



INVITATION FOR BID (IFB)

Name of Good or Service Requested:

MINI-EXCAVATOR

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Attachment A – Master Q & A Form

	
Truman Neprud Governmental Sales Representative	1835 Harnish Blvd. Billings, Montana 59101 406.672.4975 Mobile 406.656.0202 Office 800.332.7095 Toll Free 406.652.6865 Fax tneprud@tractorandequipment.com





A. Summary of Invitation for Bid

This bid is for the purpose of entering into a contract for a MINI-EXCAVATOR for the City of Billings. The successful bidder agrees to provide the City of Billings with an acceptable quality of equipment/service, performance and workmanship as determined by the City of Billings.

It is the purpose of this bid to obtain the best quality of equipment/service at the most favorable price to the City of Billings. Consideration will be given for the level of service offered and ability to meet stated specifications as outlined in the contract documents.

The lowest bid need not be accepted if it is documented that a specific supplier in the past has been a poor performer or has provided poor goods.

B. Instructions to Bidders

Sealed bids entitled MINI-EXCAVATOR for the City of Billings, will be received by the City Clerk up until 2:00 PM (MST) on Tuesday, September 5, 2023.

All bids may be submitted to the Billings City Clerk, via email at bids@billingsmt.gov or via mail or delivery at 210 N. 27th Street, Billings, MT 59101 (P. O. Box 1178, Billings, MT 59103). Bids will be publicly opened and read aloud via Facebook Live on the City's Facebook page: <https://www.facebook.com/Billings-MT-City-Government-74352842013/>. Bid tabulations will be posted for public viewing after the bids have been opened.

More specific additional information regarding this MINI-EXCAVATOR bid may be obtained by contacting Brandon Schmidt, Cemetery Supervisor, via telephone at 406-657-8299, or via email at schmidtb@billingsmt.gov.

Each bid must be accompanied by a Certified Check, Cashier's Check, or Bid Bond payable to the City of Billings, Montana, in the amount not less than ten percent (10%) of the total amount of the bid. The bid security will be retained by the City Clerk until the successful bidder enters into a contract with the City of Billings. If no contract is entered into, by the successful bidder, within sixty (60) days the security may be forfeited to the City of Billings.

No bids may be withdrawn after the scheduled time for the public opening of bids, which is 2:00 PM (MST) on Tuesday, September 5, 2023.



The right is reserved to reject any or all bids received, to waive irregularities, to postpone the award of the contract for a period of not to exceed sixty (60) days, and to accept that bid which is in the best interests of the City of Billings, Montana.

The City of Billings is an Equal Opportunity Employer. The Contractor and subcontractor shall abide by the requirements of 41 CFR 60-300.5(a) and 41 CFR 60-741.5(a), which prohibit discrimination against qualified protected veterans and/or qualified individuals on the basis of disability, and requires affirmative action by covered prime contractors and subcontractors to employ and advance in employment qualified protected veterans and individuals with disabilities.

EXAMINATION OF DOCUMENTS

Before submitting a bid, the bidder shall:

- a. Carefully examine the Standards and Specifications as well as all other attached documents;
- b. Fully inform themselves of the existing conditions and limitations;
- c. Include with the bid sufficient information to cover all items required in the specifications.

BID COMPLIANCE

It shall be the responsibility of the bidder to see that all bids are submitted to the office of the City Clerk before 2:00 PM (MST) on Tuesday, September 5, 2023.

BID MODIFICATIONS

Bids shall be made on the forms provided herein; they shall not contain any recapitulation of the work to be done. Modifications, additions or changes to the terms and conditions of this Invitation for Bid may be cause for rejection of the bid. Bids submitted on other forms may be rejected.

INTERPRETATION PRIORITY

Should a bidder find discrepancies in, or omissions from, the specifications, or be in doubt as to their meaning, bidder shall notify Brandon Schmidt, Cemetery Supervisor, at schmidt@billingsmt.gov, who will send written instructions or addenda to all bidders. The City will not be responsible for oral interpretation. All addenda issued prior to bid opening shall be incorporated into and become a portion and part of the contract/agreement upon award. Questions received less than ninety-six (96) hours before the bid opening cannot be answered.

WITHDRAWAL OF BIDS



Bidders may withdraw their bid either personally or by written request at any time prior to the time set for bid opening. No bid may be withdrawn or modified after the time set for opening, unless and until the award of the contract is delayed for a period exceeding sixty (60) days.

BID PRICE VALID

Bidder acknowledges that no contractual relationship with the Proposer exists until execution of the resulting contract following City Administration or City Council approval. Because contract approval can be delayed due to scheduling or unforeseen circumstances, the Bidder must honor their pricing and any other terms set forth in the proposal for at least ninety (90) days after the bid due date.

FUTURE PURCHASES

The bid price will remain in effect for the duration of the model year production and within the manufacturer's capacity to produce the units. The City may place additional orders for vehicles from the prices established as a result of this bid.

