



Village of Woodridge

BID DOCUMENT
BID 2022-18

PURCHASE OF EQUIPMENT

EXCAVATOR AND TRAILER

- BIDS TO BE FULLY EXECUTED
- ALL SIGNATURES TO BE SWORN BEFORE A NOTARY PUBLIC

DEADLINE TO SUBMIT BIDS /
BID OPENING - DATE/TIME/LOCATION:

Monday, October 10, 2022 - 11:00 a.m.

DELIVER BIDS TO /
BID OPENING LOCATION:

Village of Woodridge
Attention: Finance Department
Five Plaza Drive
Woodridge, Illinois 60517-5014

Issued by:

Public Works / Purchasing Department
Village of Woodridge, Illinois
5 Plaza Drive
Woodridge, Illinois 60517
(630) 719-4717

VILLAGE OF WOODRIDGE
EQUIPMENT PURCHASE
BID# 2022-18

LEGAL NOTICE

The Village of Woodridge will be accepting sealed bids for the items listed below. Bids will be accepted at the Woodridge Village Hall, Five Plaza Drive, Woodridge, until **Monday, October 10, 2022, at 11:00 a.m. (CST)**, at which time they will be opened and publicly read aloud.

ONE (1) EXCAVATOR AND TRAILER

Specifications may be obtained at the Village Hall, weekdays, between 8:00 a.m. and 4:30 p.m., or on line at the Village of Woodridge website at www.woodridgeil.gov under "My Government", "Finance," and "Bids/Purchasing," or directly at, https://www.woodridgeil.gov/my_government/finance/bids_purchasing.php. Questions may be directed to Jeff Moline by email at jmoline@woodridgeil.gov by 3:00 p.m., Friday, September 30, 2022. Any addendum issued for this bid will be posted by 3:00 p.m., Monday October 3, 2022 on the Village website. Interested bidders are responsible to check the website for any addenda.

The Village of Woodridge reserves the right to reject any or all bids, to waive technicalities, and to accept any bid which is deemed to be in the best interest of the Village of Woodridge.

The Village of Woodridge does not discriminate on the basis of disability in the admission or access to, treatment or employment in, its services, programs, or activities. Upon request, accommodation will be provided to allow individuals with disabilities to participate in all Village of Woodridge services, programs, and activities. The Village has a designated coordinator to facilitate compliance with the Americans with Disabilities Act of 1990 (ADA), as required by Section 35.107 of the U.S. Department of Justice regulations, and to coordinate compliance with Section 504 of the Rehabilitation Act of 1973, as mandated by Section 8.5 of the U.S. Department of Housing and Urban Development regulations. For information, contact the Assistant Village Administrator, Village of Woodridge, Five Plaza Drive, Woodridge, Illinois, 60517; (630) 719-4705, TDD (630) 719-2497. Upon request, this information can be made available in large print, audiotape, and/or computer format.

VILLAGE OF WOODRIDGE
PURCHASE OF EQUIPMENT
BID# 2022-18

I. GENERAL CONDITIONS

1. INTENT

It is the intent of these specifications and contract to purchase the below listed products/equipment.

QUANTITY: (1)

PRODUCT/EQUIPMENT: EXCAVATOR AND TRAILER

The Village will accept submittals for a new and unused 2022 OR 2023 model equipment and that any and all deviations from these specifications is noted in the bid proposal form and itemized on Exhibit A, as required under section II. All pieces of equipment, tools, miscellaneous items and other components to be added to the unit which is referred to in the specifications shall be provided by the contractor as a part of the unit at no additional cost unless explicitly denoted to be supplied by the Village.

2. PREPARATION AND SUBMISSION OF PROPOSAL

The Bidder must submit his/her proposal on the forms furnished by the Village of Woodridge by the Bid Opening Date and Time for this Bid. All blank spaces on the proposal form must be filled in if applicable. Authorized signature must be the individual owner of a proprietorship, a general partner of a partnership or a duly authorized officer, attested to by the Corporate Secretary, of a Corporation. The proposal is contained in these documents and must remain attached thereto when submitted. All signatures and spaces are to be completed in ink or typewritten, where applicable. Prices/costs shall be in United States dollars. Incorrect completion, execution or submission of bids shall be sufficient grounds for rejection of a bid. The following documents shall be executed at the time of submission of a bid:

- A) Contractor's Certification and Bid Proposal – Pages 10 - 13
- B) Table 1 – List of Deviations (Exhibit A)
- C) Non-Barred from Bidding Endorsement (Exhibit B)
- D) Anti-Collusion Affidavit (Exhibit C)
- E) Conflict of Interest Form (Exhibit D)
- F) Tax Compliance & Bidder's IRS Form W-9 (Exhibit E)

**BIDDERS ARE RESPONSIBLE TO CHECK THE VILLAGE WEBSITE OR CONTACT THE WOODRIDGE
PURCHASING DEPARTMENT FOR ANY ADDENDA THAT MAY BE ISSUED FOR THIS BID.**

All proposals shall be submitted in sealed envelopes carrying the following information on the face:

- 1) Bidder's Name and Address
- 2) Bid Number
- 3) Subject Matter of Bid
- 4) Designated Date and Time of Bid Opening

3. WITHDRAWAL OF PROPOSAL

Bidders may withdraw their bids at any time prior to the time specified in the Bid Notice as the closing time for the receipt of bids. However, no bid shall be withdrawn or cancelled for a period of sixty (60) calendar days after said advertised closing time for the receipt of bids, nor shall the successful bid be withdrawn, cancelled, or modified after having been accepted by the Village.

4. SUBMISSION OF ALTERNATE BIDS

Bidder may submit alternate bids provided that:

- Cash bid proposals meet Village Specifications and are submitted separately.
- The Village shall not consider an alternate bid which fails to meet specifications.

5. BID DEPOSIT (Not required)

When required on Page 1 of these Specifications, all bids shall be accompanied by a bid deposit in the amount specified. Bid deposits shall be in the form of a certified check, a bank cashier's check drawn on a responsible bank doing business in the United States and shall be made payable to the Village of Woodridge, or bid bond.

The bid deposit of all except the three lowest bidders on each contract will be returned within twenty (20) calendar days after the opening of the bids. The remaining bid deposits on each contract will be returned, with the exception of the accepted Bidder, after the contract is awarded. The bid deposit of the accepted Bidder will be returned after acceptance by the Village of satisfactory performance bond where such bond is required or completion of contract where no performance bond is required.

6. SECURITY FOR PERFORMANCE (Not required)

When required on Page 1 of these Specifications, the successful Bidder or Bidders shall, within thirteen (13) calendar days after acceptance of the bid by the Village, furnish a performance bond in the full amount of the contract, in a form acceptable to the Village.

In the event that the successful Bidder(s) fails to furnish the performance bond within thirteen (13) calendar days after acceptance of the bid by the Village, then the bid deposit of the successful Bidder shall be retained by the Village as liquidated damages and not as a penalty, it being agreed by the successful Bidder that said sum is a fair estimate of the amount of damages that said Village will sustain due to the successful Bidder's failure to furnish said bond.

7. EQUIVALENT PRODUCTS

In cases where a specified item is identified by a manufacturer's name, trade name or other reference, it is understood that the Bidder proposes to furnish the item as identified. If the Bidder proposes to furnish an "equal" item, the proposed "equal" item must be so indicated in the bid proposal. The Village shall be the sole determiner of the equalness of the substitute offered.

8. BASIS OF AWARD

The Village reserves the right to accept or reject any and all bids, in whole or in part, and to waive technicalities.

9. ACCEPTANCE OF BID

The Village shall make its determination with respect to bids within sixty (60) days, or within ninety (90) days where approval by other agencies is required, from the date of opening of bids. Should the Village fail to act within the times herein specified, all bids shall be rendered null and void.

10. CATALOGS

Each Bidder shall submit in DUPLICATE, catalogs, descriptive literature and detailed drawings, fully detailing features, designs, construction, appointments, finishes and the like, in order to fully describe the material or work proposed to be furnished.

11. COMPLIANCE WITH LAWS

The Bidder will strictly comply with all ordinances of the Village of Woodridge, the laws of the State of Illinois and United States Government.

12. MATERIAL INSPECTION AND RESPONSIBILITY

The Village shall have a right to inspect any material to be used in carrying out this contract. The Village does not assume any responsibility for the availability of any materials and equipment required under this contract.

13. TERMINATION OF CONTRACT

The Village may, by written notice of default to the successful Bidder, terminate the whole or part of this contract in any one of the following circumstances:

- If it is determined that successful Bidder knowingly falsified information provided to the Village.
- If it is determined that successful Bidder offered substantial gifts or gratuities to a Village official, employee, or agent whether in their official capacity or not.
- Any order is entered in any proceeding against the successful Bidder decreeing the dissolution of the successful Bidder and such order remains in effect for sixty (60) days.

The successful Bidder shall apply to any tribunal for the appointment of a trustee or receiver of any part of the assets of the successful Bidder, or commence any proceedings relating to the successful Bidder under any bankruptcy, reorganization, arrangement, insolvency, readjustment of debt, dissolution or other liquidation law of any jurisdiction, or any such application shall be filed, or any such proceedings shall be commenced, against the successful Bidder, and the successful Bidder indicates its approval, consent or acquiescence, or an order shall be entered appointing such trustee or receiver or adjudicating the successful Bidder bankrupt or insolvent, or approving the petition in any such proceeding, and such order remains in effect for sixty (60) days.

In the event the Village terminates this contract in whole or in part, the Village may procure, upon such terms in such manner as the Village Administrator may deem appropriate, products or services necessary to return property (vehicle) owned by the Village or equipment, including those materials paid for by the Village, or equipment or materials permanently attached to the property of the Village, and the successful Bidder shall be liable to the Village for any excess costs for such similar supplies or service, provided that the successful Bidder shall continue the performance of this contract to the extent not terminated under the provisions of this clause.

14. EQUAL EMPLOYMENT OPPORTUNITY

Each contracting agency shall ensure every contract to which it is a party shall contain the following clause.

In the event of the contractor's non-compliance with the provisions of this equal employment opportunity clause, the Illinois Human Rights Act or the Rules and Regulations of the Illinois Department of the Human Rights ("Department"), the Contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation. During the performance of this contract, the contractor agrees as follows:

- a) That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, marital status, national origin, or ancestry, age, physical or mental handicap unrelated to ability, pregnancy, or an unfavorable discharge from the military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
- b) That, if it hires additional employees in order to perform this contract or any portion thereof, it will determine the availability (in accordance with the department's rules and regulations) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.
- c) That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental handicap unrelated to ability, pregnancy, or an unfavorable discharge from military service.
- d) That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the contractor's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations.

