position: 7 feet to 7-½ feet approx.  C. Stabilizer pads to be flip over style with rubber on one side.		8. Loading reach: 7 feet approx.	8
lockouts to prevent drift in work & transport positions.  A. Operating position: 10 feet approx.  B. Transport position: 7 feet to 7-½ feet approx.  C. Stabilizer pads to be flip over style with rubber on one side.		9. Bucket rotation: 190 degrees.	9
positions.  A. Operating position: 10 feet approx.  B. Transport position: 7 feet to 7-½ feet approx.  C. Stabilizer pads to be flip over style with rubber on one side.		10. Stabilizer spread with hydraulic	10
A. Operating position: 10 feet approx.  B. Transport position: 7 feet to 7-½ feet approx.  C. Stabilizer pads to be flip over style with rubber on one side.		lockouts to prevent drift in work & transport	
B. Transport position: 7 feet to 7-½ feet  approx.  C. Stabilizer pads to be flip over style with rubber on one side.		positions.	
approx.  C. Stabilizer pads to be flip over style with rubber on one side.		A. Operating position: 10 feet approx.	A
C. Stabilizer pads to be flip over style with rubber on one side.		B. Transport position: 7 feet to 7-1/2 feet	B
rubber on one side.		approx.	
		C. Stabilizer pads to be flip over style with	
11. Digging force: 11		rubber on one side.	
		11. Digging force:	11



## City of Tulsa, Oklahoma Page 25 of 46

	A. Bucket cylinder, 15,000 lb. approx.	A
	B. Dipper cylinder, 8,000 lb. approx.	В
	12. Leveling angle (max. Slope on which	12
	backhoe will make vertical cut):14-	
	degrees.	
	13. Lift capacity at top of lift height: 4900 lbs.	13
	approx. retracted.	
	14. Lift capacity anywhere within full swing	14
	arc: 2,000 lb. approx. extended	* * *
	15. Extendable dipper-stick: To be included.	15
	16. Additional instructions:	16
	Include two sets of hydraulic quick-	
	connecting fittings and lines for the use of	\**
	hydraulic tools, etc. On middle of dipper-	98 1
	stick. Auxiliary hydraulics for hyd. hammer	
	w/adjustable valve, clam shell buckets	*
	such as the Helac Powergrip.	*
	17. Controls for backhoe shall be two lever	17
	pilot controls as to not restrict an	
	operator's operational knowledge to any	
	machine.	
		1111
		Describe:
	Overall transport length: 23 ft. approx.	1 7 7 7 7
	2. Overall transport width: 7 ft. 5 in. approx.	2
	3. Ground clearance at backhoe mainframe:	3
Dimensions	13 in.	
	Operating weight including cab and	4
	extendable dipper-stick: 16,000 lb. approx.	0.
	5. Unit must be able to fit on standard trailer.	5
	(dual axle flat deck trailer)	
		Describe:
Fluid Capacities	1. Fuel capacity: 36 gallons approx.	1
	2. Hydraulic capacity: 24 gallons approx.	2
		Describe:
Color	Manufacturer's standard	



City of Tulsa, Oklahoma Page 26 of 46

		Describe:
Additional	Backup alarm.	1
	2. Horn.	2
	3. Dish fenders: Rear only.	3
	Full lockup package: Include (lockable	4
Equipment to	doors).	
Include	5. Lockable tool box.	5
	6. Street pads: 130 lb. rubberized / reversible.	6
	7. Air ride control system: nitrogen is	7
	acceptable.	
	* *   S ' '	**
	**	Describe:
Weights	Weights: Manufacturer's recommendation for	
	balance.	98
		Describe:
	The successful bidder shall supply at no	~
	additional cost to the city, a minimum of eight	*
Training	(8) hours training on operation and routine	
Trailing	service. Training shall be at the City of Tulsa	
	facilities within one (1) week of delivery of the	
	machine.	
	131 A I I	1212
		Describe:
	The successful bidder shall supply 2 copies	<del></del>
	each of the following:	
	Operators Manuals.	
Manuals	2. Parts manuals.	_2
iviariuais	3. Service manuals.	_3
	Parts and Service manuals may be on CD	
	ROM or if manuals are available on-line at no	
	cost to the City of Tulsa. State how they may	
	be obtained.	



