

CITY OF WASHINGTON, ILLINOIS Public Works Committee Agenda Communication

Meeting Date: 07-06-2021

Prepared By: Kevin Schone – Public Works Director

Agenda Item: Backhoe Purchase Consideration

Explanation: This fiscal year's budget allows for replacement of the 2012 Caterpillar 420F backhoe. Staff advertised the bid opening on June 15th and bids were opened on June 30th with the results of the bids shown below.

Company Name		Discription		Bid Prices	
		Price Fully Assembled and Working	\$	108,850.00	
		Trade 2012 Cat 420F	\$	45,500.00	
Company:	Martin Equipment	Hydraulic Hammer	\$	13,500.00	
		Hammer Trade	\$	2,500.00	
		Total Backhoe and Hydraulic Hammer After Trade	\$	74,350.00	
		Drive F. H. Associated and Working	4	117.750.00	
		Price Fully Assembled and Working	\$	117,750.00	
		Trade 2012 Cat 420F	\$	45,000.00	
Company:	Birkey's	Hydraulic Hammer	\$	11,000.00	
		Hammer Trade	\$	1,750.00	
		Total Backhoe and Hydraulic Hammer After Trade	\$	82,000.00	
		Price Fully Assembled and Working	\$	110,000.00	
		Trade 2012 Cat 420F	\$	28,000.00	
Company:	Altorfer	Hydraulic Hammer		7,000.00	
		Hammer Trade	\$	2,000.00	
		Total Backhoe and Hydraulic Hammer After Trade	\$	87,000.00	

As you can see Martin Equipment of Goodfield is the low bid at \$74,350.00 after the trade, a savings of \$12,650 from the high bid of Altorfer's. Attached are the supporting documents.

Fiscal Impact: \$135,000 has been budgeted in account #502-000-800-1500

Recommendation/

Committee Discussion Summary: Staff recommends purchase of the new backhoe from Martin Equipment of Goodfield Illinois in the amount of \$74,350 after trade.

Action Requested: Direction to bring forward to the City Council meeting of July 6, 2021 for approval.



Martin Equipment 400 W. Martin Dr Goodfield, IL 61742 (309) 965-2502

Quote Issued To: CITY OF WASHINGTON

301 W WALNUT ST ATTN: JEANETTE GLUECK

WASHINGTON, IL, 61571

309-444-3196

Quote Issued By: Hofer, Ken - 309-635-8961

QUOTATION

Quote #: 1012456 Issue Date: 6/29/2021

Expire Date: 7/7/2021 **Est Delivery**: 9/27/2021

FOB:

ITEMS LISTED FOR SALE

 Item #
 Year
 Make
 Model
 Serial #
 Hours
 Sale Price

 2021
 JD
 310SL
 (TBD)
 0
 108,850.00

310SL BACKHOE LOADER

English Decals with English Operator and Safety Manuals

JDLink Ultimate 5 Year Subscription

MFWD with traction-control limited-slip differential: Electric on/off control / Sealed axle

Cab - Headliner, dome light, left and right cab doors, tinted safety glass, windshield

wipers (1 rear and 1 front) front windshield washer, fresh-air intake, and heater/defroster/pressurizer, A/C, -CFC-FREE R134A Refrigerant

leater/derroster/pressurizer,A/C, -CFC-FREE

Front View Mirror

Radio, Bosch AM/FM/Weather Band

Sun Visor

Seat, Cloth Air-Suspension

Dual Maintenance Free Batteries With with 360-min. reserve capacity and 1,850 CCA

& Disconnect and Jump Post

LED 10 Light Package

Extendible Dipperstick

Auxiliary Hydraulic with One & Two Way Flow (For Hammer & Thumb/Swinger

Operation)

Pilot Controls, Two Lever, with Pattern Selection

DEERE Standard Quick Coupler - Less Thumb

24" (610 mm) Wide, Severe-Duty, 7.5 Cu. Ft.(0.21 Cu. M.) Capacity Bucket

Heavy-Duty Stabilizer Pads

Heavy-Duty Backhoe Bucket Cylinder

Loader Coupler, 3-Function Hydraulics, Single Lever Control - connects with Deere &

Cat backhoe loader coupler attachments.

1000 Lb. (454 kg) Front Counterweight

John Deere PowerTech EWL 4.5L (276 Cu. In.) Engine Meets Final Tier 4 and Stage

IV Emissions w/ Auto Idle & Auto Shutdown

Diagnostic Oil Sampling Ports

Ride Control

Galaxy 550 Radial Tires - 500/70R24 Rear & 340/80R18 Front

2 Position Hood, Loader Boom Service Lockout

Hingable Coolers for Easy Cleanout

Parking/emergency brake with electric switch control. Spring applied, hydraulically

released wet multi-disc / Independent of service brakes

500Hr Service Intervals

Heavy Lift Mode - up to 15% More Craning Capacity

John Deere Full Coverage Warranty 12mo./ unlimited Hours

TRADE ALLOWANCES

 TIV #
 Year
 Make
 Model
 Serial #
 Trade Allowance

 CAT0420FAJWJ00656
 2012
 CATERPILLAR
 420F IT
 CAT0420FAJWJ00656
 45500.00

Total Trade Allowances: 45,500.00

Total:

108,850.00

Optional Extended Warranty Available -

QUOTE SUMMARY

Total Sale Price: 108,850.00
Less Trade Allowance: 45,500.00
Additional Taxable Items: 0.00
Subtotal: 63,350.00

Subtotal: 63,350.00
Sales Tax: 0.00
Additional Nontaxable Items: 0.00

Total : 63,350.00
Acceptance Signature:

All quotations contingent upon strikes, delays, and conditions beyond our control. Prices subject to change with or without notice.

All prices are subject to expiration of any current sales programs and incentives.

Date:

PROPOSAL

The undersigned proposes, in accordance with the terms and conditions of the Contract Documents, of which this Proposal is a part, to furnish 1 Backhoe Loader with hydraulic hammer to the City of Washington

Quantity: 1	
Description: Backhoe Loader	
Price of Fully Assembled and Demonstrated full Working Condition	\$ 108,850°=
Trade Allowance 2012 Cat 420F IT VIN# JWJ00656	\$ 108,850,°°° \$ 45,500,°°°
Description: Hydraulic Hammer	
Price of Fully Assembled and Demonstrated full Working Condition	\$ 13,500.00
Trade Allowance NPK H-3XA SN37595	\$ 13,500.99 \$ 2,500.99 \$ 74,35099
Total - Backhoe and Hydraulic Hammer After Trades	\$ 74,350º
Cash Billing Terms: VET 10	
Person to Contact Regarding This Proposal: Ken +lofer	
Phone Number: 309 635 896	/
The undersigned also acknowledges having received a full set of the Addenda Nos. 1 (None unless indicated). Signature:	Contract Documents and
Name of Business: MARTIN Earipment	
Business Address: 400 W. MARTIN DY	
Good field II. 61742	
Business Phone: 309 - 965 - 2502	

SPECIAL PROVISIONS

1. Basis of Award

Unit price shown on the proposal shall include <u>all</u> delivery charges for the proposed equipment. The City reserves the right to waive technicalities or to reject any and all bids when, in the opinion of the City Council, the best interests of the City of Washington will be served by such action.