If any such labor organization or representative fails or refuses to cooperate with the contractor in its efforts to comply with such act and rules and regulations, the contractor will promptly so notify the department and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations thereunder.

e) That it will submit reports as required by the department's rules and regulations, furnish all relevant information as may from time to time be requested by the department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's rules and regulations.

f) That it will permit access to all relevant books, records, accounts, and work sites by personnel of the contracting agency and the department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's rules and regulations.

g) That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that such provisions will be binding upon such subcontractor. In the same manner as with other provisions of this contract, the contractor will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the contracting agency and the department in the event any subcontractor fails or refuses to comply therewith. In addition, the contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

f) Each public subcontractor shall in turn include the equal employment opportunity clause set forth within these rules and regulations in each of its subcontracts under which any portion of the contract obligations are undertaken or assumed, said inclusion to be either verbatim or by reference so that the provisions of the clause will be binding upon such subcontractors.

The requirements of the equal employment clause set forth above with respect to non-discrimination because of religion shall not apply to a religious corporation, association, educational institution or society with respect to the employment of individuals of a particular religion for the carrying on by such corporation, association, educational institution or society of its activities.

15. INDEMNITY HOLD HARMLESS PROVISION

To the fullest extent permitted by law, the successful Bidder hereby agrees to defend, indemnify and hold harmless the Village, its officials, agents, employees, and volunteers, against all injuries, deaths, loss, damages, claims, patent claims, suits, liabilities, judgments, costs and expenses, which may in anywise accrue against the Village, its officials, agents, employees, and volunteers; arising in whole or in part or in consequence of the performance of the work by the successful Bidder, its employees, or subcontractors, or which may in anywise result therefore, except that arising out of the sole legal cause of the Village, its officials, agents, employees, and volunteers, and the successful Bidder shall, at its own expense, appear, defend and pay all charges of attorneys and all costs and other expenses arising therefore or incurred in connection therewith, and, if any judgment shall be rendered against the Village, its officials, agents, employees, and volunteers, in any such action, the successful Bidder shall, at its own expense, satisfy and discharge same.

The successful Bidder expressly understands and agrees that any performance bond or insurance policies required by the contract, or otherwise provided by the successful Bidder, shall in no way limit the responsibility to indemnify, keep and save harmless and defend the Village, its officials, agents, employees, and volunteers, as herein provided. The successful Bidder further agrees that to the extent that money is due the successful Bidder by virtue of the contract, an amount of said money as shall be considered necessary in the judgment of the Village, may be retained by the Village to protect itself against said loss until such claims, suits, or judgments shall have been settled or discharged and/or evidence to that effect shall have been furnished to the satisfaction of the Village.

16. COSTS

The undersigned hereby affirms and states that the prices quoted herein constitute the total cost to the Village for all work involved in the respective items. This cost also includes all proposal preparation costs, insurance, royalties, transportation charges, use of all tools and equipment, superintendent, overhead expense, inspection costs, all profits

and all other work services and conditions necessarily involved in the work to be done in accordance with the requirements of the contract documents considered severally and collectively.

17. START OF WORK AND COMPLETION

Contractor shall provide the unit within six (6) months of notice of award or sooner.

18. PENALTY FOR NON-COMPLETION

Time is of the essence to the contract. Should the Contractor fail to deliver the fully outfitted piece of equipment within the working days stipulated in the contract or on or before the completion date stipulated in the contract or within such extended time as may have been allowed, the Contractor shall be liable and shall pay the Village one hundred dollars (\$100.00) per calendar day not as a penalty but as liquidated damages, for each day of overrun in the contract time or such extended time as may have been allowed. The liquidated damages for failure to complete the contract on time are approximate, due to the impracticality of calculating and proving actual delay costs. This penalty established is to cover the cost of delay to account for administration, engineering, inspection, and supervision during periods of extended and delayed performance. The costs of delay represented by this schedule are understood to be a fair and reasonable estimate borne by the Village during extended and delayed performance by the Contractor of the work, remaining incidental work, correction of work improperly completed, or repair of work damaged as a result of the Contractor. The liquidated damage amount specified will accrue and be assessed until final delivery of the fully and correctly outfitted machine even though the equipment may be substantially complete. The Village will deduct these liquidated damages from any monies due or to become due to the Contractor from the Village.

19. INSPECTION ON COMPLETION / DELIVERY

The Contractor shall arrange with the Village for a mutually agreeable time and date to deliver the fully outfitted piece of equipment to the Village's designated delivery location at Woodridge Public Works, 1 Plaza Drive Woodridge IL 60517, during normal business hours of Monday through Friday, 7:00 AM to 3:30PM (Central Standard Time). Upon delivery of the equipment, the Village and Contractor shall jointly inspect the equipment to assure that all ordered equipment and options are properly installed and fully functioning. Should any items be omitted during this inspection, the Village shall notify the Contractor as soon as they are discovered and the Contractor shall repair or modify the equipment, at no cost to the Village, in order to add the missing and/or malfunctioning components. The unit / vehicle shall be clean upon completion / delivery.

20. MODIFICATIONS TO SPECIFICATIONS

The Village reserves the right to modify the specifications for the equipment. Prior to implementing those modifications the Contractor shall provide their charges for performing the reduction / addition of work and shall not proceed until the Director of Public Works or his designee, has approved the charges in writing. The final determination of the location of components in the truck shall be completed cooperatively by the Village and the Contractor, with the Village having sole discretion in the final decision. The determination of the placement of components shall not be considered a modification nor be subject to any increase in cost. All components shall be temporarily placed into their final planned location by the contractor for review by the Village prior to the contractor permanently affixing/installing the same. In the Village's sole discretion, and at no additional cost, the Village may direct the contractor to move, change, or otherwise modify the layout of the components in order to best meet the needs of the Village.

21. GUARANTEE

All materials furnished under this contract shall be guaranteed by the Contractor against defects failure improper performance and non-compliance with the contract documents for a period of one (1) year after acceptance of the unit under this contract, unless other extended warranties are noted in the specifications which may provide for additional coverage. During the guarantee period, the Contractor shall repair and replace, at his own expense, when so ordered by the Village, all equipment that develops defects whether these defects may be inherent in the functioning of the piece of operating equipment or materials furnished.

22. ACCEPTANCE AND PAYMENT

Final payment will be made following the delivery to the Village of Woodridge, review of the equipment (as detailed in the specifications), and acceptance of the unit as being correctly constructed in accordance with the specifications and in accordance with the Illinois Prompt Payment Act.

VILLAGE OF WOODRIDGE

PURCHASE OF EQUIPMENT BID# 2022-18

II. SPECIFICATIONS

1. EQUIPMENT REQUIREMENTS:

As indicated herein, this bid seeks proposal for the purchase of the below listed equipment:

ONE (1) – EXCAVATOR AND TRAILER

Equipment being requested is listed by Specific Make and Model, or Preferred Make and Model or Equal, or generally by description. The basis of design is the model used to develop the bid specifications and is the minimum requirement for the equipment being bid. Any deviation should be listed on “Exhibit A, List of Deviations.”

A. “THIS MAKE AND MODEL REQUIRED”: References to specific makes or models of equipment, accessories, or components and noted as “This Make and Model Required” it shall be required for the proposed equipment to be that given make and model. Mandatory make and model is required on specific equipment to maintain consistency with existing equipment, understanding of use and training for driver operators, equipment technician skill and stocking, and interchangeability of parts and equipment within fleet.

B. “THIS MAKE OR EQUAL”: Where reference is made to “This Make or Equal” the purpose of establishing minimum standards of performance, operation, maintenance, strength, efficiency, effectiveness, and life of the unit or its parts as required for the proposed application. Other makes and models shall also be acceptable under this classification, provided minimum specifications as described herein are met or exceeded with documentation to substantiate.

If an alternate make or model is submitted, or model proposed not meet or exceed the specifications, the Bidder must indicate the product does not meet the specifications by marking “No” on the Bid Proposal form and list in detail on Exhibit A, “Table 1 – List of Deviations”. If an alternate to the specification is proposed that is not exact to the specification listed, but the bidder believes this alternate meets or exceeds the specification, detail must be provided on Exhibit 1. Leaving an item blank will be understood to meet specifications.

VILLAGE OF WOODRIDGE

CONTRACTOR'S CERTIFICATION AND BID PROPOSAL

BID 2022-18

The UNDERSIGNED CONTRACTOR, having become familiarized with the local conditions affecting the cost of the work and with the Contract Documents, including the Advertisement for Bids, Instructions to Bidders, Standard Specifications, Special Provisions, Form of Proposal, Form of Contract, Insurance Requirements, etc., and with the plans and/or specifications and addenda, thereto if any, and understanding that in making this proposal waive all right to plead any misunderstanding regarding the same; the undersigned hereby proposes to perform all specified work and to provide and furnish all labor, materials, tools, expendable equipment, and all utility and transportation services necessary to complete in a workmanlike manner all work required in connection with this **BID 2022-18** to be completed by Woodridge, all in accordance with the plans and/or specifications, issued thereto, for the following prices; it being understood that each of the items is to be constructed complete in place and ready for use, including all labor, materials and equipment of every kind and nature necessary to construct the work as specified as well as all other appurtenant and accessory construction and that each item shall be constructed in all respects so as to accomplish the purpose for which the same was intended by the said plans and specifications.

1. It is understood and agreed by the undersigned that Woodridge reserves the unrestricted privilege to reject any bid should any unit prices be abutted, or any bid which is noticeably unbalanced, all at its sole discretion.
2. If required on Page 1, accompanying this Bid Proposal is a bid bond, certified check, or bank cashier's check ("Bid Deposit") in the amount stipulated on Page 1 of this Bid Document and it is agreed the Bid Deposit will be forfeited to said Municipality, if the undersigned fails to execute the contract in conformance with the form of contract incorporated in the Contract Documents.
3. When applicable, the unit price shall govern if there is a discrepancy between the product of the unit price multiplied by the quantity.
4. The undersigned firm certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the State of Illinois, nor has the firm made an admission of guilt of such conduct which is a matter of record, nor has an official, agent, or employee of the firm committed bribery or attempted bribery on behalf of the firm and pursuant to the direction or authorization of a responsible official of the firm.
5. The undersigned hereby certifies that they have read and understand the contents of this solicitation and agree to furnish at the prices as submitted below, subject to all terms, conditions, specifications and attachments hereto.

(BID PROPOSAL FOLLOWS)

BASE EQUIPMENT SUMMARY

BASE EQUIPMENT: EXAVATOR AND TRAILER

Basis of Design: Volvo EC60E Excavator and Towmaster T-18DT Trailer.