City of Tulsa, Oklahoma

Page 27 of 46

		Describe:
Parts & Service	Due to the emergency work environment of	
	this machine, the bidder shall have a facility	
	within 1 hours drive from the City of Tulsa for	
	parts and service availability.	
	( × ₹ ¥ )	Describe:
	The manufacturer shall warrant the machine to	* * * * * * * * * * * * * * * * * * *
	be of good material and workmanship and	***
	agrees to promptly replace any part or parts,	
	which by reason of defective materials or	
	workmanship shall fail under normal use, free	
	of negligence or accident, for a minimum	
Warranty	period of one (1) year or 1000 hours from date	98   * *
	of delivery and acceptance. All labor, parts,	*
	materials and/or supplies and transportation	*
	shall be supplied by the successful bidder at	*
	no cost to the city.	
	No deductibles shall be charged to the City	
	of Tulsa for warranty work.	
	141 / 1	Describe:
	Hydraulic thumb attachment.	1445
	2. A 36-inch severe duty ditching bucket.	2
	3. A-24-inch multi-purpose Helac power grip	3
	clam shell style bucket or acceptable equal	
	that will open to 40". Bucket shall have the	
	ability to assist picking up trees, or heavy	
	concrete and rocks with a clam shell action.	
Options	Bucket shall have a minimum of four (4)	
•	rock teeth. (see Helac picture attachment)	
	4. Extended warranty: For 4 years/ 4,000	4
	hours.	
	In addition to the standard warranty, the	
	seller shall warrant the complete machine	
	including the engine, transmission, and	
	powertrain, all parts and labor for an	
	additional four (4) year or 4000 hours	



## City of Tulsa, Oklahoma

Page 28 of 46

	period for a total of five (5) years, 5,000	
	hours.	
	Ground contact items such as bucket	
	teeth, tires, etc. Shall be excluded. A list	
	of exclusions shall be included with bid.	
	No upcharges, freight or overtime rates	*
	are to be charged for warranty repairs.	- V * X
	All repairs are to be done in the field.	* * *
5.	Preventative Maintenance five (5) years/	5
	3,000 hours.	**
	The bidder shall bid a preventive	**
	maintenance service based on full machine	**
	coverage in the field for a total of 5 years	**
	or 3,000 hours. The prices shall include all	98 4
	labor, travel time, filters, oil, fluids, and	
	gaskets required. During the preventive	
	maintenance program, every 250, hour	*
	maintenances are to be replicated through-	
	out the preventive maintenance period. No	
	upcharges, freight for parts, mileage or	A A A   3
	overtime charges are to be charged to the	9998
	City of Tulsa during the preventive	
	maintenance period.	/0/
	This list is not to be all conclusive. If	
	additional items are listed in	/3/
	manufacturers recommendations they	
	are to be listed and included.	
	A. Oil Samples: Oil samples shall be taken	
	and analyzed from each system prior to	
	the recommended drain/change interval:	
	every 250 hours. Maintenance	
	recommendations shall be supplied	
	based on the oil analysis and operating	
	information as supplied.	
	B. First 100 Hours:	
	Change all break-in oils and fluids and	
	filters and take oil samples for testing.	



## City of Tulsa, Oklahoma

Page 29 of 46

	C. Every 250 hours:	
	Change air, fuel and oil filter elements.	
	Check inner and outer final drive	
	housings oil level.	
	D. Every 500 hours:	
	Lubricate transmission driveshaft	*
	universal units (if applicable on model	E V T X
	furnished).	* * * *
	Add coolant conditioner.	***
	Check air intake hoses.	**
	Change fuel filter element(s).	**
	Check battery electrolyte level and	<u>*</u>
	terminals.	\* *
	Perform same service as performed at	98
	250 hours.	
	E. <u>Every 1,000 hours:</u>	
	Change splitter gearbox oil.	* * * * * * * * * * * * * * * * * * *
	Change inner and outer final drive oil.	
	Clean engine crankcase vent tube.	
	Measure and adjust engine valve	
	clearances.	
	Perform same services as performed at	
	250 and 500 hours.	
	Change hydraulic oil and filter.	
	Change transmission oil and filter.	
	Perform same services as performed at	
	250, 500, and 1000 hours	
Ref: Backhoe 2-wheel	drive, FY 19-20 Water & Sewer Department	

Section 1 Item #2	Specifications (Minimum)	Section 2 Bidders Proposal
General	This specification is to provide for a new, latest production model of Four (4) wheel drive Backhoe/ front end loader.	Describe: Year Manufacturer Model