6. Ordering and Delivery

Order shall be placed by telephone direct to the selected vendor by personnel of the City of Washington, Department of Public Works. A purchase order number will be furnished to the vendor and a delivery date will be agreed to at that time.

7. Billing

An invoice for the accepted equipment will be presented at the time of delivery, a check will be presented for payment. The invoice must clearly show the description, unit price, and the City's Purchase Order number.

8. Price Escalation

The price quoted herein shall remain firm for the equipment ordered.

9. Certification of Compliance

In accordance with Article 33E of the Criminal Code of 1961, as amended, the bidder is required to fill out and submit with his proposal the Certification of Compliance included with this bid document.

10. Exceptions to Specifications

Any exceptions to the specifications and these provisions shall be clearly explained on a separate page by the bidder on his firm's letterhead, to be attached to and submitted with these documents prior to or at the time of bid opening. Should a bidder submit a proposal without a separate statement of exception, it shall be assumed the proposal is in full compliance with these specifications.

11. Corrections

All prices and notations must be typed in or written in ink.

CERTIFICATION OF COMPLIANCE

The un make the	ndersigned, being first duly sworn on oath, deposes and states that he has the authority to his certification on behalf of the bidder.
	MARTIN Equipment (Name of Company)
	That in connection with this procurement, (1) the prices in this bid have been arrived at independently, without consultation, communication, or agreement, for the purpose or restricting competition, as to any matter relating to such prices with any other bidder or with any competitor; (2) the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not be knowingly disclosed by the bidder prior to opening directly or indirectly to any other bidder or to any competitor; and (3) no attempt has been made or will be made by the bidder to induce any other person or firm to submit or not to submit a bid for the purpose of restricting competition.
	The undersigned further states (1) he is the person in the bidder's organization responsible within that organization for the decision as to the prices being bid herein and that he has not participated, and will not participate, in any action contrary to (a)(1) through (a)(3) above; or (2)(a) he is not the person in the bidder's organization responsible within that organization for the decision as to the prices being bid herein but that he has been authorized to act as agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to (a)(1) through (a)(3) above, and as their agent does hereby so certify; and (b) that he has not participated, and will not participate in, any action contrary to (a)(1) through (a)(3) above.
(c) 1	The undersigned certifies that the bidder is 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.
1	It is expressly understood that the foregoing statements, representations, and promises are made as a condition to the right of the bidder to receive payment under any award made hereunder. Authorized Signature:
	Title: Saces manage
SUBSCI	RIBED AND SWORN TO before me this
30 Luy	day of June , 2021. OFFICIAL SEAL KELLY A NAFFZIGER NOTARY PUBLIC - STATE OF ILLINOIS MY COMMISSION EXPIRES: 04/08/24

sic Sp	ecification	OE LOADER BID SPECIFICATION IS
V	N	Is Backhoe built in the United States?
√	N	Maximum operating weight must be less than 20,000 pounds
V	N	Machine shall have full 1 year comprehensive manufacturers warranty
V	N	Machine shall be equipped with an economy control function
V	N	Maximum overall transport height shall be 11'-12' with standard tires and
/		extendable stick
<u> </u>	N	Unit shall have a max. height to the top of canopy of 9' 3" w/std. tires
	N	Maximum overall transport length shall be 23'6" with standard tires,
/		extendable stick, and loader coupler
<u> </u>	N	Units maximum width shall be no more than 7'7" with GP bucket
/	N	Unit shall have a minimum wheel base of 7'1"
gine		
1	N	Engine must comply w/ US EPA Tier 4 Final/EU Stage IV off road emission
1	N	Unit shall utilize Selective Catalytic Reduction (SCR)
	N	Engine shall have an economy mode to max fuel efficiency, while
		maintaining backhoe performance
	N	Unit shall have a hinged cooler system for easy cleanout
	N	The engine shall have a standard glow plug starting aid to -20 degrees F
		without using ether and electric engine coolant heater
	N	Engine shall be protected to 24 degrees whether the life with
/	N	Engine shall be protected to -34 degrees w/extended life antifreeze
1/	N	Engine cooling fan shall have a heavy duty guard that prevents contact
-	N	Engine shall have charging capacity of 140 amperes minimum
	14	Engine shall be equipped with one maintenance free battery
1	N	with the option for two such batteries equaling 1800 CCA
	NI NI	Engine shall be equipped with 12-volt starting and charging system
<u>v</u>	14	Engine shall be equipped with a standard battery disconnect switch with
./	à i	easy access
-	N	Engine shall be Turbocharged and at least 100HP and built by manufacturer
<u>v</u>	N	Machine shall have a automatic engine speed control with auto idle and
		auto shutdown when not in use
<u>~</u> /	N	Engine net peak power shall be at least 105 HP (ISO 9249)
<u></u>	N	The tilt hood shall have two service positions for easy operation
vertra	in/Transm	
V	N	The transmission shall be hydraulically actuated powershift and a torque
		converter with transport speed of 24 mph or greater. The machine shall
,		have clutch-free, synchronized, five forward and three reverse speeds
<u> </u>	N	The machine shall have a sealed axle, with no breather, and will be
		mechanical front wheel drive with traction control limited-slip
/		differential with electric on/off control
<u>/</u>	N	The manual 4WD shall have momentary 4WD standard or full time 4WD
		with the ability to lock out selected gears if required
$\sqrt{}$	N	The clutch engaged MFWD can be engaged on the fly during operation
	N	The machine shall have hydrostatic power steering with emergency
		manual mode
,		

,		the machine on cruics control and upon brettime the BDAN
v ./	N	the machine on cruise control and upon braking the RPM's return to idle
' <u> </u>	14	The parking brake shall be independent of the service brakes, spring
to almost 11 a		applied, hydraulically released, wet multi disk, and sealed
Hydraulic		
V	N	Machine shall be equipped with auto idle to lower rpm when hydraulics
/		are not active to conserve fuel and reduce noise levels
	N	Hydraulic pump shall be at least 42 gpm @2200 rpm at 3625 psi closed
		center hydraulic pressure compensated load sensing, axial piston driven
lectrical		and potential to the potential potential to the potential
V	N	Cab shall be pre-wired for rotating beacon and radio ready
	N	Unit shall be equipped with optional LED lights
perator		Tours around be equipped with optional LED lights
pergeon	N	A
V	IV	Access to the cab shall be from the right and left with protected, wide,
/		rigid, slip resistant steps and ergonomically located hand holds
<u> </u>	Ν	3" retractable seatbelt shall be provided
	N	Machine manufacturer shall provide a factory installed onboard security
		system for total machine integration. System will have the ability to
/		accommodate no less than ten operator codes
	N	The keyless start shall have an electric fuel shut-off and ability to have
		auto shutdown in monitor
	N	The tilt hood shall have two service positions for easy operation
	N	the the flood shall have two service positions for easy operation
ackhoe		
DERITGE	NI.	NA-LY- LHI LY
	N	Machine shall be able to grab current City of Washington attachments
	N	Minimum digging depth shall be 14' and 18' extended
	N	Machine shall lift 4100 punds 5' off the ground when fully extended
	N	Machine will be equipped with GP bucket as standard equipment
oader		
V/	N	The loader shall have a non-removeable, hinged loader boom service hook
V	N	Loader coupler shall be able to grab current City of Washington attachments
1	N	Loader bucket shall not roll back, and must not move under normal dig
		operations
V	N	
		Loader shall have positive down pressure to lift tractor front end off the
	N	level ground
	14	Loader shall be equipped with a lift cylinder brace to mechanically hold
./		the loader arms in the raised position
	N	Loader bucket shall be suitable for general purpose with heavy duty
		characteristics including high strength wear material in the leading edges
		of the lower side corners, equaling the material properties of the base
		cutting edge
1	N	Loader bucket shall be self leveling for truck loading spoil
/	N	Machine will be equipped with GD bucket as standard assistance
akes		Machine will be equipped with GP bucket as standard equipment
1	N	Porking Danker shall a street
	N	Parking Brake shall activate automatically when engine shuts off regardless
		of whether the operator engages it or not