Item #	MINIMUM REQUIREMENTS (USE “EXHIBIT A” TO LIST ANY DEVIATIONS FROM THE MINIMUM REQUIREMENTS)	Comply Yes/No	No. of Units	Total Cost
1	EXCAVATOR FEATURES & ATTACHEMENTS: Basis of design is VOLVO EC60E (Spec attached as Attachment 1. Includes items #1.1 through #1.23.		1	\$
1.1	Cab with Heat & AC			
1.2	Boom:9’8”			
1.3	Auto Engine Shutdown			
1.4	X1 Hydraulics			
1.5	Extra Work Lights			
1.6	Frame Lifetime Guarantee			
1.7	Water Separator			
1.8	LED Flashing Beacon			
1.9	Care Tracks			
1.10	16” Rubber Tracks			
1.11	Long Arm : 6’ 3”			
1.12	Suspension Seat with Heat			
1.13	Joystick Controls			
1.14	Work Lights			
1.15	Travel Alarm			
1.16	Angle Blade with Float			
1.17	Radio			
1.18	Rear View Camera			
1.19	STD Warranty 1 year or 2500 hours			
1.20	Tool Kit-Daily Maintenance			
1.21	Tool Kit-Full Scale			
1.23	Werk Brau Tilt Coupler –Installed			
2	Werk Brau 24” HD Bucket		1	\$
3	Werk Brau 18” HD Bucket		1	\$
4	Indeco HP800-FS		1	\$
5	800FT/lbs. class hydraulic breaker with excavator mounting bracket, pins, hoses and couplers		1	\$

Item #	MINIMUM REQUIREMENTS (USE "EXHIBIT A" TO LIST ANY DEVIATIONS FROM THE MINIMUM REQUIREMENTS)	Comply Yes/No	No. of Units	Total Cost
6	TRAILER FEATURES. Basis of design is Towmaster T-18DT (Spec attached as Attachment 2) Includes items #6.1 through #6.23		1	\$
6.1	18,000LB Payload Capacity			
6.2	18' Tilting Deck			
6.3	4' Stationary Deck			
6.4	2" Nominal Oak Decking			
6.5	24" Diamond Plate Approach			
6.6	10 deg. Load Angles			
6.7	6 Sets of D-Rings			
6.8	102" Overall Width			
6.9	80" Between Fenders			
6.10	24" Loaded Deck Height			
6.11	3" Adjustable Pintle Ring			
6.12	Tool Box with Locking lid			
6.14	12K Drop Leg Jack			
6.15	Pallet Fork Holder (Under Stationary Deck/Side Mount)			
6.16	(2) 10k Torflex Axles			
6.17	Oil Bath Hubs			
6.18	(4) 235/75R17.5 (H) Tires			
6.19	(4) Steel Mod Wheels			
6.20	Sealed Wiring Harness			
6.21	7 Pole RV Style Plug			
6.22	LED Lights			
6.23	Tow Part Polyurethane Black Paint			
7	Preparation/Install & Freight		1	\$
TOTAL COST (Items #1 through #7)				\$

Anticipated Delivery Date: _____

The undersigned hereby certifies that they have read and understand the contents of this solicitation and agree to furnish at the products and services to complete the work at the prices shown for any or all of the items above, subject to all instructions, conditions, specifications and attachments hereto. Failure to have read all the provisions of this solicitation shall not be cause to alter any resulting contract or to accept any request for additional compensation. By signing this bid document, the bidder hereby certifies that they are not barred from bidding on this contract as a result of a violation of either Section 33E-3 or 33E-4 of the Illinois Criminal Code of 1961, as amended.

THE SECTION BELOW MUST BE COMPLETED IN FULL AND SIGNED

Name of Bidder: _____
Address: _____
Telephone No. _____ Fax No. _____
Email Address: _____
Title: _____
Date: _____

IF A CORPORATION

(Corporate Seal)

CORPORATE NAME

Attest: _____

By: _____
Secretary

By: _____
President

SUBSCRIBED AND SWORN BEFORE ME

This _____ day of _____, 20_____.

MY COMMISSION EXPIRES: _____

NOTARY PUBLIC

IF A PARTNERSHIP

(Seal)

(Seal)

(Seal)

PARTNERS DOING BUSINESS UNDER THE NAME OF

SUBSCRIBED AND SWORN BEFORE ME

This _____ day of _____, 20_____.

MY COMMISSION EXPIRES: _____

NOTARY PUBLIC

=====

IF AN INDIVIDUAL

(Seal)

SUBSCRIBED AND SWORN BEFORE ME

This _____ day of _____, 20____.

MY COMMISSION EXPIRES: _____

NOTARY PUBLIC

By: _____
Authorized Agent of Contractor

This agreement, made and entered into this _____ day of _____, 2022, between the Village of Woodridge, acting by and through its Mayor and Board of Trustees and _____
_____.

(Village Seal)

VILLAGE OF WOODRIDGE

Attest:

By: _____
Village Clerk

By: _____
Village Administrator

Subscribed and sworn before me this _____ day of _____, 2022.

My Commission Expires: _____

Notary Public

Exhibit A

Table 1 – List of Deviations

ITEM #	ITEM REQUESTED BY VILLAGE	VENDOR PROPOSED ALTERNATE:	TOTAL COST:

Exhibit B

VILLAGE OF WOODRIDGE NON BARRED FROM BIDDING DISQUALIFICATION PERSONS AND ENTITIES SUBJECT TO DISQUALIFICATION

No person or business entity shall be awarded a contract or subcontract, for a stated period of time, from the date of conviction or entry of a plea or admission of guilt, if the person or business entity,

- (A) has been convicted of an act committed, within the State of Illinois or any state within the United States, of bribery or attempting to bribe an officer or employee in the State of Illinois, or any State in the United States in that officer's or employee's official capacity;
- (B) has been convicted of an act committed, within the State of Illinois or any state within the United States, of bid rigging or attempting to rig bids as defined in the Sherman Anti-Trust Act and Clayton Act 15 U.S.C.;
- (C) has been convicted of bid rigging or attempting to rig bids under the laws of the State of Illinois, or any state in the United States;
- (D) has been convicted of bid rotating or attempting to rotate bids under the laws of the State of Illinois, or any state in the United States;
- (E) has been convicted of an act committed, within the State of Illinois or any state in the United States, of price-fixing or attempting to fix prices as defined by the Sherman Anti-Trust Act and Clayton Act 15 U.S.C. Sec. 1 et seq.;
- (F) has been convicted of price-fixing or attempting to fix prices under the laws of the State of Illinois, or any state in the United States;
- (G) has been convicted of defrauding or attempting to defraud any unit of state or local government or school district within the State of Illinois or in any state in the United States;
- (H) has made an admission of guilt of such conduct as set forth in subsection (A) through (F) above which admission is a matter of record, whether or not such person or business entity was subject to prosecution for the offense or offenses admitted to;
- (I) has entered a plea of nolo contendere to charges of bribery, price fixing, bid rigging, bid rotating, or fraud; as set forth in subparagraphs (A) through (F) above.

Business entity, as used herein, means a corporation, partnership, limited liability company trust, association, unincorporated business or individually owned business.

By signing this document, the bidder hereby certifies that they are not barred from bidding on this contract as a result of a violation of either Section 33E-3 or 33E-4 of the Illinois Criminal Code of 1961, as amended.

(Signature of Offeror if the Offeror is an Individual)
(Signature of Partner if the Offeror is a Partnership)
(Signature of Officer if the Offeror is a Corporation)

The above statements must be subscribed and sworn to before a notary public. Subscribed and

Sworn to this _____ day of _____, 2022.

Notary Public

Failure to complete and return this form may be considered sufficient reason for rejection of the proposal.

Exhibit C

VILLAGE OF WOODRIDGE

ANTI-COLLUSION AFFIDAVIT AND CONTRACTOR'S CERTIFICATION

_____, being first duly sworn, deposes and says that

he/she is _____ (Partner, Officer, Owner, Etc.)

of _____
(Contractor)

The party making the foregoing proposal or bid, that such bid is genuine and not collusive, or sham; that said bidder has not colluded, conspired, connived or agreed, directly or indirectly, with any bidder or person, to put in a sham bid or to refrain from bidding, and has not in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference with any person; to fix the bid price element of said bid, or of that of any other bidder, or to secure any advantage against any other bidder or any person interested in the proposed contract.

The undersigned certifies that they are not barred from bidding on this contract as a result of a conviction for the violation of State laws prohibiting bid-rigging or bid-rotating.

(Name of Bidder if the Bidder is an Individual)
(Name of Partner if the Bidder is a Partnership)
(Name of Officer if the Bidder is a Corporation)

The above statements must be subscribed a sworn to before a notary public. Subscribed and Sworn to this _____ day of _____, 2022.

Notary Public

Failure to complete and return this form may be considered sufficient reason for rejection of the bid.

Exhibit D

VILLAGE OF WOODRIDGE
CONFLICT OF INTEREST

_____, hereby certifies that

it has conducted an investigation into whether an actual or potential conflict of interest exists between the bidder, its owners and employees and any official or employee of a Municipality identified herein.

Bidder further certifies that it has disclosed any such actual or potential conflict of interest and acknowledges if bidder has not disclosed any actual or potential conflict of interest, the Village of Woodridge may disqualify the bid or the affected the Municipality may void any award and acceptance that the Municipality has made.

(Name of Bidder if the Bidder is an Individual)
(Name of Partner if the Bidder is a Partnership)
(Name of Officer if the Bidder is a Corporation)

The above statements must be subscribed a sworn to before a notary public. Subscribed and

Sworn to this _____ day of _____, 2022.

Notary Public

Failure to complete and return this form may be considered sufficient reason for rejection of the bid.

Exhibit E

VILLAGE OF WOODRIDGE
TAX COMPLIANCE AFFIDAVIT

_____, being first duly sworn, deposes and says that

he or she is a _____ of _____.

(Partner, Officer, Owner, Etc.)

The individual or entity making the foregoing proposal or bid certifies that he is not barred from contracting with the any of the Municipalities identified herein because of any delinquency in the payment of any tax administered by the Department of Revenue unless the individual or entity is contesting, in accordance with the procedures established by the appropriate revenue act. The individual or entity making the proposal or bid understands that making a false statement regarding delinquency in taxes is a Class A Misdemeanor and, in addition, voids the contract and allows the municipality to recover all amounts paid to the individual or entity under the contract in civil action

(Name of Bidder if the Bidder is an Individual)
(Name of Partner if the Bidder is a Partnership)
(Name of Officer if the Bidder is a Corporation)

The above statements must be subscribed and sworn to before a notary public. Subscribed and

Sworn to this __ day of _____, 2022.

Notary Public _____

Failure to complete and return this form may be considered sufficient reason for rejection of the bid.

ATTACHMENT 1

EXCAVATOR FEATURES & ATTACHEMENTS:
Basis of design - VOLVO EC60E

Volvo Construction Equipment
Building Tomorrow



EC60E

Volvo Excavators 5.5-6.8 t / 12,110-14,990 lb 59 hp





WELCOME TO OUR WORLD

Welcome to a world of industry leading machinery. A world where imagination, hard work and technological innovation will lead the way towards developing a future which is cleaner, smarter, and more connected. A world supported by the enduring values of the Volvo Group. A world of stability, sustainability and innovation. A world which we put our customers at the heart of.