The prices established from this bid may be extended to other political subdivisions within the State of Montana solely at the vendor's discretion.

CERTIFICATION

The bidder certifies that the bid has been arrived at by the bidder independently and has been submitted without any collusion designed to limit independent bidding or competition. The bidder further certifies that the materials, products, services and/or goods offered herein meet all requirements of the stated specifications and are equal in quality, value and performance with highest quality, nationally advertised brand and/or trade names.

Any manufacturer's trade names, if used in specifications, are for the express purpose of establishing a standard of quality and coordination of design, not for the purpose of limiting competition.

ELIGIBILITY

The successful bidder will be required to provide copies of the following, or the ability to obtain the following within 15 days of notification of contract award:

- Completed and signed the new vendor forms, if necessary (to be eligible for payment): <http://mtbillings3.civicplus.com/DocumentCenter/View/26004>
- City of Billings Business License: <https://www.billingsmt.gov/981/Business-License-Information>



- Montana Contractor's License: <http://erd.dli.mt.gov/work-comp-regulations/montana-contractor/construction-contractor-registration>
- Certificate of Workman's Compensation or Certificate of Exemption from Workman's Compensation: <http://erd.dli.mt.gov/work-comp-regulations>

EVIDENCE OF QUALIFICATION

Upon request of the City of Billings, a bidder whose bid is under consideration for award may be required to manifest satisfactory evidence of his financial resources, experience, the organization and equipment as well as service provisions bidder has available or will make available. In determining the lowest responsible bidder, in addition to price, the following considerations may be addressed:

- a) The ability, capacity and skill of the bidder to perform the contract or provide the service required.
- b) The character, integrity, reputation, judgment, experience and efficiency of the bidder.
- c) Whether the bidder can perform the contract within time specified.
- d) The quality of performance of previous contracts, agreements and/or performance.
- e) Previous and/or existing compliance by the bidder with laws relating to the contract or services.
- f) Such other information which may be secured having a bearing on the decision to award the contract.

C. Contract Requirements and Specifications

Mini Excavator:

Comply (Y/N):

- Bucket Digging Force 10,200 lbf
- 12" Max Tail Swing
- Diesel Engine, Minimum 50HP
- Rubber Tracks
- Dozer Blade
- Roll Over Protective Structure
- Tip Over Protective Structure
- Falling Objects Protective Structure
- Engine Block Heater
- Spark Arrestor
- Enclosed Cab w/HVAC
- Work Lights
- 36" Bucket
- Hydraulic Hammer/Breaker
- All Necessary Kits to Attach/Operate Attachments
- 2-Year Warranty on All Equipment

✓Y
NO 14" w/ Counter weight
Y 18" w/ cab
Y
Y
Y
Y
Y
Y
Y
Y
Y
Y
Y
Y
Y
Y
Y

Options:

Available (Y/N):

- 18" Bucket
- Heated Cab
- Radio
- Attachment Tilt and/or Rotate Kit
- Plate Compactor

Y
Include
Include
Y
Y

Delivered to Mountview Cemetery (1704 Central Ave., Billings, MT 59102)



D. Pricing and Addendum

Please bid net prices at which you will agree to furnish required goods or services.

BASE BID: Mini-Ex w/ 36" Bucket \$ 89,000

OPTION 1 (18" Bucket): \$ 1,073

OPTION 2 (Heated Cab): \$ Included in Sales Price

OPTION 3 (Radio): \$ Included in sales Price

OPTION 4 (Attachment tilt and/or
rotate kit): \$ 22,283

OPTION 5 (Plate Compactor): \$ 5,411

TRADE-IN ALLOWANCE FOR UNIT #1906: (\$ 13,480)
 1997 JCB-212S Backhoe w/ 4-wheel
 Drive and 4-wheel steering approx..
 5400 hours (Received at delivery location)

I/We acknowledge _____ addendum.
#

Tractor and Equipment Co.
Company Name

9/5/23
Date

Truman Ayers
Contact Name (please print)

Sales Rep.
Title

[Signature]
Signature of Contact Position

By signing the above, I certify that I am authorized by the Company named above to respond to this request.



E. Standard Terms and Conditions

In case of default by the successful bidder or failure to deliver the goods or services within the time specified, the City Purchasing Agent, after written notice, may procure them from other sources and hold contractor responsible for excess costs occasioned thereby.

The specifications attached to the instructions to bidders establish a standard of quality desired by the City of Billings. Any bidder may submit quotations on any article which substantially complies with these specifications as to quality, workmanship and service. The City of Billings reserves the right to make its selections of materials or services purchased, based on its best judgment as to which articles substantially comply with the requirements of the specifications.

No alteration in any of the terms, conditions, delivery, quality, or specifications will be effective without prior written consent of the City of Billings.

No exception to delivery or service dates shall be allowed unless prior written approval is first obtained from the City of Billings.