Martin Equipment 400 W. Martin Dr Goodfield, IL 61742 (309) 965-2502

Quote Issued To: CITY OF WASHINGTON

301 W WALNUT ST ATTN: JEANETTE GLUECK

WASHINGTON, IL, 61571

309-444-3196

Quote Issued By: Hofer, Ken - 309-635-8961

QUOTATION

Quote #: 1012474 **Issue Date :** 6/29/2021 **Expire Date :** 7/7/2021

Est Delivery: 11/2/2021

FOB:

ITEMS LISTED FOR SALE

 Item # Year
 Make
 Model
 Serial # Hours
 Sale Price

 2021
 NPK
 PH3
 0
 13,500.00

NPK PH3 HYD HAMMER DEERE 310SL BRACKET CHISEL POINT HAMMER ASSY.

Total: 13,500.00

TRADE ALLOWANCES

Acceptance Signature:

 TIV #
 Year
 Make
 Model
 Serial #
 Trade Allowance

 64243
 2000
 NPK
 H 3XA
 64243
 2500.00

Total Trade Allowances: 2,500.00

Date:

QUOTE SUMMARY

Total Sale Price : 13,500.00
Less Trade Allowance : 2,500.00
Additional Taxable Items : 0.00

Subtotal: 11,000.00

Sales Tax: 0.00
Additional Nontaxable Items: 0.00

Total: 11,000.00

All quotations contingent upon strikes, delays, and conditions beyond our control. Prices subject to change with or without notice.

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Trade Allowance 2012 Cat 420F IT VIN# JWJ00656	\$ 45,000
Description: Hydraulic Hammer	
Price of Fully Assembled and Demonstrated full Working Condition	\$ 11,000
Trade Allowance NPK H-3XA SN37595	\$ 1,750
Total - Backhoe and Hydraulic Hammer After Trades	\$ 82,000
Cash Billing Terms: Net 30 Days	
Person to Contact Regarding This Proposal: Ken Smith	
Phone Number: 309-261-4497	
The undersigned also acknowledges having received a full set of the Addenda Nos. 1 (None unless indicated).	e Contract Documents and
Signature: 2m Smill	
Name of Business: Bickey's	
Business Address: 1105 Interstate Drive	
Bloomington, IL 61705	
Business Phone: 309-827-0520	

SPECIAL PROVISIONS

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CERTIFICATION OF COMPLIANCE

The undersigned, being make this certification or		deposes and states that he has the authority to
Birkey's		·
	(Name of Co	ompany)
(1) the prices is communication, relating to such p (2) the prices who bidder and will indirectly to any (3) no attempt has	or agreement, for the purportices with any other bidder of ich have been quoted in this not be knowingly disclose other bidder or to any compass been made or will be made	is bid have not been knowingly disclosed by the ed by the bidder prior to opening directly or
decision as to the participate, in any (2)(a) he is not to for the decision agent for the per participated, and and as their agent	son in the bidder's organization prices being bid herein y action contrary to (a)(1) the person in the bidder's or as to the prices being bid hereing	rganization responsible within that organization herein but that he has been authorized to act as lecision in certifying that such persons have not action contrary to (a)(1) through (a)(3) above, and (b) that he has not participated, and will not
		s not barred from bidding on this contract as a te laws prohibiting bid-rigging or bid-rotating.
		g statements, representations, and promises are der to receive payment under any award made
	Authorized Si	ignature: Ken Smith
SUBSCRIBED AND SV	WORN TO before me this	Representative
30 th day of S	an Cull	"OFFICIAL SEAL" Samantha N. Perez Gillan NOTARY PUBLIC, STATE OF ILLINOIS MY COMMISSION EXPIRES 4/2/2022

	BACKHOE	LOADER BID SPECIFICATION
Basic Spe	cifications	
Y_V_	N	Is Backhoe built in the United States?
Y	N_	Maximum operating weight must be less than 20,000 pounds
YY	N	Machine shall have full 1 year comprehensive manufacturers warranty
YY	N	Machine shall be equipped with an economy control function
	N	Maximum overall transport height shall be 11' -12' with standard tires and
/		extendable stick
	N	Unit shall have a max. height to the top of canopy of 9' 3" w/std. tires
1	N	Maximum overall transport length shall be 23'6" with standard tires,
		extendable stick, and loader coupler
	N	Units maximum width shall be no more than 7'7" with GP bucket
	N	Unit shall have a minimum wheel base of 7'1"
Engine,		
/	N	Engine must comply w/ US EPA Tier 4 Final/EU Stage IV off road emission
/	N	Unit shall utilize Selective Catalytic Reduction (SCR)
	N	Engine shall have an economy mode to max fuel efficiency, while
	,	maintaining backhoe performance
1	N V	Unit shall have a hinged cooler system for easy cleanout
	N	The engine shall have a standard glow plug starting aid to -20 degrees F
		without using ether and electric engine coolant heater
	N	Engine shall be protected to -34 degrees w/extended life antifreeze
	N	Engine cooling fan shall have a heavy duty guard that prevents contact
	N	Engine shall have charging capacity of 140 amperes minimum
	N /	Engine shall be equipped with one maintenance free battery
		with the option for two such batteries equaling 1800 CCA
,)	N	Engine shall be equipped with 12-volt starting and charging system
	N	Engine shall be equipped with a standard battery disconnect switch with
	``	easy access
	N	Engine shall be Turbocharged and at least 100HP and built by manufacturer
	N N	Machine shall have a automatic engine speed control with auto idle and
		auto shutdown when not in use
, ,)	N	Engine net peak power shall be at least 105 HP (ISO 9249)
	N V	The tilt hood shall have two service positions for easy operation
Dowortes.	in/Transmis	
/	N .	The transmission shall be hydraulically actuated powershift and a torque
	IV V	converter with transport speed of 24 mph or greater. The machine shall
		have clutch-free, synchronized, five forward and three reverse speeds
	N 1/	The machine shall have a sealed axle, with no breather, and will be
·	N	
		mechanical front wheel drive with traction control limited-slip
		differential with electric on/off control
r	N_V	The manual 4WD shall have momentary 4WD standard or full time 4WD with the ability to lock out selected gears if required
/		
- V	N	The clutch engaged MFWD can be engaged on the fly during operation
·	N	The machine shall have hydrostatic power steering with emergency
/		manual mode
v v	N	The machine shall have a dial throttle that will allow the operator to road