## City of Tulsa, Oklahoma

Page 30 of 46

		<u>Describe.</u>
	Type: OSHA approved ROPS, totally	1
	enclosed, all weather protected cab.	
	2. Fully insulated.	2
	3. Tilt steering.	3
	4. Windows: Full visibility. Any removable	4
	or sliding windows to have locks.	****
	5. Rear view mirror.	5
	6. Seat type: Heavy Duty, vinyl covered	6
	air ride seat, full foam, deluxe,	
	adjustable with seat belt.	
	7. Ventilation fan.	7 **
	8. Heater/defroster: include.	8
	9. Air conditioning: include.	9
Operator	10. Windshield wipers: 2-speed with	10
Compartment	washer (front).	
	11. Controls: manufacturer's standard.	11 *
	12. Additional instructions:	12
	13. include:	13
	A. Pressurized cab.	A
	B. Sound proofing to OSHA	<u>B</u>
	approved sound level of 85dba.	AAN5
	14. Two (2) cab doors for entry and	14
	safety.	
	15. Two (2) doors with locks, each door	15
	opening size to be a minimum of 35"	
	in width with safety hand rails on door	
	and cab.	
	16. AM FM Weather radio.	16



City of Tulsa, Oklahoma Page 31 of 46

		Describe:
	Instrument panel shall include the	
	following gauges:	
	1. Fuel level gauge.	1
	2. Coolant temperature.	2
	3. Volt Meter.	3
Instrument Panel	4. Tachometer.	4
	5. Hour-meter	5
	6. Oil pressure	6
	Include gauge covers for vandalism	
	protection.	* * *
	All alarms to include both audible and	
	visual warning.	\* *
	100	Describe
	C _	Describe.
	1. Fuel; Diesel.	<u>1</u>
	2. Emissions; Tier IV Final compliant.	2
	3. Cylinders: Four (4).	3
	4. Net Horsepower; 90 HP turbocharged	4
	minimum.	
	5. Air Cleaner(s); Dry-type, dual	5
\	replaceable element(s), with restriction	_
Engino	indicator.	
Engine	6. Oil Filter(s); Full flow, spin-on type,	6
	with pressurized lubrication.	- 75/
	7. Fuel Filter(s); Primary and secondary.	7
	8. Water Separator; In-line.	8
	9. Starting Aid; 110 Volt, 1000-Watt	9
	electric block heater.	
	10. Exhaust System: vertical with	10
	spark arresting muffler.	



## City of Tulsa, Oklahoma

Page 32 of 46

		<u>Describe:</u>
	1. Transmission type: power shift or auto	1
	shift w/ shuttle.	
	2. Forward speeds: Four (4).	2
	3. Reverse speeds: Three (3) or four (4).	3
	4. Torque converter: Required.	4
	5. Reversing unit: Hydraulic.	5
	Final drive: Inboard or outboard	6
	planetary.	* * *
	7. True Four (4) wheel drive, limited slip	7
	differential.	**
	**	**
	A demonstration may be required to	* * *
Powertrain	show that the machine has 4-wheel	98 4
. overtami	drive capability of pulling its own	
	weight. With rear tires off the ground,	
	by means of the outriggers, both front	*
	wheels must be utilized to pull the	
	machine forward. The demonstration	
	shall be performed before award of the	_
\	bid. If the machine being bid meets all	9 9 9 9 5
	other specifications and the 4-wheel	
	drive has been previously	
	demonstrated to the City of Tulsa; and	<u> </u>
	shown to meet the city specifications,	
	another demonstration will not be	
	required.	
	11100	Describe:
Operating Weight	16,000 – 17,000 LB. approx.	<u>Describe.</u>
1 0 0	16,000 – 17,000 св. арргох.	
		Describe:
	Radiator capacity: largest capacity	1
	available from the manufacturer.	
Cooling System	2. Coolant recovery system: to be	2
	included. Include: Anti-freeze	
	protection to -30 degrees f.	