The contractor warrants all articles supplied under this contract to conform to specifications, herein. The contractor will deliver a warranty stating that all articles supplied under the contract are fit and sufficient for the purpose manufactured, merchantable, and free from defects.

In the event the City is entitled to a prompt payment or cash discount, the period of computation shall commence on the date of delivery, or receipt of correctly completed invoices, whichever is later. If an adjustment of payment is necessary, the discount period shall commence on the date final approval for payment is authorized.

The contractor agrees not to discriminate against any client, employee or applicant for employment or for services, because of race, creed, color, national origin, sex or age with regard to, but not limited to, the following: employment upgrading; demotion or transfer; recruitment or recruitment advertising; layoffs and termination; rates of pay or other forms of compensation; selection for training; rendition of services. It is further understood that any contractor who is in violation of this shall be barred forthwith from receiving awards of any purchase order for the City unless a satisfactory showing is made that discriminatory practices have terminated and that a reoccurrence of such acts are unlikely.

The City reserves the right to cancel and terminate this contract forthwith upon giving 30 days written notice to the contractor. (This provision does not apply to



the purchase of materials and equipment. A purchase order for materials and equipment is a binding contract.)

Should either party employ an attorney or attorneys or utilize the services of in-house attorneys to enforce any of the provisions hereof or to protect its interest in any manner arising under this contract, the non-prevailing party in any action pursued in a court of competent jurisdiction agrees to pay to the prevailing party all reasonable costs, damages, expenses, and attorneys' fees, including fees for in-house attorneys, expended or incurred in connection therewith.

Where applicable, possible or required, bidder is required to submit descriptive literature, sample material, design sketches and detailed shop drawings. Failure to submit required items may result in rejection of the bid or termination of contract.

The successful bidder may not make any advertising or sale use of the fact that contract items are being used by purchaser and other approved agencies, under penalty of contract termination.

This Agreement shall be construed and enforced in accordance with the laws of the State of Montana. Venue for any suit between the parties arising out of this Agreement shall be the State of Montana Thirteenth Judicial District Court, Yellowstone County.

Regardless of FOB point, contractor agrees to bear all risks of loss, injury, or destruction of goods and materials ordered herein and such loss, injury, or destruction shall not release contractor from any obligation hereunder.

All materials submitted in response to this IFB become public records under Article II, Section 9 of the Montana Constitution and §§ 2-6-102 and 7-1-4144, MCA and may be distributed by written request pursuant to Montana's Constitutional Right to Know or Public Records Acts.

Information provided in response to this IFB will be held in confidence and will not be revealed or discussed with competitors prior to award of Contract by Council. However, one copy of each bid submitted shall be retained for the official files of the Department and will become public record after award of the Contract.

Records and materials that are constitutionally protected from disclosure are not subject to the provisions of this section.



F. Intent to Respond Form

Email the following Intent to Respond form to within four (4) days of the Bid Opening date of Tuesday, September 5, 2023, even if your company chooses NOT to participate.

To: City of Billings – PRPL Department – Cemetery Division
Attn: Brandon Schmidt, Cemetery Supervisor
Phone: 406-657-8299
Email: schmidtb@billingsmt.gov

From: Truman Neprud Contact Name
Tractor and Equipment Co. Company Name
1835 Hamish Blvd. Company Address
Billings MT, 59102
tneprud@tractorandequipment.com Email Address
406-672-4975 Phone Number
406-652-6865 Fax Number

Please indicate whether or not you intend to submit a bid on: MINI-EXCAVATOR by checking Yes or No.

We intend to respond by the specified due date:

Yes No

Tractor and Equipment Co. Company Name 8-25-23 Date

Truman Neprud Contact Name (please print) Governmental sales asso. Title


Signature of Contact Position

By signing the above, I certify that I am authorized by the Company named above to respond to this request.



G. Questions

Questions regarding this Invitation for Bids must be sent to the contact person listed in Section B no later than 5 business days prior to due date. The City will make every effort to provide a written response within 2 business days. Whenever responses to inquiries would constitute a modification or addition to the original IFB, the reply will be made in the form of an addendum to the IFB, a copy of which will be posted on the City's website and forwarded to all Suppliers who have submitted an "Intent to Respond" form (Section F).

Supplier must submit their questions via email using the "Master Q & A" form found below (Attachment A), and provide, at a minimum, the following:

- Supplier's name, requester, and appropriate contact information.
- The question, clearly stated.
- Specific reference to the applicable IFB section(s).

H. Protests

Any Bidder protest of award recommendations and/or bid specifications must be filed with the Purchasing Agent within seven (7) days of bid opening.

Upon receiving a written protest, the Purchasing Agent, with assistance from the Legal Department, determines if the protest has sufficient merit and if so, schedules an informal hearing with the protesting bidder and the user Department.

At this hearing, all parties discuss the basis of the protest and attempt to resolve the dispute based on fact. If the protesting party is not in agreement with the results of the informal hearing, they may appeal to the City Administrator.