1		the machine on cruise control and upon braking the RPM's return to idle
Y	N	The parking brake shall be independent of the service brakes, spring
		applied, hydraulically released, wet multi disk, and sealed
- Hydraulic	System	
/	N	Machine shall be equipped with auto idle to lower rpm when hydraulics
		are not active to conserve fuel and reduce noise levels
	N	Hydraulic pump shall be at least 42 gpm @2200 rpm at 3625 psi closed
		center hydraulic pressure compensated load sensing, axial piston driven
Electrical		tenter nydradic pressure compensated load sensing, axial piston driven
Liectrical	NI.	Coh shall be not using for retating become and radio reads.
	N	Cab shall be pre-wired for rotating beacon and radio ready
Y_V_	N	Unit shall be equipped with optional LED lights
Operator S		
	N	Access to the cab shall be from the right and left with protected, wide,
/		rigid, slip resistant steps and ergonomically located hand holds
Y_V_	N	3" retractable seatbelt shall be provided
Y	N_1/_	Machine manufacturer shall provide a factory installed onboard security
		system for total machine integration. System will have the ability to
	,	accommodate no less than ten operator codes
/	N	The keyless start shall have an electric fuel shut-off and ability to have
	/	auto shutdown in monitor
Y	N V	The tilt hood shall have two service positions for easy operation
Υ	N	
Backhoe		
v V	N	Machine shall be able to grab current City of Washington attachments
/ /	N	Minimum digging depth shall be 14' and 18' extended
· · · · · · · · · · · · · · · · · · ·		Machine shall lift 4100 punds 5' off the ground when fully extended
<u>'</u>	N_V	
<u> </u>	N	Machine will be equipped with GP bucket as standard equipment
oader		
<u></u>	N	The loader shall have a non-removeable, hinged loader boom service hook
	N	Loader coupler shall be able to grab current City of Washington attachments
	N	Loader bucket shall not roll back, and must not move under normal dig
1		operations
YY	N	Loader shall have positive down pressure to lift tractor front end off the
1		level ground
<u> </u>	N	Loader shall be equipped with a lift cylinder brace to mechanically hold
/		the loader arms in the raised position
	N	Loader bucket shall be suitable for general purpose with heavy duty
		characteristics including high strength wear material in the leading edges
		of the lower side corners, equaling the material properties of the base
		cutting edge
	N	Loader bucket shall be self leveling for truck loading spoil
/ /		
	N	Machine will be equipped with GP bucket as standard equipment
Brakes		
	N	Parking Brake shall activate automatically when engine shuts off regardless
	·· <u> </u>	of whether the operator engages it or not



, CITY OF WASHINGTON

115 W JEFFERSON WASHINGTON, IL 61571 Cell Phone:

Home Phone: 3094443196

By: Ken Smith Quote Date: 6/21/2021 Valid Until: 6/30/2021 Contact Mobile: (309) 261-4497

Quoted Unit

Year	Make	Model	Serial #	Description	Tag
2021	Case	590SN	TBD	Backhoe	Q70153876

Total Sell Price: \$128,750.00

Trades

Description	Make	Model	Year	SerialNo	Trade Allowance		Payoff
Miscellaneous	Cat	420F IT	2012	JWJ00656		\$45,000	\$0
Miscellaneous	NPK	H-3XA		37595		\$1,750	\$0
					Net Trade Allowance		\$46,750.00
					Net Due From Custon Tax Rate (Where App		\$82,000.00 0.000
					Calculated Tax Amou	nt	0.00
					Sales Tax Total		\$0.00 \$82,000.00

Attachments

Make Model Desc

Notes

Also includes Okada ORV1100 Breaker (specs attached). Case 590SN options include: 1 YR/Unlimited Hour Full Coverage Base Warranty, 2 YR/2000 Hour Extended Limited Engine Warranty, 2 Door Deluxe Cab/Heat/A/C 72 DBA Sound Level & Heated Cloth Air Seat, Bluetooth Weatherband FM Radio, Powershift H-Type Transmission, Ride Control, Comfort Steer, Front Hydraulic Coupler, 3 Spool Hydraulics, 92" Cat Style GP Loader Bucket, 24" Backhoe Bucket, Toolbox, Extendahoe with Universal Coupler, Uni/Bi-Direct Auxillary Hydraulics, Pilot Controls w/ PowerLift & PowerBoost, Flip Over Stabilizer Pads, Dual 850 CCA Batteries w/ Cold Start Package, LED Light Package, Heavy Front Counterweight, 3YR Telematics Subscription



Below is a list of exclusions:

Basic Specifications Section:

Line #2: Operating weight is approximately 21,325 lbs.

Line #8: Machine width is 7'8"

Engine Section:

Line #4: Coolers are cleaned out and accessed via removing front screen and unbolting the coolers if they cannot be cleaned out with an air wand.

Line #9: Dual 850 CCA Batteries totaling 1700 CCA

Line #15: Hood can be fully opened regardless of loader arm position providing full access

Powertrain/Transmission:

Line #1: Powershift Transmission has 4 forward gears and 4 reverse gears with a transport speed of 25 mph

Line #2: Sealed axle has a breather port to allow for expansion of fluid level as axle temperature fluctuates

Line #3: 4 Wheel Drive is engaged via switch that disengages in 3rd gear or higher. 4-wheel drive automatically engages during braking scenarios to decrease stopping distance.

Operator Station:

Line #3: Machine is started/stopped via keyed switch

Line #4: Machine can be enabled to auto shutdown through various conditions within parameters set by the operator in the display screen

Line #5: Hood can be fully opened regardless of loader arm position providing full access

Backhoe:

Line #3: At 8' the backhoe can lift 4158 lbs. when retracted and 3247 lbs. when extended with Power Lift enabled.

Any questions please contact Ken Smith @ 309-261-4497







BACKHOE LOADER

TIER 4 FINAL CERTIFIED



ENGINE	
Model	FPT F5BFL413A
Emissions Certification	Tier 4 Final
Type Diesel 4	1-stroke, Turbocharged
Cylinders	4
Bore/Stroke	3.90 x 4.33 in (99 x 110 mm)
Displacement	207 in ³ (3.4 L)
Fuel injection	Direct, high pressure common rail - HPCR
Fuel	Diesel
Engine speeds* Rated speed – full load Low idle High idle – no load	RPM 2200 900 - 1000 2320 - 2430
Horsepower @ 2200 RPM Gross Net	l: 110 hp (82 kW) 108 hp (81 kW)
Maximum torque @ 1400 Gross Net	339 lb-ft (460 N-m) 338 lb-ft (459 N-m)
Torque rise at rated speed	d 29% +/- 5%
Radiator: Core type Core size area Rows of tubes	Square wave 486 in² (3 145 cm²) 4
Viscous Fan: Style S Diameter Ratio	B blade viscous suction 19.68 in (500 mm) 1.4:1
Pump operating angle rat Side to side Fore and aft	ings: Rated 35° Rated 35°