## City of Tulsa, Oklahoma

Page 33 of 46

		Describe:
	1. Voltage: 12 Volt system.	1
	Battery(s) quantity: Manufacturer's standard.	2
	3. Battery(s) CCA: 1500 total minimum.	3
	4. Alternator: 100 Amp hours minimum.	4
	5. Head lamps: Two (2).	5
	6. Tail lights: Two (2) LED.	6
	7. Turn signals: Two (2) LED.	7
	8. Flashing lights: Include (2).	8
Electrical System	9. Working lights: Include (4) adjustable	9
	work lights on front and rear of cab and	**
	side lighting for a 360-degree lighting	\* *
	of work area. All work lights to be LED.	98
	10. Strobe lights: include One (1)	10
	Code 3, Part number L1200 low profile	
	4 ½" high amber strobe-light, or	<u>*</u>
	equivalent, mounted on top of cab with	
	dash mounted switch. Beacons not	
	acceptable.	
	3\.A.I	Describe:
	Service brakes: fully enclosed wet	10/
	disk.	<del></del>
	2. Parking brakes: must neutralize	2
	reverser when applied and	~// 6·/
Brake System	automatically apply when engine is	
	stopped to prevent machine roll off if	
	hand applied brake is disengaged & to	<u>U'/</u>
	prevent operator drive thru on machine	
	start up. No cable brakes or manual	
	neutralizer.	
		Describe:
Steering	Type: Hydrostatic power.	DOSCHING.
•	1 ype. i iyurostatic power.	
Tires		Describe:
THES	1. Front: 12.5/80-18 10 Ply.	1



## City of Tulsa, Oklahoma

Page 34 of 46

	2. Rear: 19L-24 8 Ply.	2
		Describe:
	Hydraulic pump: Gear driven or variable piston.	1
	Hydraulic pump capacity: 35 gpm. @     2200 rpm.	2
	3. Filtration: Spin on type.	3
	4. Hydraulic lines: Steel & rubber.	4
	5. Additional instructions:	5
	Hydraulic system shall be as required	- X
	to sufficiently operate loader and	
	backhoe	
	Simultaneously.	98 \\^^\
	6. Backhoe boom and crowd cylinders:	6
	Must be equipped with safety holding	*
	valves to prevent release of load in	×-
	event of hydraulic line failure. As per	
	attached City of Tulsa standard no.	
Hydraulic	000081 & ISO standard 8643. Bidder	
	must state if the unit is equipped with	
	the holding valves as outlined per the	
	attached regulations and standards.	
	Bidder must demonstrate that the	
	unit is equipped with the holding	
	valves as outlined per the attached	
	regulations and standards. The	
	demonstration may be performed	
	before award of the bid. If the type	
	of machine with the holding valves	
	has been previously demonstrated	
	to the City of Tulsa and shown to	
	meet the city standard and the iso	7
	8643 regulations another	
	demonstration will not be required.	
	7. Hydraulics with quick-disconnects shall	
	be plumbed to middle of dipper for	
	•	



## City of Tulsa, Oklahoma Page 35 of 46

	135ueu. April 23, 2020	
	mounted tools.	
Loader	mounted tools.    Describe:   1	
	10. Dump reach at full height 45-degree dump: 32-36 inches approx.	
	12. Additional instructions to include: 12	
1	on front loader for roading equipment safely from one location to another.	



## City of Tulsa, Oklahoma

Page 36 of 46

	l —	
	Bucket type: heavy-duty trenching     1	
	with four (4) replaceable teeth.	
	2. Bucket width: 24 inches.	
	3. Bucket connection: Rigid type, <u>3</u>	
	universal quick coupler compatible _	
	with older Caterpillar, Case, & Deere	
	4. Digging depth: 18 feet approx. 4	*
	5. Overall reach from rear axle 5	**
	centerline: 25 feet.	**
	6. Loading height: 14 ft. approx. 6	**
	7. Swing arc: 180 degrees. <u>7</u>	**
	8. Loading reach: 7 feet approx. 8	\* *
	9. Bucket rotation: 190 degrees.	98
	10. Stabilizer spread with hydraulic 11	0
	lockouts to prevent drift in work &	×
	transport positions.	*
		A.
Backhoe		В.
	feet approx.	
		C.
	with rubber on one side.	1 1 1 1
	11. Digging force:	1
		A.
		B.
	12. Leveling angle (max. Slope on which	V // C. /
	backhoe will make vertical cut): 14	
	degrees.	OK-
		3
	lbs. approx. retracted.	
	14. Lift capacity anywhere within full	4
	swing arc: 2,000 lb. approx. extended	
	15. Extendable dipper-stick: To be	5
	included.	
	16. Additional instructions:	6
	Include two sets of hydraulic quick-	
	connecting fittings and lines for the	