BID BOND

TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA
Hartford, Connecticut 06183

KNOW ALL MEN BY THESE PRESENTS, that we Tractor & Equipment Co.

as Principal, hereinafter called the Principal, and Travelers Casualty and Surety Company of America a corporation duly organized under the laws of the State of Connecticut as Surety, hereinafter called the Surety, are held and firmly bound unto City of Billings

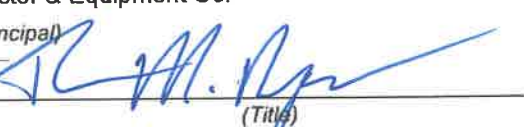
as Oblige, hereinafter called the Oblige, in the sum of Ten Percent of Amount Bid Dollars (\$ 10%), for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for One (1) Caterpillar 306 Mini Excavator

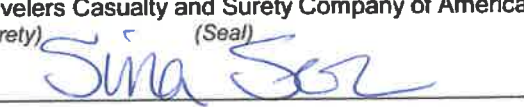
NOW, THEREFORE, if the Oblige shall accept the bid of the Principal and the Principal shall enter into a Contract with the Oblige in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Oblige the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Oblige may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this 5th day of September, 2023


(Witness)

Tractor & Equipment Co.
(Principal)
By: 
(Title)


(Witness)
Danielle Johnson

Travelers Casualty and Surety Company of America
(Surety) (Seal)
By: 
(Title) Attorney-in-Fact





**Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company**

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint Tina Foster of KNOXVILLE, Tennessee, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this 21st day of April, 2021.



State of Connecticut

City of Hartford ss.

By: 
Robert L. Raney, Senior Vice President

On this the 21st day of April, 2021, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the 30th day of June, 2026




Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this 5th day of September, 2023.




Kevin E. Hughes, Assistant Secretary

**To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.
Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.**



Cat[®] 306 CR

MINI HYDRAULIC EXCAVATOR

FEATURES:

The Cat[®] 306 CR Mini Excavator delivers maximum power and performance in a mini size to help you work in a wide range of applications.

ALL DAY COMFORT

- Your choice of a canopy or a sealed and pressurized cab is equipped with an improved air conditioning system, adjustable wrist rests and a suspension seat to help keep you working comfortably all day long.

EASY TO OPERATE

- Controls are easy to use and the intuitive Next Generation Monitor provides customizable machine operator preferences and easy to read machine information.

STICK STEER TRAVEL MODE

- Moving around the job site is even easier with the Cat Stick Steer option. Easily switch from traditional travel controls with levers and pedals to joystick controls with a push of a button. The benefit of less effort and improved control is in your hands!

BIG PERFORMANCE IN A MINI DESIGN

- Increased lifting, swinging, travel and multi-functioning performance help you get the job done more efficiently.

SAFETY ON THE JOB SITE

- Your safety is our top priority. The Cat Mini Excavator is designed to help keep you safe on the job. An optional back-up camera, courtesy work lights and a fluorescent retractable seat belt are just a few of the safety features we've built into the machine.

SIMPLE SERVICE FOR LESS DOWNTIME

- Maintenance is quick and easy on the Cat Mini Excavator. Routine check points are easy to access at ground level with grouped service points and robust service panels.

LOWER OPERATING COSTS

- Equipped with features such as auto idle, auto engine shutdown, and efficient hydraulics with a variable displacement pump, the Cat Mini Excavator was designed with reducing your operating costs in mind.

CHOICES

- Configure the machine to meet your specific application needs with a straight blade, angle blade, or Extra Tool Carrier (XTC).

UNMATCHED DEALER SUPPORT

- Your Cat dealer is here to help you reach your business goals. From providing equipment solutions to operator training to service needs and beyond, your Cat dealer is ready to help.

Specifications

Engine

Engine Model	Cat C2.4 Turbo	
Rated Net Power @ 2,200 rpm		
U.S. EPA Tier 4 Final/EU Stage V	41.7 kW	55.9 hp
ISO 9249/EEC 80/1269		
Gross Power		
ISO 14396	43.2 kW	57.9 hp
Bore	87 mm	3.4 in
Stroke	102.4 mm	4 in
Displacement	2.43 L	148 in ³

Weights

Minimum Operating Weight with Canopy*	6411 kg	14,136 lb
Maximum Operating Weight with Canopy**	7107 kg	15,671 lb
Minimum Operating Weight with Cab*	6485 kg	14,299 lb
Maximum Operating Weight with Cab**	7175 kg	15,821 lb

*Minimum Weight is based on rubber tracks, operator, full fuel tank, standard stick, blade and bucket.