Small machines, big results

With decades of experience in the design and manufacture of compact excavators and wheel loaders, our range of compact machinery is designed with customer success in mind. Built from the same DNA as large Volvo machinery, our compact range sets the standard for efficiency performance and uptime – complemented by an extensive range of Volvo attachments for maximum versatility.

Building on our proud history, the Volvo Concept Lab continues to create cutting-edge ideas and innovative concepts – such as our award-winning electric compact excavator – to ensure we offer our customers machines which deliver big results long into the future.



VOLVO

Solutions for you

Our industry leading machines are just the start of your relationship with Volvo. As your partner, we have developed an extensive range of additional solutions to help you improve uptime, boost productivity and reduce costs.

Designed for your business

Structured across nine blocks, our portfolio of products and services are designed to complement your machine's performance and boost your profitability. Simply put, we offer some of the best guarantees, warranties and technological solutions in the industry today.

There when you need us

Whether you're buying new or used, our global network of dealers and technicians offer around-the-clock support, including machine monitoring and world-class parts availability. It's the basis of everything offered by Volvo Services, so you can be confident we've got you covered right from the start.



Fuel Efficiency Services



Productivity Services



Safety Services



Financial Services



Uptime Services



Rental Services



Volvo Attachments



Genuine Volvo Parts



New Life Services

BUILDING TOMORROW

More space, more comfort, more work

The new EC60E features a larger cab design for a comfortable and more productive operator environment. Improved ergonomics and a modern LCD display give you perfect control in all operations. Plenty of storage has been added for personal belongings.

Operator convenience

Increased storage space is available for operator comfort and convenience. A phone tray, two power sockets, cup holder and three other large storage areas makes the Volvo cab a more convenient working environment.



Operator visibility

All-round visibility is improved by thinner pillars, larger glazed area and enlarged wiper blade. The rear view camera secures a better view for perfect and safe control through the 7" color LCD display. This ensures there are no blind spots even in the most confined working areas.



Work in comfort

The comfortable and adjustable seat makes it easier for the operator to work hard all day and feel less tired by the end of it. The cab's air conditioning is 10% more efficient and in automatic mode, the temperature remains at a set level. Six adjustable vents allow for optimal airflow in the cab.



Ease of control

Control your machine with minimal effort in order to get more done in less time. The keypad groups all controls on the right hand side and the 7" color LCD screen displays all machine information for access to functions through its easy to use menus. Through the hot keys, the operator can directly access pre-set functions for added convenience. The new proportional joystick provides better grip, fits your thumb perfectly and increases ease of control.





LARGER CAB

10% more space results in comfortable and relaxed operation, increasing production and reducing fatigue. The new cab design creates more space behind the seat, allowing the operator to move more freely within the space. The new generation Volvo Cab features more in cab room, increased glazed area and reduced noise levels.



BOOSTED PERFORMANCE

Do more in less time with increased combined digging efforts, a 10% improvement in traction, swing force and lifting capacity. The EC60E has been designed to tackle the most challenging job sites and contracts using the powerful Tier 4 final engine and adjustable hydraulic flow.

Power for performance

Climb quicker, swing smoother, dig harder and load faster with the EC60E. Improved traction, swing force and lifting capacity gets you results, fast. This versatile and powerful machine can be tailored for any job and is suitable for a wide range of applications.

Powerful Volvo Tier 4 final engine

Give your job site a boost and achieve fast results. Increased power to 59.4 hp (44.3 kW) and improved cooling ensure optimized performance in any climate. For the ultimate combination of power and performance, the engine helps to push through challenging conditions.



Smooth operation

Smooth combined operation means you can make very accurate and precise movements. With responsive controls the machine does exactly what the operator intends for less fatigue and fluent movement.



Versatility

Perform on any job site, whether you're working in a confined space or major construction area. The machine's compact design, long arm, optional fixed boom and offset boom, longer dozer blade, auxiliary hydraulic and thumb pipings makes the machine suitable for a wide range of jobs and applications.



Operator performance

The operator can set the machine to their own style and to suit the job at hand for easier control and increased performance. The auxiliary hydraulic flows, electric dozer blade and boom offset speed can be adjusted by the operator and tailored to three different work response modes – 'Active', 'Normal' or 'Soft'.



Profit in your business

The EC60E is designed and built to increase your profitability and keep you working for longer. To reduce your running costs it features excellent service access, convenient maintenance points and Volvo's auto engine shutdown feature. With better fuel efficiency this durable and reliable machine secures your costs and increases your uptime.

Low fuel consumption

The new Volvo engine and improved hydraulics together offer superior fuel efficiency. The standard auto idle feature helps to reduce your fuel consumption even further and increase your profits.



Auto engine shutdown

A unique offering from Volvo, the engine stops automatically after a preselected time, lowering fuel costs and noise. A stopped hour meter reduces maintenance costs and increases the resale value of the machine.



MATRIS and VCADS Pro

By working with your dealer and using Volvo MATRIS software you can analyse operator behaviour to improve efficiency, boost productivity and reduce your fuel and maintenance costs. Volvo also offers the VCADS Pro diagnostic system, making it easy to control your machine.



Durability and reliability

The EC60E is designed with the same high quality as all Volvo machines so you can be assured it's durable and reliable on your job site. You can depend on your machine to perform and work hard for peace of mind.





SERVICEABILITY

Keep your machine up and running with a number of features combined to increase machine availability and reduce downtime. Ground level service access, including new main control valve location, convenient greasing points and an easy to clean cooling unit all reduce service time and maintenance costs. Check service intervals easily through the in-cab screen, which shows reminders when maintenance is needed.



ATTACHMENTS VERSATILITY

The machine's attachment can be easily changed to save time and costs. Its design, hydraulics, piping and in-cab switches combined with the Volvo attachments range allows the EC60E to take on a variety of tasks. Volvo attachments work in harmony with the machine to deliver maximum productivity.

One machine, many applications

Volvo offers a wide range of durable attachments that are suitable for any job site, including utilities, building, agriculture, landscaping and forestry. Volvo attachments are an integrated part of the excavator for which they're intended –delivering maximum productivity and versatility.

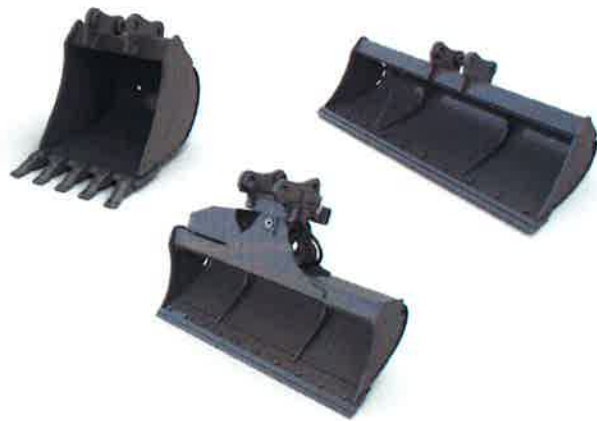
Quick coupler

Both the mechanical and the hydraulic quick couplers allow attachments to be changed quickly and efficiently. Making it easier on site, the quick coupler picks different Volvo buckets and is the perfect match for the breakers and thumb.



Buckets

A complete range of buckets from general purpose reinforced buckets to ditching buckets, allow the machine to work on many job sites for a wide range of applications. The durable buckets can work in loose gravel, crushed rock, dirt and soil.



Breaker

Volvo's durable hydraulic breakers have been designed for ultimate compatibility with Volvo excavators. The wide range of breaker tools (or bits) has been built to break all kinds of materials and combines excellent performance with low noise and vibration levels.



Thumb

Designed to work with both Volvo direct fit buckets and quick coupler, the Volvo thumb makes many tasks possible, including piling, placing, loading, lifting and carrying.



A compact machine with big potential

BOOSTED PERFORMANCE

Do more in less time with increased combined digging efforts, a 10% improvement in traction, swing force and lifting capacity.

Smooth operation

Smooth combined operation means you can make very accurate and precise movements.

MATRIS and VCADS Pro

Volvo MATRIS analyses operator behaviour, improving efficiency and productivity. VCADS Pro helps to control your machine.

ATTACHMENTS VERSATILITY

The Volvo attachments range allows the machine to take on a variety of tasks for a wide range of jobs and applications.

Versatility

Perform on any job site, whether you're working in a confined space or major construction area

Auto engine shutdown

The auto engine shutdown provides lower fuel costs, less noise, much lower maintenance costs and a greater resale value.

ECO mode

Volvo's unique ECO mode improves fuel efficiency without any loss of performance in most operating conditions.



LARGER CAB

More space results in comfortable and relaxed operation, increasing production and reducing fatigue.

SERVICEABILITY

Ground level service access, new main control valve location, convenient greasing points and easy to clean cooling unit reduce service time.

Ease of control

The keypad groups all controls on the right hand side and the LCD screen displays all machine information for access to functions.

Operator convenience

Increased storage space in the cab provides for operator comfort and convenience.

Powerful Volvo Tier 4 final engine

For the ultimate combination of power and performance, the powerful engine pushes through challenging conditions.

CUSTOMER SUPPORT AGREEMENTS

Customer Support Agreements offer preventive maintenance, total repairs and a number of uptime services.



Adding value to your business

Being a Volvo customer means having a complete set of services at your fingertips. Volvo can offer you a long-term partnership, protect your revenue and provide a full range of customer solutions using high quality parts, delivered by passionate people. Volvo is committed to increasing the positive return on your investment and maximising uptime.

Complete Solutions

Volvo has the right solution for you. So why not let us provide all your needs throughout the whole life cycle of your machine? By

listening to your requirements, we can reduce your total cost of ownership and increase your revenue.



Genuine Volvo Parts

Our attention to detail is what makes us stand out. This proven concept acts as a solid investment in your machine's future. Parts are extensively tested and approved because every part is vital for uptime and performance. Only by using Genuine Volvo Parts, can you be sure that your machine retains the renowned Volvo quality.

Service Network

In order to respond to your needs faster, a Volvo expert is on their way to your job site from one of our Volvo facilities. With our extensive infrastructure of technicians, workshops and dealers, Volvo has a comprehensive network to fully support you using local knowledge and global experience.





CUSTOMER SUPPORT AGREEMENTS

The range of Customer Support Agreements offer preventive maintenance, total repairs and a number of uptime services. Volvo uses the latest technology to monitor machine operation and status, giving you advice to increase your profitability. By having a Customer Support Agreement you are in control of your service costs.

Volvo EC60E in detail

Engine

The new engine which provide excellent performance is equipped with a four-cylinder, vertical, electronic controlled high pressure fuel injectors, in-line turbo charger and water cooled diesel engine type. This engine fully meets the demands of the latest Tier 4 final emissions regulations.