DRIVETRAIN	17 2 18 H			
Transmission – standard PowerDrive H-Type, 4F shifting w/ auto shift m	-4R hydrauli			
Transmission – standard PowerDrive H-Type, 4F shifting w/ auto shift m	-4R hydrauli	c clutch		
Gear ratios	Forwa	rd/Reverse		
1st	5	5.533/4.549		
2nd	3	3.359/2.762		
3rd	1	1.533/1.260		
4th	0.811/0.667			
Travel Speeds - H-Type	PowerDrive			
DD Transmission	Forward	Reverse		
	mph (kph)	mph (kph)		
1st	4.0 (6.5)	4.8 (7.7)		
2nd	6.6 (10.6)	7.8 (12.6)		
3rd w/ DD Feature Off	13.7 (22.0)	16.4 (26.4)		
3rd w/ DD	14.4 (23.1)	16.4 (26.4)		
4th w/ DD Feature Off	23.0 (37.0)	27.6 (44.4)		
4th w/ DD	25.0 (40.2)	27.6 (44.4)		
Torque converter ratio		2.2		
Differential lock:				
On-the-go	push-butto	n activation		
Front 4WD/Rear axle:				
Differential ratio		2.1/2.5		
Planetary hub ratio	6.0/6,4			
Total reduction ratio		12.8/16.0		
Service brakes: Individually applied, po	wer assisted	1		

spring-applied hydraulic release - SAHR NOTE: Travel speeds at 2306 engine RPM specified: w/ 21.0 L x 24.0 tires.

hydraulically actuated, maintenance-free,

2 per side.

Total disc area Parking brakes

self-adjusting, outboard mounted, wet disc,

384 in² (0.25 m²)

Trans Mounted

ELECTRICAL.

Voltage 12 Volts, negative ground Alternator 160 amp

Dual batteries:

850 cold-cranking amps each

Power plugs - 2

30 amps total

OPERATOR ENVIRONMENT

ROPS/FOPS certified protective canopy; Anti-vandalism cover for dash - w/ canopy only; Rear fenders extensions; Coat hook w/ garment strap; Interior rearview convex mirror; Mechanical suspension seat - 180° swivel - Vinyl; 3 in (76 mm) retractable seat belt; Cup holder/ storage tray mounted on left-hand fender; Right-hand storage compartment w/ lid, tilt-steering wheel on cab models.

Gauges:

Engine water temperature; Converter oil temperature; Fuel level; Tachometer/ hourmeter; DEF level.

Warning lights:

Air cleaner restriction; Alternator; A/C high pressure; Cold start; Engine oil pressure; Hydraulic oil filter bypass; Parking brake engagement; Low fuel; Water in fuel; Low DEF.

Audible alarms w/ diagnostics: Coolant temperature; Engine oil pressure; Parking brake engagement; Converter oil temperature; Shuttle engagement/seat position; Backup alarm; Low DEF.

Horn

Dual switched front and rear

OPERATING WEIGHT

Configuration - SAE Transport:

No Operator, 4:1 Loader Bucket, E-hoe, Cab w/ Heat and AC, Ride Control, Fully fueled, 24 in HD BH Bucket 4 WD, Boom Guard, 1,100 lb front counterweight, Quick Couple BH, BH aux., Pilot BH Controls, 14-17.5 @ 50 psi front tires, 21 L - 24 @ 28 psi Rear Tires.

21,325 lb (9 673 kg)

Add-on weights:

Cab-over canopy 309 lb (140 kg) Fabricated stabilizer pads 141 lb (64 kg)

Oil filtration

Replaceable,

full flow cartridge

HYDRAULICS

Pump:

Bosch Rexroth Series 31 Variable Displacement Axial Piston Pump, dual mode torque regulation, mode selected by solenoid

Main relief pressure:

Standard	3,450 +/- 50 psi
	(238 +/- 3.5 bar)
Power Lift	3,625 +/- 50 psi
	(250 +/- 3.5 bar)

Filtration:

7-micron, full flow replaceable cartridge on return line, condition indicator light for filter.

Heavy-duty	Oil cooler	
пеа	Oil cooler	

Loader flow @ rated engine RPM:

43 gpm @ 2,340 psi (162.6 L/min @ 161 bar)

Loader control valve w/ pilot or manual backhoe controls:

Two or three-spool closed center sectional control valve. Single lever manual control for lift and tilt functions. The three-spool valve uses a proportional Electro-Hydraulic control for the auxiliary function. The lift lever has a positive hold "Float" position and a "returnto-dig" feature.

Loader auxiliary hydraulics w/ proportional thumb switch w/ detent on loader control handle:

0 - 43 gpm (0 - 162.6 L/min)

Backhoe flow @ rated engine RPM:

43 gpm @ 3,100 psi (162.6 L/min @ 214 bar)

Manual backhoe control valve:

Seven-spool monoblock open center control valve w/ eighth spool bolt-on sections. Features "Pro-Control" which includes custom designed spools for each individual function along w/ "swing cushioning" valve for zero-wag swing control. Basic control valve has an open center parallel circuit for all functions.

Pilot backhoe control valve:

Seven or eight spool sectional closed center control vaive. Features "Pro-Control" which includes custom designed spools for each individual function along w/ "swing cushioning" valve for zero-wag swing control. Basic control valve is closed center, w/ circuits in parallel w/ a post-compensated, flow sharing feature for simultaneous operation of all circuits.

1-way flow auxiliary hydraulics:

1-way flow hydraulic valve is equipped w/ an adjustable LS relief valve to control attachment pressure and a 6 position flow control selector for 6 detented, distinct flow settings. Actuation:

Manual backhoe controls - cab floor pedal Pilot controls - left-hand joystick

2-way flow auxiliary hydraulics:

Actuation:

Activate the 2-way flow switch located on the rear console

Manual shift - 2-way flow linkage on far right of backhoe tower

Pilot controls - left-hand joystick.

SERVICE CAPACITIES		
Fuel tank	35.0 gal (132.0 L)	
DEF tank	3.6 gal (13.5 L)	
Hydraulic system:		
Total	138 qt (130.7 L)	
Extendahoe®	144 qt (135.7 L)	
Reservoir w/ filter	55 qt (52.4 L)	
Reservoir w/o filter	53 qt (50.5 L)	

Transmission - total system:

4WD PowerDrive H-Type 19 qt (18.0 L)

Front axle:	
4WD Differential	9.1 qt (8.6 L)
4WD Planetaries - each	1.1 qt (1.0 L)
Rear axle:	
Differential and planetaries	14.4 qt (13.6 L)
Engine oil w/ filter	8.5 qt (8.0 L)
Cooling system:	
w/ heater	19.0 qt (18.0 L)
w/o heater	18.3 qt (17.3 L)
Window washer reservoir	3.0 qt (2.8 L)

OTHER SPECIFICATIONS

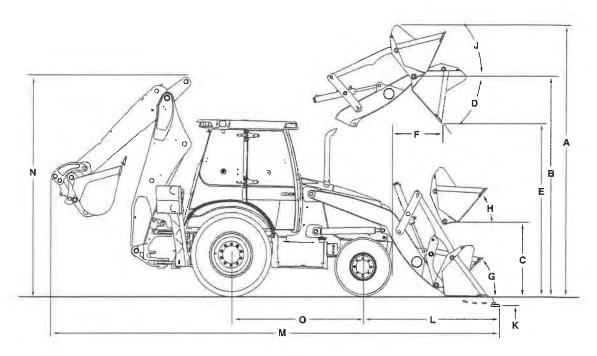
Front tires: 4WD	14.0 L x 17.5, 10-ply SGL SS		
Rear tires: 4WD	21.0 L x 24.0, 10-ply R4		
Turning radius*: Curb to Curb: 4WD - engaged:			
Brakes on	12 ft 6 in (3.81 m)		
Brakes off	14 ft 4 in (4.36 m)		
4WD - diseng	aged:		
Brakes on	11 ft 8 in (3.55 m)		
Brakes off	12 ft 8 in (3.86 m)		

NOTE: *Turning radius dimensions curb to curb w/ 21.0 L x 24.0 rear tires.