**Maximum Weight is based on steel tracks, extra counterweight, operator, full fuel tank, long stick, blade and bucket.



306 CR Mini Hydraulic Excavator

Weight Increase from Minimum Configuration

Counterweight	250 kg	551 lb
Long Stick	44 kg	97 lb
Steel Tracks with Pads	375 kg	827 lb
Angle Blade	102 kg	225 lb
XTC Carriage (no tool)	64 kg	141 lb

Travel System

Travel Speed – High	5.0 km/h	3.1 mph
Travel Speed – Low	2.8 km/h	1.7 mph
Maximum Traction Force – High Speed	31 kN	6,969 lbf
Maximum Traction Force – Low Speed	56 kN	12,589 lbf
Ground Pressure – Minimum Weight	35.4 kPa	5.1 psi
Ground Pressure – Maximum Weight	39.1 kPa	5.7 psi
Gradeability (maximum)	30 degrees	

Service Refill Capacities

Cooling System	10.0 L	2.6 gal
Engine Oil	8.0 L	2.1 gal
Fuel Tank	130 L	34.3 gal
Hydraulic Tank	39 L	10.3 gal
Hydraulic System	75 L	19.8 gal

Hydraulic System

Load Sensing Hydraulics with Variable Displacement Piston Pump		
Pump Flow @ 2,400 rpm	173 L/min	46 gal/min
Operating Pressure – Equipment	245 bar	3,553 psi
Operating Pressure – Travel	245 bar	3,553 psi
Operating Pressure – Swing	210 bar	3,046 psi
Auxiliary Circuit – Primary		
Flow	90 L/min	24 gal/min
Pressure	245 bar	3,553 psi
Auxiliary Circuit – Secondary		
Flow	33 L/min	9 gal/min
Pressure	245 bar	3,553 psi
Digging Force – Stick (Standard)	29.5 kN	6,632 lbf
Digging Force – Stick (Long)	26.5 kN	5,957 lbf
Digging Force – Bucket	51.5 kN	11,578 lbf

Swing System

Machine Swing Speed	11 rpm
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Blade

Straight Blade Width	1980 mm	78 in
Straight Blade Height	390 mm	15.4 in
Angle Blade Width	1980 mm	78 in
Angle Blade Height	400 mm	15.7 in

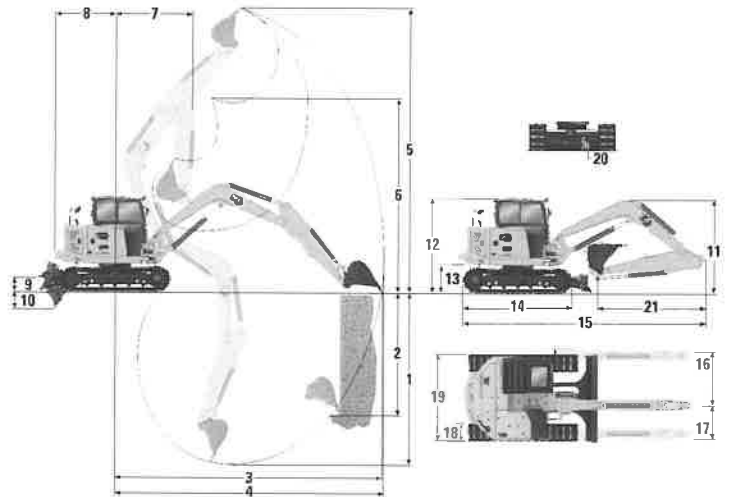
Certification – Cab

Roll Over Protective Structure (ROPS)	ISO 12117-2:2008
Tip Over Protective Structure (TOPS)	ISO 12117:1997
Top Guard	ISO 10262:1998 (Level II)

Sound

Operator Sound Pressure (ISO 6396:2008)	72 dB(A)
Average Exterior Sound Pressure (ISO 6395:2008)	99 dB(A)

• European Union Directive "2000/14/EC"



Dimensions

	Standard Stick	Long Stick
1 Dig Depth	3710 mm (146 in)	4110 mm (162 in)
2 Vertical Wall	2710 mm (107 in)	3165 mm (125 in)
3 Maximum Reach at Ground Level	6130 mm (241 in)	6535 mm (257 in)
4 Maximum Reach	6295 mm (248 in)	6685 mm (263 in)
5 Maximum Dig Height	5835 mm (230 in)	6130 mm (241 in)
6 Maximum Dump Clearance	4325 mm (170 in)	4610 mm (181 in)
7 Boom in Reach	2485 mm (98 in)	2960 mm (117 in)
8 Tail Swing with Counterweight	1475 mm (58 in)	1475 mm (58 in)
Tail Swing without Counterweight	1350 mm (53 in)	1350 mm (53 in)
9 Maximum Blade Height	415 mm (16 in)	415 mm (16 in)
10 Maximum Blade Depth	600 mm (24 in)	600 mm (24 in)
11 Transport Height	1755 mm (69 in)	2410 mm (95 in)
12 Cab Height	2545 mm (100 in)	2545 mm (100 in)
13 Swing Bearing Height	672 mm (26 in)	672 mm (26 in)
14 Overall Undercarriage Length	2580 mm (102 in)	2580 mm (102 in)
15 Overall Shipping Length	5975 mm (235 in)	5950 mm (234 in)
16 Boom Swing Right	910 mm (36 in)	910 mm (36 in)
17 Boom Swing Left	735 mm (29 in)	735 mm (29 in)
18 Track Belt/Shoe Width	400 mm (16 in)	400 mm (16 in)
19 Overall Track Width	1980 mm (78 in)	1980 mm (78 in)
Width Over Upper House	1950 mm (77 in)	1950 mm (77 in)
20 Ground Clearance	306 mm (12 in)	306 mm (12 in)
21 Stick Length	1580 mm (62 in)	1980 mm (78 in)