Model	Volvo	D2.6H
Max. power at	r/min (r/s)	2,200 (36.7)
Net (ISO 9249/SAE J1349)	kW (hp)	42.7 (57.3)
Gross (SAE J1995)	kW (hp)	44.3 (59.4)
Max. torque	Nm (ft lbf)	221.6 (163)
at engine speed	r/min	1,500
No. of cylinders		4
Displacement	l (in ³)	2.61 (159)
Bore	mm (in)	87 (3.42)
Stroke	mm (in)	110 (4.33)

Electrical system

Voltage	V	12
Batteries	V	1 x 12
Battery capacity	Ah	100
Alternator	V/Ah	12/90
Starter motor output	V - kW	12 - 2.5

Hydraulic system

Open-center, negative hydraulic system providing accurate controllability

Main pump: Variable-displacement pump

Maximum flow	l/min (gal/min)	2 x 60.5 (2 x 16)
--------------	-----------------	-------------------

Swing pump: Gear pump

Maximum flow	l/min (gal/min)	1 x 35.2 (1 x 9.3)
--------------	-----------------	--------------------

Relief valve setting pressure

Implement	MPa (psi)	22.6 (3,278)
Travel circuit	MPa (psi)	24.5 (3,560)
Swing circuit	MPa (psi)	19.6 (2,843)
Pilot circuit	MPa (psi)	3.2 (464)
Breaker & shear X1 maximum flow	l/min (gal/min)	60.5 (15.9)
Breaker & shear X1 maximum pressure	MPa (psi)	22.5 (3,263)
Slope & rotator X3 maximum flow	l/min (gal/min)	20.2 (5.3)
Slope & rotator X3 maximum pressure	MPa (psi)	14.7 (2,132)

Travel System

Each track is powered by an automatic two-speed shift travel motor. The track brakes are multi-disc, spring-applied and hydraulic released. The travel motor, brake and planetary gears are well protected within the track frame.

Travel speed low	km/h (mi/h)	2.4 (1.5)
Travel speed high	km/h (mi/h)	4.4 (2.7)
Max. drawbar pull	kN (lbf)	52.8 (11,870)
Gradeability	°	35

Service Refill

Fuel tank	l (gal)	105 (27.7)
Hydraulic system, total	l (gal)	120 (31.7)
Hydraulic tank	l (gal)	76 (20.1)
Engine oil	l (gal)	11 (2.9)
Engine coolant	l (gal)	10 (2.6)
Travel reduction unit	l (gal)	2 x 0.8 (2 x 0.2)

Sound Level

Sound pressure level in cab according to ISO 6396		
L _{PA} (standard)	dB	78
External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC		
L _{WA} (standard)	dB	97

Swing system

No need for gear oil replacement

The lubricating system uses hydraulic operation oil for the reduction gear, eliminating the need for gear oil replacement.

Built-in parking brake

Parking brake can be built into the hydraulic motor, enabling safer parking on an incline.

Shockless function

Shockless relief is standard equipment to enable smooth traversing.

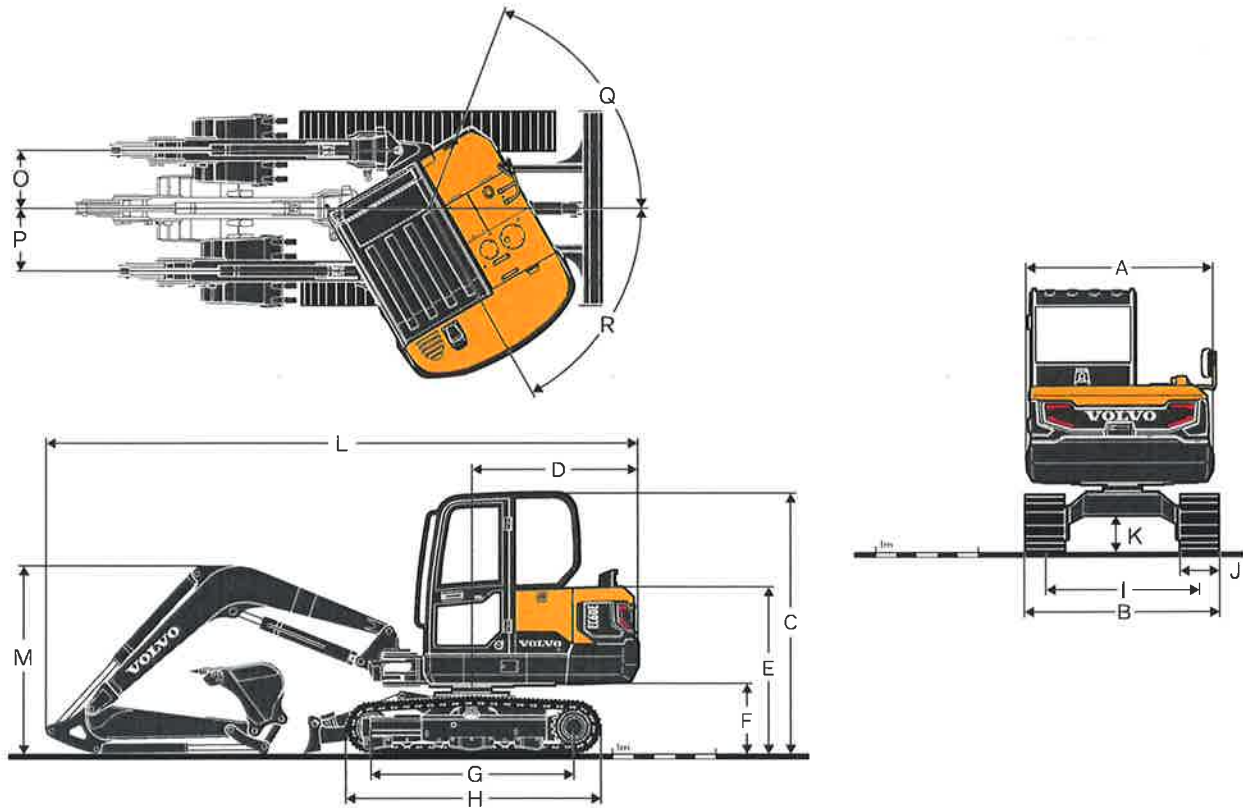
Max. swing speed	r/min	9.2
Max. swing torque	kNm (ft lbf)	12.3 (9,072)

Undercarriage

The undercarriage has a robust X-shaped frame.

Track shoes		2 x 39
Link pitch	mm (in)	135 (5.31)
Shoe width - steel	mm (in)	380 / 500 (15 / 19.7)
Shoe width - rubber	mm (in)	400 (15.7)
Bottom rollers		2 x 5
Top rollers		2 x 1

Specifications

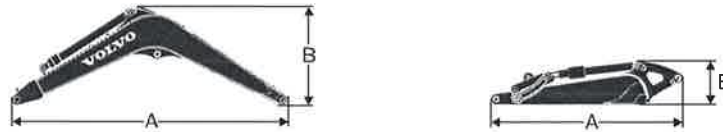


DIMENSIONS		EC60E					
Boom		m	ft in	3.0	9'10"	3.0	9'10"
Arm		m	ft in	1.6	5'3"	1.9	6'3"
A	Overall width of upper structure	mm	ft in	1 845	6'1"	1 845	6'1"
B	Overall width	mm	ft in	1 920	6'4"	1 920	6'4"
C	Overall height of cab	mm	ft in	2 584	8'6"	2 584	8'6"
D	Tail swing radius	mm	ft in	1 650	5'5"	1 650	5'5"
E	Overall height of engine hood	mm	ft in	1 630	5'4"	1 630	5'4"
F	Counterweight clearance *	mm	ft in	671	2'2"	671	2'2"
G	Tumbler length	mm	ft in	1 990	6'6"	1 990	6'6"
H	Track length	mm	ft in	2 500	8'2"	2 500	8'2"
I	Track gauge	mm	ft in	1 520	5'0"	1 520	5'0"
J	Shoe width	mm	ft in	380	1'3"	380	1'3"
K	Min. ground clearance *	mm	ft in	350	1'2"	350	1'2"
L	Overall length	mm	ft in	5 800	19'0"	5 865	19'3"
M	Overall height of boom	mm	ft in	1 854	6'1"	1 978	6'6"
O	Boom swing distance	mm	ft in	684	2'3"	684	2'3"
P	Boom swing distance	mm	ft in	755	2'6"	755	2'6"
Q	Boom swing angle	°		80		80	
R	Boom swing angle	°		50		50	

* Without shoe grouser

** Based on Steel track

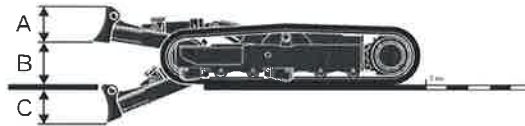
Specifications



DIMENSIONS		Unit		Boom		Arm			
		m	ft in	3.0	9'10"	1.6	5'3"	1.9	6'3"
A	Length	mm	ft in	3 110	10'2"	2 102	6'11"	2 402	7'11"
B	Height	mm	ft in	1 192	3'11"	488	1'7"	497	1'8"
	Width	mm	ft in	336	1'1"	300	1'0"	300	1'0"
	Weight	kg	lb	378	830	168	370	181	400

Boom * Includes cylinder, piping and pin, excludes boom cyl. Pin

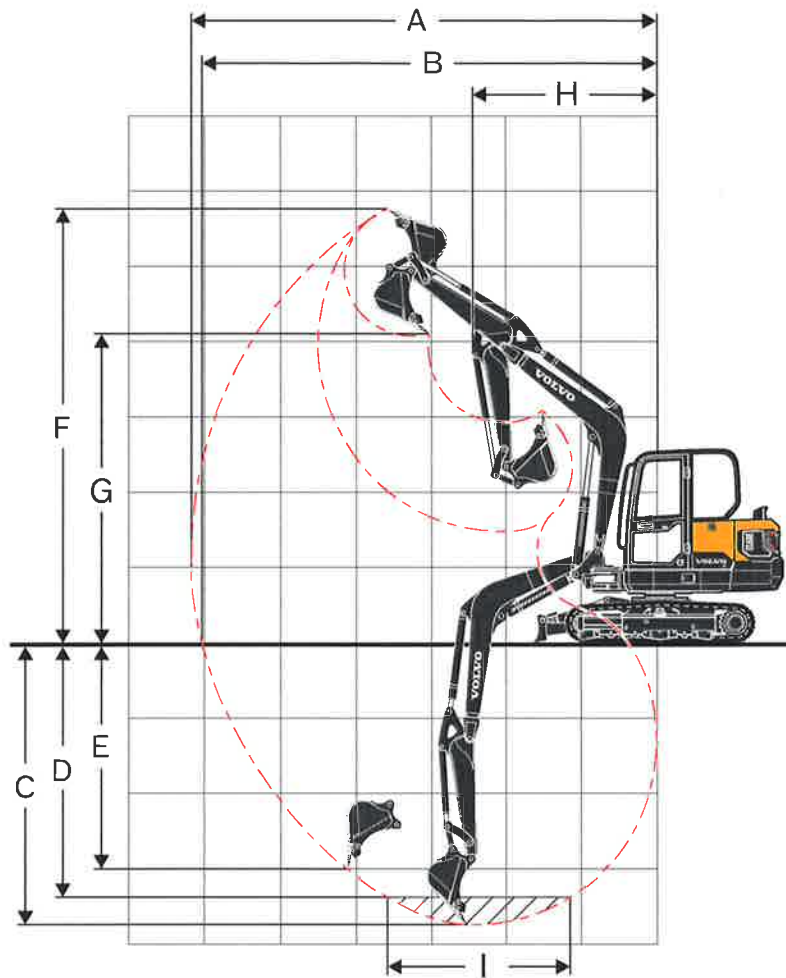
Arm * Includes cylinder, linkage and pin