City of Tulsa, Oklahoma Page 37 of 46

	use of hydraulic tools, etc. On middle of dipper-stick. Auxiliary hydraulics for hyd. hammer w/adjustable valve, clam shell buckets such as the Helac Powergrip.  17. Controls for backhoe shall be two lever pilot controls as to not restrict an operator's operational knowledge to any machine.	17.
Dimensions	<ol> <li>Overall transport length: 23 ft. approx.</li> <li>Overall transport width: 7 ft. 5 in. approx.</li> <li>Ground clearance at backhoe mainframe: 13 in.</li> <li>Operating weight including cab and extendable dipper-stick: 16,000 lb. approx.</li> <li>Unit must be able to fit on standard trailer. (dual axle flat deck trailer).</li> </ol>	Describe: 1 2 3 4 5
Fluid Capacities	Fuel capacity: 36 gallons approx.     Hydraulic capacity: 24 gallons approx.	Describe: 1 2
Color	Manufacturer's standard	Describe:
Additional Equipment to Include	<ol> <li>Backup alarm.</li> <li>Horn.</li> <li>Dish fenders: Rear only.</li> <li>Full lockup package: Include (lockable doors).</li> <li>Lockable tool box.</li> <li>Street pads: 130 lb. rubberized / reversible.</li> <li>Air ride control system: nitrogen is</li> </ol>	Describe:  1 2 3 4  5 6  7



## City of Tulsa, Oklahoma Page 38 of 46

	acceptable.	
Weights	Weights: Manufacturer's recommendation for balance.	Describe:
Training	The successful bidder shall supply at no additional cost to the city, a minimum of eight (8) hours training on operation and routine service. Training shall be at the City of Tulsa facilities within one (1) week of delivery of the machine.	Describe:
Manuals	The seller shall supply 2 copies each of the following:  1. Operators Manuals.  2. Parts manuals.  3. Service manuals.  Parts and Service manuals may be on CD ROM or if manuals are available on-line at no cost to the City of Tulsa. State how they may be obtained.	Describe:  1 2 3
Parts & Service	Due to the emergency work environment of this machine, the bidder shall have a facility within 1 hours drive from the City of Tulsa for parts and service availability.	Describe:
Warranty	The manufacturer shall warrant the machine to be of good material and workmanship and agrees to promptly replace any part or parts, which by reason of defective materials or workmanship shall fail under normal use, free of negligence or accident, for a minimum	Describe:



# Invitation For Bid IFB 20-830 4 Wheel Drive Backhoe Water & Sewer Issued: April 23, 2020 period of one (1) year or 1000 hours from

## City of Tulsa, Oklahoma

Page 39 of 46

	period of one (1) year of 1000 hours from	
	date of delivery and acceptance. All	
	labor, parts, materials and/or supplies and	
	transportation shall be supplied by the	
	successful bidder at no cost to the city.	
	No deductibles shall be charged to the	*
	City of Tulsa for warranty work.	***
	X X X	* * *
	XX RA	Describe:
	Hydraulic thumb attachment.	1
	2. A 36-inch severe duty ditching bucket.	2
	3. A 24-inch multi-purpose Helac power	3
	grip clam shell style bucket or	\ \ \ \ \
	acceptable equal that will open to 40".	98 1
	Bucket shall have the ability to assist	×
	picking up trees, or heavy concrete	<u>*</u>
	and rocks with a clam shell action.	*
	Bucket shall have a minimum of four	
	(4) rock teeth. (see Helac picture	
	attachment)	
	4. Extended warranty: For 4 years/ 4,000	4
\	hours.	
Options	In addition to the standard warranty,	
	the successful bidder shall warrant the	A A 7.97
	complete machine including the	
	engine, transmission, and powertrain,	
	all parts and labor for an additional	
	four (4) year or 4000 hours period for	
	a total of five (5) years, 5,000 hours.	
	Ground contact items such as bucket	
	teeth, tires, etc. Shall be excluded. A	
	list of exclusions shall be included with	
	bid.	
	Jid.	
	No uncharges freight or quartime	
	No upcharges, freight or overtime	
	rates are to be charged for warranty	