LOADER BUCKET SIZES				
Туре	Width	Weight	Struck	Heaped Capacity
Long Lip Bucket with lift points and bolt-on cutting edge	93 in (2.36 m)	1,188 lb (539 kg)	1.1 yd ³ (0.84 m ³)	1.3 yd ³ (0.99 m ³)
	96 in (2.44 m)	1,415 lb (642 kg)	1.27 yd ³ (0.97 m ³)	1.5 yd³ (1.15 m³)
4 iN 1 [®] Bucket	93 in (2.36 m)	1,685 lb* (764 kg)	1.0 yd ³ (0.76 m ³)	1.20 yd³ (0.92 m³)

NOTE: *Weight of 4 IN 1® bucket includes edges, cylinders and tube lines.

Type	Width	Weight	Heaped Capacity
Universal Buckets	12 in (305 mm)	295 lb (134 kg)	3.40 ft ³ (0.10 m ³)
	18 in (457 mm)	356 lb (162 kg)	5.30 ft3 (0.15 m3)
	24 in (610 mm)	427 lb (194 kg)	7.70 ft ³ (0.22 m ³)
	30 in (762 mm)	489 lb (222 kg)	10.20 ft ³ (0.29 m ³
	36 in (914 mm)	552 lb (251 kg)	12.70 ft ³ (0.36 m ³)
High Capacity Buckets	24 in (610 mm)	447 ib (203 kg)	8.50 ft ³ (0.24 m ³)
	30 in (762 mm)	502 lb (228 kg)	10.60 ft ³ (0.30 m ³



Line drawings are for illustrative purpose only and may not be exact representation of unit.

LOADER DIMENSIONS		
	Long Lip Bucket	4 IN 1 [®] Bucket
A. Overall operating height – fully raised	13 ft 11 in (4.24 m)	13 ft 10 in (4.22 m)
Height to:		
B. Bucket hinge pin fully raised	11 ft 6 in (3.50 m)	11 ft 6 in (3.50 m)
C. Bucket hinge pin at SAE carry	12.8 in (325 mm)	12.8 in (325 mm)
D. Dump angle at full height	45°	45°
E. Dump clearance at full height, 45° dump:		
Bucket	8 ft 11 in (2.72 m)	9 ft 1 in (2.77 m)
Clam open	_	9 ft 10 in (3.01 m)
Dump reach at full height, 45° dump – from bumper:		
Bucket	29.2 in (741 mm)	27.8 in (707 mm)
Clam open		13.8 in (351 mm)
Bucket rollback:		
3. @ Groundline	40°	41°
H. @ SAE carry	46°	46°
I. @ Full height	Adjustable	Adjustable
C. Digging depth below grade:		
Bucket flat	6.2 in (157 mm)	5.9 in (150 mm)
Clam open – dozing		3.5 in (89 mm)
Reach from front axle centerline – bucket on ground	6 ft 7 in (2.05 m)	6 ft 5 in (1.99 m)
lift capacity to full height - calculated values	8,202 lb (3 721 kg)	7,807 lb (3 541 kg)
Breakout force - calculated values:		
Lift cylinders	11,463 lb (5 099 daN)	11,225 lb (4 993 daN)
Dump cylinders	12,776 lb (5 683 daN)	13,717 lb (6 102 daN)
Bucket cutting edge width	92.7 in (2.36 m)	93,0 in (2,36 m)
Maximum grading angle	106°	106°
Maximum clam opening		38.3 in (972 mm)
Moldboard height	-	36.8 in (934 mm)
Raising time to full height	3.7 sec	3.7 sec
Bucket dumping time	2.0 sec	2.0 sec
owering time:		
Power down	2.5 sec	2.5 sec
Return-to-dig	3.8 sec	3.8 sec
Clam:		
Open time		1.3 sec
Close time		1.1 sec

NOTE: Loader dimensions taken with 4WD.

DIMENSIONS		
		Extendahoe®
	Retracted	Extended
M. Overall transport length:		
Long Lip bucket	23 ft 10 in (7.25 m)	_
4 IN 1 [®] bucket	23 ft 7 in (7.20 m)	-
Overall transport width	7 ft 9 in (2.36 m)	
Height:		
To top of canopy	8 ft 9 in (2.68 m)	8 ft 9 in (2.68 m)
To top of cab	8 ft 11 in (2.71 m)	8 ft 11 in (2.71 m)
To top of exhaust stack	8 ft 9 in (2.67 m)	8 ft 9 in (2.67 m)
N. Transport	11 ft 8 in (3.54 m)	-
Ground clearance at backhoe frame	14.2 in (360 mm)	14,2 in (360 mm)
Angle of departure	18.7°	18.7°
Front wheel tread:		
14.0 L x 17.5 Industrial Rib	74.3 in (1.89 m)	
14.0 L x 17.5	74.3 in (1.89 m)	-
Rear wheel tread:		
21.0 L x 24.0	69.6 in (1.77 m)	_
O. Wheelbase:		
2WD	84.0 in (2.13 m)	_
4WD	84.5 in (2.15 m)	_

NOTE: Dimensions taken with 21.0 L x 24.0 rear tires and 14.5/75.0 L x 16.1 front tires except that data marked 4WD is taken with 14.0 L x 17.5 front tires.

CYLINDERS				
	Bore Diameter	Rod Diameter	Stroke	Closed Length
Loader:				
Lift – 2	3.50 in (88.9 mm)	1.875 in (47.6 mm)	29.13 in (740.0 mm)	41.54 in (1 055.0 mm)
Dump - 2	3.25 in (82.6 mm)	1.75 in (44.5 mm)	20.33 in (516.5 mm)	30.78 in (781.8 mm)
4 IN 16 clam - 2	3.00 in (76,2 mm)	1.75 in (44.5 mm)	9.08 in (230.6 mm)	19.62 in (498.3 mm)
Backhoe:				
Boom	5.50 in (139.7 mm)	2.75 in (69.9 mm)	40.57 in (1 030.5 mm)	57.05 in (1 449.0 mm)
Dipperstick	5.25 in (133.4 mm)	2.75 in (69.9 mm)	23.53 in (597.7 mm)	38.49 in (977.7 mm)
Bucket	3.50 in (88.9 mm)	2.50 in (63.5 mm)	38.95 in (989.4 mm)	51.78 in (1 315,2 mm)
Extendahoe*	3.00 in (76.2 mm)	1.75 in (44.5 mm)	48.03 in (1 220.0 mm)	64.02 in (1 626.0 mm)
Swing - 2	4.00 in (101.6 mm)	2.00 in (50.8 mm)	11.50 in (292.0 mm)	24.44 in (620.8 mm)
Stabilizer – 2	5.25 in (133.4 mm)	2.50 in (63.5 mm)	20.40 in (518.1 mm)	33.57 in (852.7 mm)