DIMENSIONS				Dozer blade					
				Standard dozer		Zero-offset (Longer) dozer		Angle dozer	
A	Height	mm	ft in	350	1'2"	350	1'2"	397	1'4"
	Width	mm	ft in	1 920	6'4"	1 920	6'4"	1 920	6'4"
B	Lifting height	mm	ft in	351	1'2"	405	1'4"	399	1'4"
C	Digging depth	mm	ft in	446	1'6"	635	2'1"	682	2'3"
	Angle (Right)							25	
	Angle (Left)							25	

MACHINE WEIGHTS AND GROUND PRESSURE

	Shoe width		Operating weight		Ground pressure	
	mm	in	kg	lb	kPa	psi
Boom 3 m / 9'10", Arm 1.6 m / 5'3", Bucket 129 kg (142 l) / 280 lb, Counterweight 440 kg / 970 lb						
Steel track	380	15"	5 877	12,960	34.9	5
Steel track	500	20"	5 979	13,180	27	4
Rubber track	400	16"	5 730	12,630	32.3	5
Rubber pad	400	16"	6 049	13,340	33.8	5
Boom 3 m / 9'10", Arm 1.9 m / 6'3", Bucket 129 kg (142 l) / 280 lb, Counterweight 440 kg / 970 lb						
Steel track	380	15"	5 927	13,070	35.2	5
Steel track	500	20"	6 029	13,290	27.2	4
Rubber track	400	16"	5 780	12,740	32.6	5
Rubber pad	400	16"	6 099	13,450	34.1	5



WORKING RANGES

Description		Unit					
Boom		m	ft in	3.0	9'10"	3.0	9'10"
Arm		m	ft in	1.6	5'3"	1.9	6'3"
A	Max. digging reach	mm	ft in	6 105	20'0"	6 395	21'0"
B	Max. digging reach on ground	mm	ft in	5 970	19'7"	6 260	20'6"
C	Max. digging depth	mm	ft in	3 695	12'1"	3 995	13'1"
D	Max. digging depth (l=2.44m / 8'0" level)	mm	ft in	3 295	10'10"	3 640	11'11"
E	Max. vertical wall digging depth	mm	ft in	2 625	8'7"	2 900	9'6"
F	Max. cutting height	mm	ft in	5 695	18'8"	5 885	19'4"
G	Max. dumping height	mm	ft in	4 150	13'7"	4 340	14'3"
H	Min. front swing radius	mm	ft in	2 465	8'1"	2 470	8'1"

DIGGING FORCES WITH DIRECT FIT BUCKET

Breakout force (bucket)	SAE J1179	kN	lb	37.7	8,470	37.7	8,470
	ISO 6015	kN	lb	43.3	9,720	43.3	9,720
Tearout force (arm)	SAE J1179	kN	lb	28.2	6,340	25	5,630
	ISO 6015	kN	lb	28.8	6,470	25.4	5,710
Rotation angle, bucket		°		196		196	

Specifications

LIFTING CAPACITY EC60E

Lifting capacity at the arm end without bucket.

For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick coupler from the following values.

		Lifting hook related to ground level	1.0 m, 3.3 ft		2.0 m, 6.6 ft		3.0 m, 9.9 ft		4.0 m, 13.2 ft		5.0 m, 16.5 ft		Max. Reach			
			Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC		
Boom: 3.0m / 9'10" Arm: 1.6m GP / 5'3" GP Shoe: 400mm / 16" Rubber track CWT: 440 kg / 970lb Dozerblade: Down	4.0 m	kg	-	-	-	-	-	-	*1,450	1,150	-	-	*1,420	1,000	4.3 m	
	13.2 ft	lb	-	-	-	-	-	-	*3,210	2,510	-	-	*3,140	2,220	14.1 ft	
	3.0 m	kg	-	-	-	-	-	-	*1,510	1,130	-	-	*1,320	800	4.9 m	
	9.9 ft	lb	-	-	-	-	-	-	*3,310	2,480	-	-	*2,920	1,770	16.1 ft	
	2.0 m	kg	-	-	-	-	-	*2,320	1,670	*1,730	1,080	*1,470	770	*1,330	710	5.2 m
	6.6 ft	lb	-	-	-	-	-	*5,070	3,670	*3,790	2,380	*3,230	1,680	*2,920	1,570	17.2 ft
	1.0 m	kg	-	-	-	-	-	*2,910	1,550	*1,960	1,030	*1,540	750	*1,400	680	5.3 m
	3.3 ft	lb	-	-	-	-	-	*6,360	3,390	*4,300	2,260	*3,370	1,630	*3,090	1,510	17.4 ft
	0.0 m	kg	-	-	-	*1,360	*1,360	*3,050	1,490	*2,060	990	*1,520	730	*1,450	700	5.1 m
	0.0 ft	lb	-	-	-	*3,060	*3,060	*6,670	3,270	*4,520	2,180	*3,330	1,600	*3,200	1,550	16.9 ft
	-1.0 m	kg	*2,430	*2,430	*3,230	2,910	*2,790	1,480	*1,930	980	-	-	-	*1,440	790	4.7 m
	-3.3 ft	lb	*5,390	*5,390	*7,200	6,340	*6,120	3,250	*4,220	2,160	-	-	-	*3,180	1,750	15.5 ft
	-2.0 m	kg	-	-	-	*3,140	2,960	*2,130	1,510	-	-	-	-	*1,340	1,030	4.0 m
	-6.6 ft	lb	-	-	-	*6,860	6,470	*4,650	3,310	-	-	-	-	*2,960	2,280	12.9 ft
Boom: 3.0m / 9'10" Arm: 1.6m GP / 5'3" GP Shoe: 400mm / 16" Rubber track CWT: 440 kg / 970lb Dozerblade: Up	4.0 m	kg	-	-	-	-	-	-	*1,450	1,070	-	-	1,290	930	4.3 m	
	13.2 ft	lb	-	-	-	-	-	-	*3,210	2,340	-	-	2,860	2,070	14.1 ft	
	3.0 m	kg	-	-	-	-	-	-	1,460	1,050	-	-	1,030	740	4.9 m	
	9.9 ft	lb	-	-	-	-	-	-	3,190	2,310	-	-	2,290	1,640	16.1 ft	
	2.0 m	kg	-	-	-	-	2,210	1,550	1,410	1,010	1,000	710	930	660	5.2 m	
	6.6 ft	lb	-	-	-	-	4,830	3,390	3,080	2,210	2,190	1,560	2,050	1,460	17.2 ft	
	1.0 m	kg	-	-	-	-	2,070	1,430	1,350	950	980	690	890	630	5.3 m	
	3.3 ft	lb	-	-	-	-	4,540	3,130	2,960	2,090	2,140	1,510	1,980	1,400	17.4 ft	
	0.0 m	kg	-	-	-	*1,360	*1,360	2,010	1,370	1,310	920	960	670	920	650	5.1 m
	0.0 ft	lb	-	-	-	*3,060	*3,060	4,400	3,000	2,880	2,010	2,100	1,480	2,040	1,440	16.9 ft
	-1.0 m	kg	*2,430	*2,430	*3,230	2,630	2,000	1,360	1,300	910	-	-	-	1,040	730	4.7 m
	-3.3 ft	lb	*5,390	*5,390	*7,200	5,740	4,380	2,990	2,860	1,990	-	-	-	2,300	1,620	15.5 ft
	-2.0 m	kg	-	-	-	*3,140	2,680	2,030	1,390	-	-	-	-	*1,340	950	4.0 m
	-6.6 ft	lb	-	-	-	*6,860	5,860	4,450	3,050	-	-	-	-	*2,960	2,110	12.9 ft
Boom: 3.0m / 9'10" Arm: 1.6m GP / 5'3" GP Shoe: 380mm / 15" Steel Track CWT: 440 kg / 970lb Dozerblade: Down	4.0 m	kg	-	-	-	-	-	-	*1,450	1,180	-	-	*1,420	1,020	4.3 m	
	13.2 ft	lb	-	-	-	-	-	-	*3,210	2,570	-	-	*3,140	2,280	14.1 ft	
	3.0 m	kg	-	-	-	-	-	-	*1,510	1,160	-	-	*1,320	820	4.9 m	
	9.9 ft	lb	-	-	-	-	-	-	*3,310	2,540	-	-	*2,920	1,820	16.1 ft	
	2.0 m	kg	-	-	-	-	*2,320	1,720	*1,730	1,110	*1,470	790	*1,330	730	5.2 m	
	6.6 ft	lb	-	-	-	-	*5,070	3,760	*3,790	2,440	*3,230	1,730	*2,920	1,620	17.2 ft	
	1.0 m	kg	-	-	-	-	*2,910	1,590	*1,960	1,060	*1,540	770	*1,400	700	5.3 m	
	3.3 ft	lb	-	-	-	-	*6,360	3,490	*4,300	2,320	*3,370	1,680	*3,090	1,560	17.4 ft	
	0.0 m	kg	-	-	-	*1,360	*1,360	*3,050	1,530	*2,060	1,020	*1,520	750	*1,450	720	5.1 m
	0.0 ft	lb	-	-	-	*3,060	*3,060	*6,670	3,360	*4,520	2,240	*3,330	1,650	*3,200	1,600	16.9 ft
	-1.0 m	kg	*2,430	*2,430	*3,230	2,990	*2,790	1,530	*1,930	1,010	-	-	-	*1,440	810	4.7 m
	-3.3 ft	lb	*5,390	*5,390	*7,200	6,520	*6,120	3,340	*4,220	2,220	-	-	-	*3,180	1,800	15.5 ft
	-2.0 m	kg	-	-	-	*3,140	3,040	*2,130	1,560	-	-	-	-	*1,340	1,060	4.0 m
	-6.6 ft	lb	-	-	-	*6,860	6,650	*4,650	3,410	-	-	-	-	*2,960	2,350	12.9 ft
Boom: 3.0m / 9'10" Arm: 1.6m GP / 5'3" GP Shoe: 380mm / 15" Steel Track CWT: 440 kg / 970lb Dozerblade: Up	4.0 m	kg	-	-	-	-	-	-	*1,450	1,100	-	-	1,320	950	4.3 m	
	13.2 ft	lb	-	-	-	-	-	-	*3,210	2,400	-	-	2,950	2,120	14.1 ft	
	3.0 m	kg	-	-	-	-	-	-	1,500	1,080	-	-	1,070	760	4.9 m	
	9.9 ft	lb	-	-	-	-	-	-	3,280	2,370	-	-	2,360	1,690	16.1 ft	
	2.0 m	kg	-	-	-	-	2,270	1,590	1,450	1,030	1,030	730	960	680	5.2 m	
	6.6 ft	lb	-	-	-	-	4,960	3,480	3,180	2,270	2,250	1,610	2,120	1,500	17.2 ft	
	1.0 m	kg	-	-	-	-	2,140	1,470	1,390	980	1,010	710	920	650	5.3 m	
	3.3 ft	lb	-	-	-	-	4,670	3,210	3,050	2,150	2,210	1,560	2,040	1,440	17.4 ft	
	0.0 m	kg	-	-	-	*1,360	*1,360	2,070	1,410	1,360	950	990	700	950	670	5.1 m
	0.0 ft	lb	-	-	-	*3,060	*3,060	4,540	3,090	2,970	2,070	2,170	1,530	2,110	1,480	16.9 ft
	-1.0 m	kg	*2,430	*2,430	*3,230	2,700	2,070	1,400	1,340	940	-	-	-	1,070	750	4.7 m
	-3.3 ft	lb	*5,390	*5,390	*7,200	5,900	4,520	3,070	2,950	2,050	-	-	-	2,370	1,660	15.5 ft
	-2.0 m	kg	-	-	-	*3,140	2,760	2,100	1,430	-	-	-	-	*1,340	980	4.0 m
	-6.6 ft	lb	-	-	-	*6,860	6,020	4,580	3,130	-	-	-	-	*2,960	2,170	12.9 ft
Boom: 3.0m / 9'10" Arm: 1.9m GP / 6'3" GP Shoe: 400mm / 16" Rubber track CWT: 440 kg / 970lb Dozerblade: Down	5.0 m	kg	-	-	-	-	-	-	-	-	-	-	*1,380	1,290	3.7 m	
	16.5 ft	lb	-	-	-	-	-	-	-	-	-	-	*3,060	2,890	12.1 ft	
	4.0 m	kg	-	-	-	-	-	-	*1,280	1,160	-	-	*1,160	880	4.7 m	
	13.2 ft	lb	-	-	-	-	-	-	*2,830	2,540	-	-	*2,560	1,950	15.3 ft	
	3.0 m	kg	-	-	-	-	-	-	*1,360	1,140	*1,310	780	*1,090	720	5.2 m	
	9.9 ft	lb	-	-	-	-	-	-	*3,000	2,490	*2,900	1,720	*2,400	1,590	17.2 ft	
	2.0 m	kg	-	-	-	-	*2,070	1,700	*1,600	1,090	*1,380	760	*1,090	650	5.5 m	
	6.6 ft	lb	-	-	-	-	*4,530	3,720	*3,510	2,380	*3,040	1,680	*2,400	1,430	18.1 ft	
	1.0 m	kg	-	-	-	-	*2,740	1,560	*1,870	1,030	*1,480	740	*1,140	620	5.6 m	
	3.3 ft	lb	-	-	-	-	*5,990	3,410	*4,100	2,250	*3,260	1,620	*2,520	1,370	18.3 ft	
	0.0 m	kg	-	-	-	*1,510	*1,510	*3,020	1,480	*2,030	980	*1,530	720	*1,270	630	5.4 m
	0.0 ft	lb	-	-	-	*3,370	*3,370	*6,610	3,230	*4,440	2,150	*3,340	1,570	*2,800	1,410	17.8 ft
	-1.0 m	kg	*2,060	*2,060	*2,880	2,840	*2,890	1,450	*1,980	960	*1,380	710	*1,350	700	5.1 m	
	-3.3 ft	lb	*4,560	*4,560	*6,410	6,200	*6,320	3,190	*4,330	2,110	*3,000	1,560	*2,970	1,550	16.6 ft	
-2.0 m	kg	*3,400	*3,400	*3,700	2,890	*2,370	1,470	*1,590	980	-	-	-	*1,300	870	4.4 m	
-6.6 ft	lb	*7,540	*7,540	*8,080	6,320	*5,170	3,230	*3,450	2,140	-	-	-	*2,860	1,940	14.3 ft	
-3.0 m	kg	-	-	-	*1,690	*1,690	*1,040	*1,040	-	-	-	-	*970	*970	3.1 m	
-9.9 ft	lb	-	-	-	*3,610	*3,610	*2,160	*2,160	-	-	-	-	*2,110	*2,110	10.0 ft	