## City of Tulsa, Oklahoma

Page 40 of 46

	repairs. All repairs are to be done in	
	the field.	
5.	Preventative Maintenance five (5)	5
	years/ 3,000 hours.	
	The bidder shall bid a preventive	
	maintenance service based on full	*
	machine coverage in the field for a	****
	total of 5 years or 3,000 hours. The	* * *
	prices shall include all labor, travel	***
	time, filters, oil, fluids, and gaskets	**
	required. During the preventive	* * *
	maintenance program, every 250, hour	**
	maintenances are to be replicated	\* *\
	through-out the preventive	98 4
	maintenance period. No upcharges,	
	freight for parts, mileage or overtime	
	charges are to be charged to the City	*
	of Tulsa during the preventive	
	maintenance period.	
	This list is not to be all conclusive.	
	If additional items are listed in	00075
	manufacturers recommendations	
	they are to be listed and included.	
	A. Oil Samples: Oil samples shall be	Oil Samples
	taken and analyzed from each system	
	prior to the recommended	
	drain/change interval: every 250 hours.	
	Maintenance recommendations shall	
	be supplied based on the oil analysis	
	and operating information as supplied.	
	B. First 100 Hours:	В
	Change all break-in oils and fluids and	
	filters and take oil samples for testing.	
	C. Every 250 hours:	<u>C</u>
	Change air, fuel and oil filter elements.	
	Check inner and outer final drive	
	housings oil level.	



#### City of Tulsa, Oklahoma

Page 41 of 46

	D. Every 500 hours:	D
	Lubricate transmission driveshaft	
	universal units (if applicable on model	
	furnished).	
	Add coolant conditioner.	
	Check air intake hoses.	
	Change fuel filter element(s).	* * * *
	Check battery electrolyte level and	* × ×
	terminals.	XX
	Perform same service as performed at	
	250 hours.	
	E. Every 1,000 hours:	<u>E</u> **
	Change splitter gearbox oil.	\* *
	Change inner and outer final drive oil.	98
	Clean engine crankcase vent tube.	
	Measure and adjust engine valve	
	clearances.	*
	Perform same services as performed	
	at 250 and 500 hours.	
	Change hydraulic oil and filter.	
	Change transmission oil and filter.	2242
\	Perform same services as performed	A N S
	at 250, 500, and 1000 hours	/0/
Ref: Backhoe, Four-wheel of	drive, Fy 19-20, Water & Sewer Department	
SPECIFICATIO	N ATTACHMENT CHECKLIST	
<u> </u>	NATIACIIMENT CHECKLIST	- X X /
		st at the beginning of the bid package, use the following
		ased on the technical specifications. Bids submitted by
	e the following attachments, as required by the	
Brochures a	nd/or specification literature clearly describ	ing the unit(s) and verifying that the unit(s) meet or

#### THE REST OF THIS PAGE LEFT INTENTIONALLY BLANK

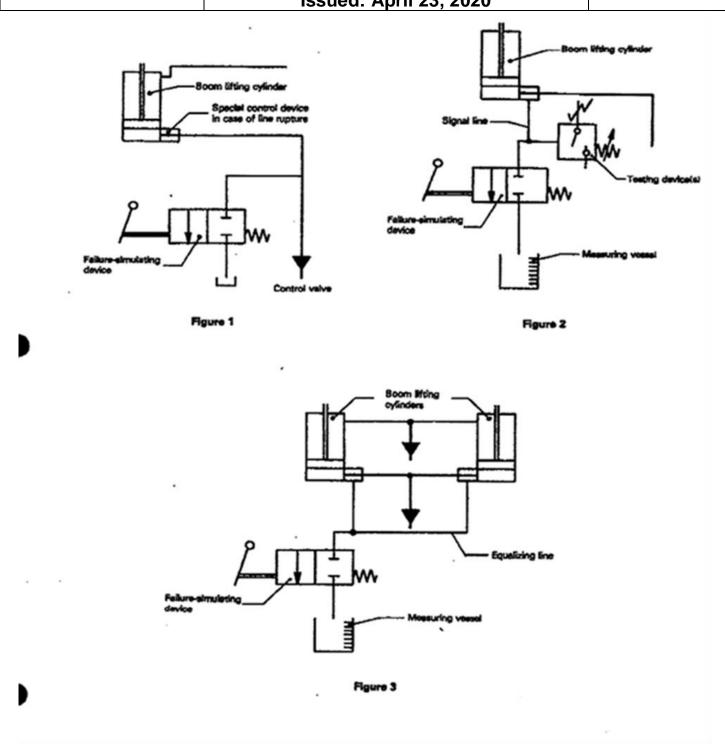
exceed the requirements of this specification

Warranty documentation should be provided with the bid proposal



City of Tulsa, Oklahoma

Page 42 of 46



#### THE REST OF THIS PAGE LEFT INTENTIONALLY BLANK



City of Tulsa, Oklahoma

Page 43 of 46

CITY OF TULSA STANDARD #000081

LOAD HOLDING VALVESFOR BACKHOES AND EXCAVATORS

#### INTERNATIONAL STANDARD - ISO 8643 First Edition 1998-02,01

**ISO** (The *International Organization* for *Standardization*) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards, adopted by the technical committees, are circulated to the member bodies for approval before their acceptance as International Standards by ISO Council. They are approved in accordance with ISO procedures requiring at least 75% approval by the member bodies voting.