AXLE RATINGS		建制的基础。由新型的数据
	Rear	Front – 4WD
Maximum static	70,848 lb (32 136 kg)	67,883 lb (30 791 kg)
Dynamic operating	49,494 lb (22 450 kg)	47,426 lb (21 512 kg)
Static operating	19,798 lb (8 980 kg)	18,969 lb (8 604 kg)
Oscillation - front axle	_	22° total – 11° each side

590SN 4 of 7

BACKHOE OPERATIONAL DATA

Flip pad

Cast pad

Digging force:

Leveling angle: Flip pad

Cast pad

Bucket cylinder - SAE rated 3,460 psi

Dipper cylinder - SAE rated 3,460 psi

Bucket cylinder - Power Lift

Dipper cylinder - Power Lift

Extendahoe®

Extendahoe®

Extended

10 ft 9 in (3.26 m)

11 ft 1 in (3.37 m)

15,132 lb (67 310 N)

15,853 lb (70 520 N)

7,392 lb (32 882 N)

7,744 lb (34 450 N)

11.2°

12.0°

	R	etracted	E	xtended
	Standard	Power Lift	Standard	Power Lift
Boom Lift	Lift Capacity lb (kg)			
+18 ft (5.50 m)	_	_	2,548 (1 156)	2,710 (1 229)
+16 ft (4.87 m)			2,783 (1 262)	2,961 (1 343)
+14 ft (4.27 m)	3,688 (1 673)	3,923 (1 779)	2,967 (1 346)	3,156 (1 431)
+12 ft (3.66 m)	3,898 (1 768)	4,147 (1 881)	3,037 (1 378)	3,231 (1 465)
+10 ft (3.05 m)	3,937 (1 786)	4,188 (1 900)	3,051 (1 384)	3,246 (1 472)
+8 ft (2.44 m)	3,908 (1 773)	4,158 (1 886)	3,052 (1 384)	3,247 (1 473)
+6 ft (1.83 m)	3,853 (1 748)	4,099 (1 859)	3,037 (1 378)	3,231 (1 466)
+4 ft (1.22 m)	3,785 (1 717)	4,027 (1 827)	3,011 (1 366)	3,203 (1 453)
+2 ft (0.61 m)	3,720 (1 687)	3,957 (1 795)	2,983 (1 353)	3,174 (1 440)
Ground Level	3,657 (1 659)	3,891 (1 765)	2,970 (1 347)	3,160 (1 433)
-2 ft (0.61 m)	3,606 (1 635)	3,836 (1 740)	2,946 (1 336)	3,134 (1 422)
-4 ft (1.22 m)	3,572 (1 620)	3,800 (1 724)	2,929 (1 329)	3,116 (1 413)
-6 ft (1.83 m)	3,565 (1 617)	3,793 (1 720)	2,924 (1 326)	3,111 (1 411)
-8 ft (2.44 m)	3,609 (1 637)	3,839 (1 741)	2,941 (1 334)	3,129 (1 419)
-10 ft (3.05 m)	3,776 (1 713)	4,017 (1 822)	2,985 (1 354)	3,175 (1 440)
-12 ft (3.66 m)	3,900 (1 769)	4,149 (1 882)	3,102 (1 407)	3,300 (1 497)
-14 ft (4.27 m)			3,307 (1 500)	3,519 (1 596)
Dipper Lift				
+16 ft (4.87 m)	-		4,312 (1 956)	4,312 (1 956)
+14 ft (4.27 m)	5,853 (2 655)	5,853 (2 655)	4,020 (1 823)	4,020 (1 823)
+12 ft (3.66 m)	6,409 (2 907)	6,409 (2 907)	5,252 (2 382)	5,252 (2 382)
+10 ft (3.05 m)	6,650 (3 016)	6,650 (3 016)	4,849 (2 200)	4,849 (2 200)
+8 ft (2.44 m)	6,903 (3 131)	6,903 (3 131)	4,945 (2 243)	4,945 (2 243)
+6 ft (1,83 m)	6,928 (3 142)	6,928 (3 142)	4,670 (2 118)	4,670 (2 118)
+4 ft (1,22 m)	7,953 (3 608)	7,953 (3 608)	4,424 (2 007)	4,424 (2 007)
+2 ft (0.61 m)	_	-	5,103 (2 315)	5,103 (2 315)

NOTE: Boom and Dipper Lift Capacities are rated per SAE J31 and are 87% of the maximum hydraulic lift force available with the specified options,

Digging depth:		4
Maximum	15 ft 6 in (4.72 m)	19 ft 6 in (5.94 m)
Maximum with hi-capacity bucket	16 ft 0 in (4.88 m)	20 ft 0 in (6.10 m)
2 ft (610 mm) flat bottom	15 ft 5 in (4.69 m)	19 ft 5 in (5.92 m)
8 ft (2.44 m) flat bottom	14 ft 5 in (4.40 m)	18 ft 8 in (5.63 m)
Overall reach from:		
Rear axle centerline	23 ft 3 in (7.10 m)	27 ft 2 in (8.28 m)
Swing pivot	19 ft 7 in (5.98 m)	23 ft 6 in (7.17 m)
Loading height	13 ft 1 in (4.00 m)	15 ft 9 in (4.81 m)
Loading reach - dipper retracted	5 ft 1 in (1.56 m)	8 ft 1 in (2.47 m)
Swing arc	180°	180°
Bucket rotation:		
Mechanical coupler	198.0°	198.0°
Hydraulic coupler - Extendahoe® dipper	194.8°	194.8°
Hydraulic coupler - standard dipper	198.0°	198.0°

10 ft 9 in (3.26 m)

11 ft 1 in (3.37 m)

15,132 lb (67 310 N)

15,853 lb (70 520 N)

10,575 lb (47 041 N)

11,080 lb (49 285 N)

11.2°

12.0°

Retracted

NOTE: Lift capacities apply straight to the rear of prime mover. 4WD equipped with 24 in (610 mm) Universal HD trenching bucket and Case coupler except as noted.