Notes: 1. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards. 2. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. 3. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

LIFTING CAPACITY EC60E

Lifting capacity at the arm end without bucket.

For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick coupler from the following values.

	Lifting hook related to ground level	1.0 m, 3.3 ft		2.0 m, 6.6 ft		3.0 m, 9.9 ft		4.0 m, 13.2 ft		5.0 m, 16.5 ft		Max. Reach	
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC
Boom: 3.0m / 9'10" Arm: 1.9m GP / 6'3" GP Shoe: 400mm / 16" Rubber track CWT: 440 kg / 970lb Dozerblade: Up	5.0 m kg	-	-	-	-	-	-	-	-	-	-	*1380	1200 3.7 m
	16.5 ft lb	-	-	-	-	-	-	-	-	-	-	*3,060	2,690 12.1 ft
	4.0 m kg	-	-	-	-	-	-	*1280	1080	-	-	1130	810 4.7 m
	13.2 ft lb	-	-	-	-	-	-	*2,830	2,370	-	-	2,520	1,810 15.3 ft
	3.0 m kg	-	-	-	-	-	-	*1360	1060	1020	730	940	670 5.2 m
	9.9 ft lb	-	-	-	-	-	-	*3,000	2,320	2,220	1,590	2,070	1,480 17.2 ft
	2.0 m kg	-	-	-	-	*2070	1570	1410	1010	1000	710	850	600 5.5 m
	6.6 ft lb	-	-	-	-	*4,530	3,440	3,090	2,210	2,180	1,550	1,870	1,320 18.1 ft
	1.0 m kg	-	-	-	-	2080	1430	1350	950	970	680	820	570 5.6 m
	3.3 ft lb	-	-	-	-	4,560	3,140	2,960	2,080	2,120	1,500	1,810	1,270 18.3 ft
	0.0 m kg	-	-	*1510	*1510	2000	1360	1300	910	940	660	840	590 5.4 m
	0.0 ft lb	-	-	*3,370	*3,370	4,370	2,970	2,850	1,980	2,070	1,450	1,860	1,300 17.8 ft
	-1.0 m kg	*2060	*2060	*2880	2560	1970	1330	1280	890	940	660	930	650 5.1 m
	-3.3 ft lb	*4,560	*4,560	*6,410	5,600	4,310	2,920	2,810	1,940	2,060	1,440	2,050	1,430 16.6 ft
	-2.0 m kg	*3400	*3400	*3700	2610	1990	1350	1300	900	-	-	1160	810 4.4 m
	-6.6 ft lb	*7,540	*7,540	*8,080	5,710	4,360	2,960	2,840	1,970	-	-	2,560	1,790 14.3 ft
	-3.0 m kg	-	-	*1690	*1690	*1040	*1040	-	-	-	-	*970	*970 3.1 m
	-9.9 ft lb	-	-	*3,610	*3,610	*2,160	*2,160	-	-	-	-	*2,110	*2,110 10.0 ft
Boom: 3.0m / 9'10" Arm: 1.9m GP / 6'3" GP Shoe: 380mm / 15" Steel track CWT: 440 kg / 970lb Dozerblade: Down	5.0 m kg	-	-	-	-	-	-	-	-	-	-	*1380	1320 3.7 m
	16.5 ft lb	-	-	-	-	-	-	-	-	-	-	*3,060	2,960 12.1 ft
	4.0 m kg	-	-	-	-	-	-	*1280	1190	-	-	*1160	900 4.7 m
	13.2 ft lb	-	-	-	-	-	-	*2,830	2,600	-	-	*2,560	2,000 15.3 ft
	3.0 m kg	-	-	-	-	-	-	*1360	1170	*1310	800	*1090	740 5.2 m
	9.9 ft lb	-	-	-	-	-	-	*3,000	2,560	*2,900	1,760	*2,400	1,640 17.2 ft
	2.0 m kg	-	-	-	-	*2070	1740	*1600	1110	*1380	790	*1090	660 5.5 m
	6.6 ft lb	-	-	-	-	*4,530	3,810	*3,510	2,440	*3,040	1,720	*2,400	1,470 18.1 ft
	1.0 m kg	-	-	-	-	*2740	1600	*1870	1050	*1480	760	*1140	640 5.6 m
	3.3 ft lb	-	-	-	-	*5,990	3,500	*4,100	2,310	*3,260	1,660	*2,520	1,410 18.3 ft
	0.0 m kg	-	-	*1510	*1510	*3020	1520	*2030	1010	*1530	740	*1270	650 5.4 m
	0.0 ft lb	-	-	*3,370	*3,370	*6,610	3,320	*4,440	2,210	*3,340	1,620	*2,800	1,450 17.8 ft
	-1.0 m kg	*2060	*2060	*2880	*2880	*2890	1500	*1980	990	*1380	730	*1350	720 5.1 m
	-3.3 ft lb	*4,560	*4,560	*6,410	6,360	*6,320	3,270	*4,330	2,170	*3,000	1,610	*2,970	1,600 16.6 ft
	-2.0 m kg	*3400	*3400	*3700	2970	*2370	1510	*1590	1000	-	-	*1300	900 4.4 m
	-6.6 ft lb	*7,540	*7,540	*8,080	6,480	*5,170	3,310	*3,450	2,200	-	-	*2,860	2,000 14.3 ft
	-3.0 m kg	-	-	*1690	*1690	*1040	*1040	-	-	-	-	*970	*970 3.1 m
	-9.9 ft lb	-	-	*3,610	*3,610	*2,160	*2,160	-	-	-	-	*2,110	*2,110 10.0 ft
Boom : 3.0m / 9'10" Arm : 1.9m GP / 6'3" GP Shoe : 380mm / 15" Steel track CWT : 440 kg / 970lb Dozerblade: Up	5.0 m kg	-	-	-	-	-	-	-	-	-	-	*1380	1230 3.7 m
	16.5 ft lb	-	-	-	-	-	-	-	-	-	-	*3,060	2,760 12.1 ft
	4.0 m kg	-	-	-	-	-	-	*1280	1110	-	-	*1160	840 4.7 m
	13.2 ft lb	-	-	-	-	-	-	*2,830	2,430	-	-	*2,560	1,860 15.3 ft
	3.0 m kg	-	-	-	-	-	-	*1360	1090	1050	750	960	690 5.2 m
	9.9 ft lb	-	-	-	-	-	-	*3,000	2,380	2,290	1,640	2,140	1,520 17.2 ft
	2.0 m kg	-	-	-	-	*2070	1610	1450	1040	1030	730	870	620 5.5 m
	6.6 ft lb	-	-	-	-	*4,530	3,530	3,180	2,270	2,250	1,600	1,930	1,360 18.1 ft
	1.0 m kg	-	-	-	-	2140	1470	1390	980	1000	700	840	590 5.6 m
	3.3 ft lb	-	-	-	-	4,690	3,230	3,050	2,140	2,190	1,540	1,870	1,310 18.3 ft
	0.0 m kg	-	-	*1510	*1510	2060	1390	1340	930	980	680	870	600 5.4 m
	0.0 ft lb	-	-	*3,370	*3,370	4,500	3,050	2,940	2,040	2,140	1,490	1,920	1,340 17.8 ft
	-1.0 m kg	*2060	*2060	*2880	2640	2040	1370	1320	910	970	680	960	670 5.1 m
	-3.3 ft lb	*4,560	*4,560	*6,410	5,760	4,450	3,010	2,900	2,000	2,130	1,490	2,120	1,480 16.6 ft
	-2.0 m kg	*3400	*3400	*3700	2690	2050	1390	1340	930	-	-	1190	830 4.4 m
	-6.6 ft lb	*7,540	*7,540	*8,080	5,870	4,490	3,050	2,930	2,030	-	-	2,650	1,850 14.3 ft
	-3.0 m kg	-	-	*1690	*1690	*1040	*1040	-	-	-	-	*970	*970 3.1 m
	-9.9 ft lb	-	-	*3,610	*3,610	*2,160	*2,160	-	-	-	-	*2,110	*2,110 10.0 ft