International Standard ISO 8643 was prepared by Technical Committee ISO/TC 127, Earth Moving Machinery.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard Implies its latest edition, unless otherwise stated.

EARTH-MOVING MACHINERY—HYDRAULIC EXCAVATOR AND BACKHOE LOADER BOOM LOWERING CONTROL DEVICE REQUIREMENTS AND TESTS.

#### 0 Introduction

Where national regulations permit use of excavators or backhoe loaders for lifting operations, a failure in the hydraulic boom circuit may endanger persons under raised loads.

This risk can be reduced by applying a control device, which ensures controlled load lowering in case of failure or rupture in the boom circuit.

Test procedures are based on the special design characteristics of the hydraulic systems of hydraulic excavators and the backhoe part of backhoe loaders, and conditions of use.

#### 1 Scope

This International Standard establishes uniform requirements and test procedures for boom lowering control devices fitted on boom lift cylinders to control the rate of drop in case of a hydraulic line failure or rupture.

#### 2 Field of Application

This International Standard applies to boom control lowering devices on hydraulic excavators and the backhoe part of backhoe loaders, when used for lifting of loads.

#### 3 References

ISO 6165. Earth-Moving machinery – Basic Types – Vocabulary.

#### 4 Definitions

- 4.1 Boom Control System. Hydraulic control valve (s) (including pilot and slave valves) used for raising and lowing of the boom.
- 4.2 Rated Lift Capacity. Smaller of either the rated tipping capacity or the rated hydraulic lift capacity.
- 4.3 Lift point. One point as defined by the manufacturer for purpose of lifting. It is defined by lift point height and lift point radius.
- **4.4 Lift Point Height.** Vertical distance from the lift point to the ground reference plane (GRP).
- **4.5 Lift Point Radius.** Horizontal distance from the lift point to the axis of rotation.

#### 5 Requirements for Lifting Loads

- **5.1** For hydraulic excavators and the backhoe part of backhoe loaders used in lifting operations, a controlled lowering device shall be provided which prevents uncontrolled lowering of the boom in case of a hydraulic line failure or rupture.
- **5.2** Such control devices shall operate automatically while raising, holding and lowering loads. In case of line rupture during down movement, the increase in the initial lowering speed shall be less than 200 mm/s, measured at the load, whatever the height of the fall. After the operator returns the control to neutral position, the drop rate of the load shall not exceed 10 mm/s, allowable for internal leakage in the system.
- **5.3** The operation of the boom control lowering device shall not detract from the normal response of the machine and shall not, at any time, endanger the stability of the machine.
- 5.4 A relief valve to protect the cylinder may be fitted between the cylinder and the control device.
- **5.5** In case of a failure of the boom control system, or after a boom line rupture, lowering of the load shall be possible without endangering person(s) or the stability of the machine.
- 5.6 Except for tubes and fittings integrated into the cylinder assembly and supported at both ends, tubes and hoses shall not be used to connect:
  - (a) the lift cylinder to the control device;
  - (b) the lift cylinder to the relief valve when it is in parallel with the control device.

Tubes and fittings integrated into the cylinder assembly shall have a minimum burst pressure of four times the relief valve pressure for that part of the system.



City of Tulsa, Oklahoma

Page 44 of 46

**5.7** Signal lines for testing device(s) and equalizing lines between lift cylinders are permissible, if rupture of one of those lines results in oil leakage of not more than 10 /min for each cylinder at approximately 40 to 60 degrees C oil temperature at the specified operating pressure.

6 Test Method

#### 6.1 Apparatus

#### 6.1.1 Stop Watch

#### 6.1.2 Measuring Tape or Scale

- **6.1.3** Thermometer, measuring from 0 to 100 degrees C.
- 6.1.4. Measuring container, of 2 1 capacity of flowmeter.
- 6.1.5 Collecting container, for hydraulic oil or alternattively oil return line to tank.
- 6.1.6 Test load, a mass (50 +/- 10) % of the rated lift capacity at a specific lift point radius.

NOTE – Test methods ensuring equal results may be used, for example, a level size near a vertical wall to which a paper is pinned to record the load displacement in the tube or hose rupture simulation test, where the load is fitted with a stylus.

#### 6.2 Preparation for Test

**6.2.1** A failure-simulating device shall be installed in any connecting line the failure of which could cause the boom to lower. The tube for testing shall not increase the resistance of the connecting line.