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1287). The system contains 0.9 kg of refrigerant which has a CO₂ equivalent of 1.287 metric tonnes.

306 CR Mini Hydraulic Excavator

Lift Capacities – Minimum Configuration

Lift Point Height			Lift Point radius 3 m (9.8 ft)			Lift Point radius 4.5 m (14.8 ft)			Lift Point radius (Maximum)			
			Over Front		Over Side	Over Front		Over Side	Over Front		Over Side	m (ft)
			Blade Down	Blade Up		Blade Down	Blade Up		Blade Down	Blade Up		
4.5 m (14.8 ft)	Standard Stick	kg (lb)							*1155 (*2,547)	*1155 (*2,547)	*1155 (*2,547)	4.16 (13.6)
3 m (9.8 ft)	Standard Stick	kg (lb)				*1615 (*3,561)	1175 (2,591)	960 (2,117)	*1055 (*2,326)	*1055 (*2,326)	760 (1,676)	5.18 (17.0)
1.5 m (4.9 ft)	Standard Stick	kg (lb)	*3470 (*7,651)	2040 (4,498)	1595 (3,517)	*1945 (*4,289)	1120 (2,470)	905 (1,996)	*1125 (*2,481)	830 (1,830)	675 (1,488)	5.51 (18.1)
0 m (0 ft)	Standard Stick	kg (lb)	*3555 (*7,839)	1955 (4,311)	1515 (3,341)	*2135 (*4,708)	1080 (2,381)	865 (1,907)	*1390 (*3,065)	860 (1,896)	695 (1,532)	5.32 (17.5)

Minimum Weight includes rubber tracks, no extra counterweight, operator, full fuel tank, standard stick, blade and no bucket.

Lift Capacities – Maximum Configuration

Lift Point Height			Lift Point radius 3 m (9.8 ft)			Lift Point radius 4.5 m (14.8 ft)			Lift Point radius (Maximum)			
			Over Front		Over Side	Over Front		Over Side	Over Front		Over Side	m (ft)
			Blade Down	Blade Up		Blade Down	Blade Up		Blade Down	Blade Up		
4.5 m (14.8 ft)	Long Stick	kg (lb)				*1365 (*3,010)	*1365 (*3,010)	1150 (2,536)	*1145 (*2,525)	*1145 (*2,525)	*1145 (*2,525)	4.70 (15.4)
3 m (9.8 ft)	Long Stick	kg (lb)				*1420 (*3,131)	*1420 (*3,131)	1140 (2,514)	*1055 (*2,326)	*1055 (*2,326)	800 (1,764)	5.60 (18.4)
1.5 m (4.9 ft)	Long Stick	kg (lb)				*1780 (*3,925)	1315 (2,900)	1075 (2,370)	*1110 (*2,448)	875 (1,929)	720 (1,588)	5.90 (19.4)
0 m (0 ft)	Long Stick	kg (lb)	*3495 (*7,706)	2275 (5,016)	1785 (3,936)	*2085 (*4,597)	1255 (2,767)	1020 (2,249)	*1310 (*2,889)	900 (1,985)	735 (1,621)	5.73 (18.8)

Maximum Weight includes steel tracks, extra counterweight, operator, full fuel tank, long stick, blade and no bucket.

*The above loads are in compliance with hydraulic excavator lift capacity rating standard ISO 10567:2007 and they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. The excavator bucket weight is not included on this chart.

EQUIPMENT

ENGINE

- Cat C2.4T Diesel Engine (U.S. EPA Tier 4 Final/ EU Stage V) – Electronic Engine, Turbo, Diesel Particulate Filter (DPF)
- Automatic Engine Idle
- Automatic Engine Shutdown
- Automatic Swing Brake
- Automatic Two Speed Travel
- Fuel Water Separator with Indicator
- Radial Seal – Double Element Air Filter

- Side by Side Engine and Hydraulic Oil Cooler
- Extended Life Coolant, -37° C (-35° F)
- Ecology Drain

HYDRAULICS

- Smart Tech Electronic Pump
- Variable Displacement Piston Pump
- Load Sensing/Flow Sharing Hydraulics
- Power On Demand
- Hydraulic Temperature Monitoring