Notes: 1. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards. 2. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. 3. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

Equipment

STANDARD EQUIPMENT

Engine

Low-emission Volvo T4f diesel engine
Standard cooling system
Two-stage air filter
Fuel filter and water separator
Alternator, 90 A

Electric / Electronic control system

Safe engine start function
Automatic idling system
Halogen working lights;
1ea on Cab front top LH / 1ea on the upper frame front bottom LH / 1ea boom LH
Battery, 12 V / 100 Ah
Start motor, 12 V / 2.5 kW
Monitor and keypad
Master electrical disconnect switch
Travel alarm
Electric pilot control change

Frame

Rearview mirror
440kg (970 lb) counterweight
Under cover
Dozer blade

Undercarriage

400mm (16") rubber track

Hydraulic system

Automatic two speed travel motors
Cylinder cushioning
Hydraulic fluid mineral 47

Cab and interior

Fabric operator seat with suspension
Seat belt, 2 inch retractable
Control joystick
Radio with MP3/AUX
Canopy
Master key
Hour meter (non analog)

Digging equipment

Boom: 3.0m (9'10"), Arm: 1.6m (5'3")
Linkage

Service

Tool kit-daily maintenance

OPTIONAL EQUIPMENT

Engine

Water separator (With heater)
Engine auto shut down

Electric / Electronic control system

Fuel filler pump: 35 l/min (9.3 gpm), with automatic shut-off
Halogen extra working lights;
Cab-mounted 1 (Rear)
Boom-mounted 1(RH)
Caretack
Rotating warning beacon
Rearview Camera
Electric dozerblade switch on joystick
LED Light

Undercarriage / Superstructure

380mm (15"), 500mm (20") steel track
400mm (16") rubber pad
400mm (16") Add on rubber pad

Frame

Dozer blade with floating function
Angle dozer blade

Hydraulic system

Breaker & shear X1
- Max. flow: 60.5 l/min (15.9 gal/min)
- Pressure: 22.5 MPa (3,263 psi)
Slope & rotator X3
- Max. flow: 20.2 l/min (5.3 gal/min)
- Pressure: 14.7 Mpa (2,132 psi)

Grapple

Thumb (with three way valve)

Quick coupler

Hose rupture valve for boom, arm
Overload warning device
Hydraulic oil, ISO VG 32, 68
Hydraulic oil, biodegradable 46
Hydraulic oil, longlife oil 32, 46, 68

Cab and interior

Cab

Heater and air-conditioner
Fabric operator seat with suspension with heater
PVC operator seat with suspension
Control joystick, X3 proportional
Seat belt, 3 inch retractable
Radio with MP3/AUX/Bluetooth
Mechanical hour meter
Cab mounted FOG (Falling Object Guard)
FOPS (Falling Object Protection Structure)
Sun screen, front/roof
Safety net

Digging equipment

Arm: 1.9m (6'3")

Service

Tool kit, full scale
Spare parts

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Electric dozer blade switch on joystick



Rear view camera



Angle dozer blade



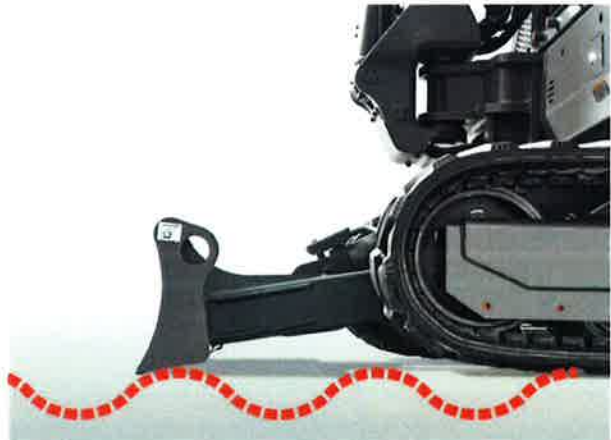
LED Light



Long arm



Floating dozer blade



Not all products are available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.

ATTACHMENT 2

TRAILER FEATURES:

Basis of design - Towmaster T-18DT



DROP-DECK TILT

**T-14DT / T-16DT
T-18DT / T-20DT**



Towmaster's drop-deck tilt trailers are the most popular tilt-bed trailers on the market. There are no ramps to hassle with; simply tilt the deck and drive on or off. This trailer is built on our cold-formed I-Beam tongue and main frame for tough durability. The tilt deck trailer features a single lever twin-latch system, knife-edge approach, rubber-ride axles and adjustable hitch. A deck cushion cylinder eases the deck back into transport position and prevents it from slamming onto the frame while loading.



Cushion cylinder controls the deck when loading or unloading equipment.



Single deck lever with dual latch securement is easy to operate.



Quick Specs:

- 2" nom. white oak deck
- 19" deck height (unload)
- 82" load with
- 16' or 18' deck
- EZ lube axles
- Forward adjusting electric brakes
- One-piece formed fender
- Low approach angle

Photos may show optional equipment.

PROFESSIONAL HAULERS DEMAND TOWMASTER



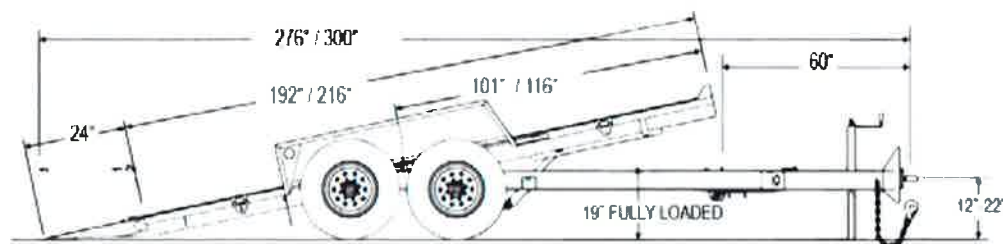
800-462-4517
TOWMASTER.COM



MORE MODELS • MORE OPTIONS • MORE CHOICES
DROP-DECK • TILT BED • DECK-OVER • GOOSENECK • LOWBOY • HYDRAULIC TAIL



Drop-Deck Tilt/ T-14DT/T-16DT/T-18DT/T-20DT



All dimensions are nominal. Illustration may be shown with optional equipment.

Standard Features

Hitch/Tongue

- Adjustable height, bolt-on coupler
- 3" pintle
- RV plug
- One-piece cold-formed frame rails
- Integrated storage tray
- 12K bolt-on side-wind parking jack
- Battery break-away kit with tow charger & test light
- Safety chains with hooks

Frame/Deck

- 80" load width (T-18DT, T-20DT)
- 82" load width (T-14DT, T-16DT)
- 19" deck height (fully loaded)
- Deck cushion cylinder
- Dual-point, single lever deck lock
- 6" I-beam main frame (T-14DT, T-16DT)
- 10" I-beam main frame (T-18DT, T-20DT)
- 3" channel crossmembers
- 2" nom. white oak deck
- D-ring tie-downs (4 per side)
- 12 gauge one-piece formed fender

Axles/Suspension

- Rubber-ride suspension axles
- 7,200 lb. axles (4 wheels) (T-14-DT)
- 8,000 lb. axles (4 wheels) (T-16DT)
- 10,000 lb. axles (4 wheels) (T-18DT, T-20DT)
- Tires - 215/75R17.5 load range H, 16-ply
- Tires - 215/75R15.5 (H) (T-20DT)
- 17.5" wheels, 8-bolt
- Electric brakes
- EZ Lube hubs
- Oil bath hubs (T-18DT/20DT)

Lights/Wiring

- Rubber grommet mounted LED lights
- Sealed modular wiring

Standard Features

- Limited Lifetime Frame Warranty
- One-Year full Warranty
- 10 Year Suspension Warranty
- Weatherproof registration holder
- Two-component polyurethane primer and paint
- Trailer color: Equipment Black

Trailer	GAWR (lbs)	GVWR (lbs)	Weight (lbs)	Capacity (lbs)	Deck Width (in)	Deck Length (ft)
T-14DT	14,400	18,300/18,600	4,300/4,600	14,000	82"	16'/18'
T-16DT	16,000	20,400/20,700	4,400/4,700	16,000	82"	16'/18'
T-18DT	20,000	22,400/22,700	4,400/4,700	18,000	80"	16'/18'
T-20DT	20,000	24,400/24,700	4,400/4,700	20,000	80"	16'/18'

Optional Equipment

- 5ft. or 6ft. Stationary deck
- Gooseneck hitch
- 6-pole round electrical plug
- Storage tray lid
- Pallet fork holders
- 9K electric winch
- Additional tie-downs
- Spare tire mount
- Spare tire and wheel
- "SL" ramp option for hauling scissor lifts
- Color options: Construction Yellow, Equipment Red, Blue, Charcoal
- Galvanizing

Other options may be available. Ask your dealer or visit our website.

Listed GVWR, weights and dimensions are for reference only. Manufacturer reserves the right to change models and specifications as they see fit. See our web site or your local authorized dealer for more information.

MONROE TOWMASTER, LLC., LITCHFIELD, MINNESOTA, USA.

towmaster.com
800-462-4517
©Monroe Towmaster, LLC - 0920