Examples of such installations are:

- (a) in the line between boom lift cylinder and control valve as shown in figure 1,
- (b) in the signal line between boom lift cylinder and testing device as shown in figure 2,
- (c) in the equalizing line between boom lift cylinders as shown in figure 3.
- **6.2.2** The complete hydraulic system shall be operated until the hydraulic oil temperature in the oil reservoir is approximately 40 to 50 degrees C. The hydraulic fluid shall be the type and grade specified by the manufacturer.

#### 6.3 Testing of Control device

- **6.3.1** The test load shall be at the lift point radius which results in a moment equal to (50 +/- 10) % of the moment developed by the rated lift capacity at a specific lift point radius.
- 6.3.2 The functions of boom raise and lower shall be smooth and at a reduced speed of max. 200 mm/s, measured at the test load.
- 6.3.3 The load shall be lowered and set down after each test in accordance with 5.5.

#### 6.4 Test of Holding position

- **6.4.1** The test load shall be raised approximately 1 m above ground level, with the control valve(s) in neutral position.
- 6.4.2 The failure-simulating valve between lift cylinders and control valve shall be opened.
- 6.4.3 The total drop of the load during the initial 10 shall be measured. It shall not exceed 100 mm.

#### 6.5 Testing During Raise Function

- 6.5.1 The test load shall be lifted smoothly and continuously without shock (see 6.3.2).
- **6.5.2** The failure-simulating valve between the lift cylinder(s) and the control valve shall be opened.
- 6.5.3 The total drop of the load during the initial 10 shall be measured. It shall not exceed 100 mm.

#### 6.6 Test During Lowering Function

- **6.6.1** The test load shall be lowered smoothly and continuously without shock (see 6.3.2).
- **6.6.2** The failure-simulating device between the lift cylinder(s) and the control valve shall be opened.
- **6.6.3** The increase in the lowering speed of the test load shall be less than 100% increase of the initial speed. After the control is moved to the neutral position, the device shall be able to limit boom movement so that the total drop of the load during the initial 10 of the test does not exceed 100 mm.

#### 6.7 Testing of Equalizing Lines or Signal Lines

- **6.7.1** Testing shall be performed without load.
- 6.7.2 The boom shall be raised to its maximum lift height, and the control valve kept in the "lift" position.
- **6.7.3** The failure-simulating device shall be opened.
- 6.7.4 The oil leakage per cylinder shall not exceed 10 1/min.

#### THE REST OF THIS PAGE LEFT INTENTIONALLY BLANK



City of Tulsa, Oklahoma

Page 45 of 46

# EXHIBIT A BID FORM INCLUDING DELIVERY AND PRICING

**1. Delivery.** If your Bid is accepted and a contract is executed, state the number of days you need to deliver the Goods and/or to begin providing Services:

You must be able to deliver the Goods and/or Services as specified in your Bid. Failure to do so may result in City terminating your agreement or canceling the Purchase Order, pursuing collection under any performance bond, as well as seeking any other damages to which it may be entitled in law or in equity.

#### 2. Pricing

#### (ESTIMATED QUANTITIES FOR EVALUATION PURPOSES ONLY)

Item	Description	Estimate Annual QTY	Unit Cost	Extended Cost
1	Two (2) Wheel Drive Backhoe	1 or more	\$	\$
	Options	•		*
	Hydraulic Thumb Attachment.	1 or more	\$	\$
	2. 36-inch SEVERE Duty Ditching Bucket.	1 or more	\$	\$
	3. 24-inch Multi-purpose Helac power grip clam shell bucket	1 or more	\$	\$
	4. Preventative Maintenance five (5) years/ 3,000 hours	1 or more	\$	\$
2	Four (4) Wheel Drive Backhoe	1 or more	\$	\$
	Options		1/0	
	Hydraulic Thumb Attachment.	1 or more	\$	\$
	2. 36-inch SEVERE Duty Ditching Bucket.	1 or more	\$	\$
	3. 24-inch Multi-purpose Helac power grip clam shell bucket	1 or more	\$	\$
	4. Preventative Maintenance five (5) years/ 3,000 hours	1 or more	\$	\$
_	L COST NOT TO EXCEED: osts must be included or your Bid will be disqualified)	\$		



**Printed Name:** 

City of Tulsa, Oklahoma

Page 46 of 46

Bidder's Company Name
And are 100 markets House
Authorized Signature Here ▶