- Certified Accumulator
- Hydro Advanced Hydraulic Oil
- Auxiliary Hydraulic Lines:
 - 1 and 2-way (combined function)
 - Auxiliary Line Quick Disconnects
 - Adjustable Auxiliary Flow
 - Continuous Flow
 - Adjustable Auxiliary Relief

(continued on next page)

306 CR Mini Hydraulic Excavator

EQUIPMENT *(continued)*

OPERATOR ENVIRONMENT

- Canopy or Sealed and Pressurized Cab
- Operator Sound Pressure 72 dB(A) ISO 6396:2008
- Stick Steer Mode
- Travel Cruise Control
- Control Pattern Changer
- Adjustable Wrist Rests
- Molded Footrests
- Removable, Washable Floor Mat
- Travel Pedals and Hand Levers
- Cat Key with Passcode Option
- Hydraulic Lockout Controls
- High Back, Suspension Seat
- Retractable Seat Belt (75 mm/3 in)
- Coat Hook
- Cup Holder
- Literature Holder
- Mounting Bosses for Top and Front Guards
- ROPS – ISO 12117-2:2008
- TOPS – ISO 12117:1997
- Signaling/Warning Horn
- Cab and (left side) Boom Work Lights
- Utility Space for Mobile Phone

- Color LCD Monitor
 - Fuel Level and Coolant Temperature Gauges
 - Maintenance and Machine Monitoring
 - Performance and Machine Adjustments
 - Numeric Security Code
 - Multiple Languages
 - Camera Ready
 - Hour Meter with Wake Up Switch
 - Jog Dial Control Interface
- Cab Machines Only
 - HVAC with Automatic Temperature Control
 - Integrated Lower Front Window
 - Assisted Front Window Overhead Storage
 - Rear Window Emergency Exit
 - LED Interior Light
 - 12V Power Socket
 - Radio – Bluetooth®, USB, Auxiliary, Microphone
 - Skylight

UNDERCARRIAGE

- Greased and Lubricated Track
- Hydraulic Track Adjusters
- Tie Down Eyes on Track Frame
- Dozer Straight Blade
- Dozer Float
- Bolt-on, Reversible Wear Edge
- Rubber Tracks

BOOM, STICK AND LINKAGES

- One Piece Boom (3055 mm/120.3 in)
- Standard Stick (1580 mm/62.2 in)
- Long Stick (1980 mm/78.0 in)
- Front Shovel Capable (Pin-On/Manual Coupler/Hydraulic Coupler – not available in all regions)
- Thumb Ready (not available in all regions)
- Certified Lifting Eye (not available in all regions)

ELECTRICAL

- 12 Volt Electrical System
- 90 Ampere Alternator
- 650 CCA Maintenance Free Battery
- Battery Disconnect
- Circuit Breaker
- Ignition Key Stop Switch
- Signaling/Warning Horn
- Product Link™ Basic (regulations apply, not available in all regions)
- Travel Alarm

OTHER

- Locks on External Enclosure Doors
- Lockable Fuel Cap
- Beacon Socket
- Rear Reflectors

OPTIONAL EQUIPMENT

OPERATOR ENVIRONMENT

- Cab (see details above)
- Next Generation Advanced Monitor
 - Touch Screen
 - Site Reference System
 - High Definition Camera Capable
- Rain Visor
- Air Suspension Heated Seat with Cab
- Top Guard – ISO 10262:1998 (Level II)

ELECTRICAL

- Product Link Elite (regulations apply, not available in all regions)
- Rearview Camera
- Rotating Beacon

OTHER

- Attachments including Buckets, Augers and Hammers
- Angle Blade
- Extra Tool Carrier (XTC)

- Steel Tracks (450 mm/17.7 in wide)
- Steel Track with Rubber Pads
- 2nd Auxiliary Hydraulic Lines
- Additional Counterweight
- Boom and Stick Hose Burst Check Valves
- Bucket Linkage with Lift Eye
- Track Guides
- Water Jacket Heater
- Refueling Pump
- Cab Guarding

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

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(North America, Europe, ANZP)



3 EASY STEPS TO PROTECT YOUR NEW CAT® EQUIPMENT

You count on your Cat® machines to get the job done, day in and day out. Choose a protection plan that's just as dependable and long-lasting. EPP offers the only coverage designed specifically for new Cat equipment - giving you the highest level of repair cost protection available. Comprehensive EPP options protect your investment and your peace of mind.

1 SELECT YOUR PROTECTION OPTION

Choose from our **Powertrain**, **Powertrain + Hydraulics**, **Powertrain + Hydraulics + Technology** and **Premier** plans to get the exact age and hours for the protection you need.

PREMIER (includes all Powertrain, Powertrain + Hydraulics, and Powertrain + Hydraulics + Technology components listed below)

ENGINE RELATED

Governor/Speed Limiter
Fuel Injection Lines

STEERING & SUSPENSION

Power Steering Logic Module
Steering Linkage
Suspension Control & Control Valve
Suspension Cylinder

ELECTRONICS

Cat Grade Control
Product Link™
Traction Control System
Protection Devices & Alarms
Speed Sensors

BRAKING

Cylinder Head Assembly
Control Valves
Accumulator
Parking Brake

CAB

Steering Column
Gauges/Indicators/Instruments
Circuit Board
Wiring Harness/Switches
Relays/Circuit Breakers
Fuse/Circuit Breaker Panel

POWERTRAIN + HYDRAULICS + TECHNOLOGY (includes all Powertrain and Powertrain + Hydraulics components listed below)

CAT CONNECT TECHNOLOGY COMPONENTS – COMPACT, GRADE, PAYLOAD, LINK

Components covered under standard warranty that are factory or dealer installed prior to delivery

Integrated Machine Displays
Monitors
Sensors
Cables/Harness Wiring
Engine Control Module (ECM)

GNSS Antennas
GNSS Receivers
Inertial Measurement Unit
Laser Catcher/Receiver
Satellite Receiver

Position Sensing Cylinders
Integrated Joystick Buttons/Controls
Software
Status Lights
Load Lights

VIMS (Vital Information Management System)
Asset Control System
Product Link System Cellular and Satellite Global Positioning System

POWERTRAIN + HYDRAULICS (includes all Powertrain components listed below)

STEERING & IMPLEMENT CONTROLS

Hydraulic Pumps
Hydraulic Motors
Hydraulic Cylinders

Hydraulic Valves
Hydraulic Accumulators
Hydraulic Lines
Hydraulic Hoses
Electronic Controls
-Implement & Steering

Joystick
Pilot Control Valve
Hydraulic Tank
Hydraulic Oil Filter Base
Hydraulic Swivel

Hydraulic Oil Temp Sensor
Hydraulic Oil Cooler
Transmission Oil Lines
Drive Train Oil Lines
Steering Gear & Valve

POWERTRAIN

ENGINE

Fan & Fan Drive
Hydraulic Fan Motor
Jacket Water Pump, Drive Group
Thermostat/Regulator
Timing/Accessory Gears
Timing Chain/Belt
Engine Oil Cooler
Engine Oil Pump
Engine Oil Pan Group
Engine Oil Filter Housing/Base
Cylinder Block
Cylinder Head Casting
Crankshaft Main & Rod Bearings
Piston & Connecting Rod

Pistons & Piston Rings
Camshaft & Camshaft Bearing
Inlet/Exhaust Valve
Push Rod & Balancer
Rocker Arm & Rocker Shaft Assembly
Valve Cover & Base
Valve Spring
Valve Guide
Flywheel
Air Line/Pipe
Aftercooler Group
Turbocharger
Manifolds, Inlet & Exhaust

Fuel Pump
Governor
Fuel Injection Pump
Fuel Transfer Pump
Solenoids/Sensors
Electronic Control Module (ECM)

TRANSMISSION, TORQUE CONVERTER & TRANSFER CASE

Transmission Case
Transmission Gears
Transmission Shaft
Transmission Hydraulic Control
Transmission Electronic Control

Transmissions Oil Pump
Transmissions Oil Filter Base
Torque Converter
Transfer Gear Group

DRIVE TRAIN

Differential Case
Differential Steering Components
Axle Housing Assembly
Axle Shaft
Drive Axle
Final Drive Case/Bore
Final Drive Gears
Universal Joint

2 KNOW YOUR RESPONSIBILITIES

To qualify for coverage under an EPP, you need to:

- > Operate your equipment according to the Cat Operation & Maintenance Manual (OMM) (e.g., no improper fuel use)
- > Ensure recommended preventive maintenance is performed at intervals specified in the OMM
- > Provide proof of preventive maintenance compliance (receipts, copies of work orders, invoices) on request
- > Promptly provide your equipment for repair in the event of a covered failure

You can count on us to perform necessary inspections to confirm eligibility, install parts approved by Caterpillar on covered repairs and validate your enrollment in the program.

3 PURCHASE AND REGISTER YOUR EPP

Work with your local Cat dealer to complete the process—and get the protection and peace of mind you deserve.

EXCLUSIONS*

If a component isn't listed, it may not be included in your plan. Other exclusions include:

- > Failures caused by normal wear-out or improper or abusive use of the machine
- > Lubricating oil, antifreeze, filters, consumables and other maintenance items replaced during the covered component repair, unless such items are rendered unusable by a covered component failure
- > Freight charges for parts shipments
- > Travel time and mileage involved in getting to a jobsite
- > Hauling, retrieval, equipment rental or overtime labor costs
- > Repair costs resulting from the failure of any non-covered components
- > Downtime loss
- > Any incidental or consequential damages or costs incurred as a result of a covered component failure
- > Modifications unless approved by Caterpillar

** These are examples of covered and excluded components or items. The actual dealer contract will govern. See your Cat dealer for a complete list of covered components and more information.*

Please contact your Cat dealer for more details.

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