590SN 5 of 7

STANDARD EQUIPMENT

GPERATOR ENVIRONMENT

See page 1

ENGINE

FPT F5BFL413A diesel
Selective Catalytic Reduction – SCR
Aspirated air cleaner – replaceable dual
element dry type with radial seal

Fuel filter with water trap
Radiator with de-aeration bottle

Antifreeze to -34° F (-37° C)

Electronic throttles - foot and rotary hand

Self adjusting belt

High Pressure Common Rail computer controlled injection with diagnostic features

Engine ECO Mode – Detent on backhoe hand throttle, push button switch on dash

Auto Engine Idle

Auto Engine Shutdown

Auto Protection Shutdown

Electronic Fuel Priming

Cold Weather Starting Aid:

Dual 12 volt batteries, glow plugs, engine block heater and heated CCV hose

DRIVETRAIN

PowerDrive H-Type transmission, 4F-4R, hydraulic clutch shifting, kick down, transmission disconnect and FNR switch in loader control lever, includes auto shift mode and direct drive

Front axle:

4WD heavy-duty mechanically driven front axle with 14.0 L x 17.5 tires and drive shaft guard

Rear axle:

4WD heavy-duty outboard planetary drive, with 21.0 L x 24.0 tires

Torque converter - 11.8 in (300 mm)

On-the-go electric 4WD control

Electric F/R shuttle control

Electric differential lock control, push-button

Park brake, spring-applied hydraulic release – SAHR

HYDRAULIES

Ground level remote hydraulic test ports Variable displacement axial piston pump Pump:

43 gpm @ 3,000 psi (162.6 L/min @ 207 bar)

Heavy-duty hydraulic oil cooler

7-micron, spin on oil filter

LOADER

Bucket position indicator; Lifting lugs and tie downs on standard bucket; Single lever control with self-leveling and return-to-dig; Hand operated clutch disconnects on loader and shift levers, single lever 4-function loader control: lift, dump, clutch cut-out, differential lock and FNR switch

BACKHOE

Over center design, Fabricated "S" boom; Pro Control System; Dipperstick integrated serrated gripper teeth; Case mechanical coupler; Power Lift, Power Boost

Cleated dirt stabilizer pads

Extendahoe®

OTHER

Front tire 14.0 L x 17.5, 10 PR – 4WD Rear tire 21.0 L x 24.0, 10 PR

Forward tilt engine hood

Replaceable, molded front bumpers

Front/Rear tie downs

Reflective logos

Signal Lights - cab and canopy:

2 rear tail/stop

2 front flashers/turn

2 rear flashers/turn

Working/Driving Lights – cab and canopy: Adjustable halogen work lights – 55 W:

4 front

2 side – one left, one right

4 rear

Master disconnect switch and remote jump-start terminals

Hydrostatic steering

Backup alarm

Vertical spin-on engine oil, fuel and hydraulic filters

Locking DEF/Fuel covers

Tool box - bolt-on, step-mounted

TELEMATICS

CASE SiteWatch™ Telematics – includes hardware and a 3-yr Advanced data subscription

WARRANTY

- 1-Year/Unlimited-Hour Full-Coverage Base Limited Warranty
- 2-Year/2,000-Hour Extended Engine Warranty

590SN 6 of 7

OPTIONAL EQUIPMENT

OPERATOR ENVIRONMENT

Speed selectable Auto Ride Control -4WD models

Comfort Steering with two-speed steering pump and 3rd/4th gear cutout

ROPS/FOPS certified protective cab available in LH Door or 2 door with heat, A/C, defroster, door activated dome light, 4 front, 4 rear and 2 adjustable side lights, floor mat, tinted glass, bluetooth radio, front and rear wiper and fender extensions

Deluxe Cab package included on 2-door cabs includes: deluxe interior, viscous fan, pull-down sun visor and 72 dba sound level

Premium multi-color, hand stitched cloth, heated air suspension seat - not for use with ROPS Canopy option

ENGINE

Severe Cold Weather Starting Aid: Synthetic transmission, hydraulic and engine oil - order with cold weather starting aid

LOADER

Auxiliary hydraulics for loader-mounted equipment with thumb-operated proportional control

Hydraulic front quick coupler

Loader linkage without loader bucket

Tool portfolio of additional attachments Buckets - see page 2

BACKHOE

1-way/2-way Auxiliary backhoe hydraulics for hammers, plate compactors or similar 1-way flow attachments or switch to 2-way flow for thumbs, augers or similar 2-way flow attachments

Bolt-on hardened gripper teeth

Two-lever control

Pilot operated control system:

Fingertip proportional Electro-Hydraulic stabilizer controls

Thumb-operated proportional Electro-Hydraulic Extendahoe® control

Thumb-operated horn button Thumb-operated auxiliary hydraulic control Infinitely adjustable towers

In-cab switchable "excavator to backhoe" control pattern change Standard dipper

Flip over stabilizer pads

Hydraulic bucket coupler

Universal coupler - CAT/Deere compatible

Buckets - see page 2

Hydraulic thumb - Includes: 2 replaceable, high strength, bolt on tines with two positions for Universal or Hi-Cap buckets - meshes with Bucket teeth on 18 in & 24 in Buckets

OTHER

Front tires:

14.0 L x 17.5 10 PR

Rear tires:

21 L x 24, 10 PR or 540/70 R24 Michelin

Special paint

LED Working/Driving Light Package:

4 front

4 rear

2 side

Front Fenders

Special Feature Request

CaseCE.com

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CASE Construction Equipment is biodieseltriendly. NOTE: All engines meet current EPA emissions regulations. All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable.

SAFETY" Always read the Operator's Manual before operating any equipment. Inspect equipment before using it, and be sure it is operating properly. Follow the product safety signs and use any safety features provided.

Your Local Okada Dealer





Since 1995, Okada America, Inc. has been offering a wide variety of attachments through its parent company, Okada Aiyon located in Osaka, Japan.

Okada Aiyon was established in 1938 manufacturing a single line of breakers that has evolved into a global company producing a full line of demolition attachments.

The Okada family remains active in daily operations, still demands precision engineering with stringent quality control that ensures long product life and consistent quality output. These proven manufacturing guidelines are what drives Okada to become the global industry leader for hydraulic attachments.



OREGON

12950 SE HWY 212 BLDG D CLACKAMAS, OR 97015

503.557.7033 | F 503.557.7779

TEXAS

115 COMMERCE BLVD

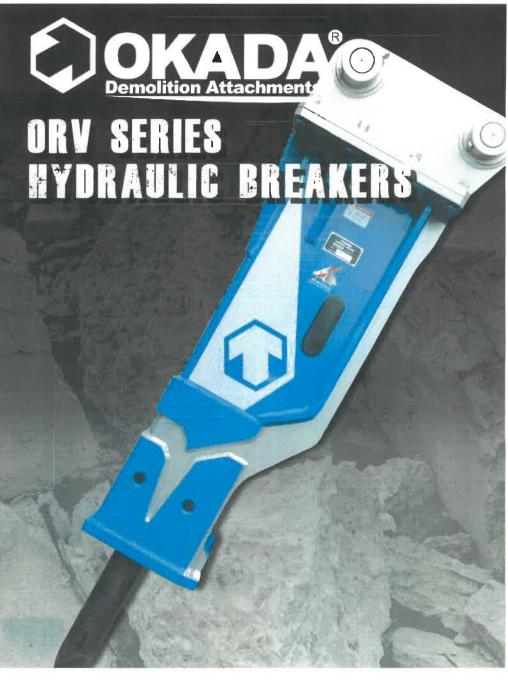
CLEBURNE, TX 76033

OHIO

904 MEDINA RD. MEDINA, OH 44256

330.239.2666 | F 330.239.3670





1/2020

WWW.OKADAAMERICA.COM

HYDRAULIC BREAKER

COUNT ON OKADA.



FEATURES

ORV Series hydraulic breakers are the result of decades of field experience and Okada's long-standing record of leadership in the industry. Thirteen models of ORV hydraulic breakers provide a broad range of solutions for your skid steer loaders, compact excavators, tractor loader backhoes and excavators.













SPECIFICATIONS

SPECIFIC	AIIUNS														
	MODEL	250LT	250H	405H	550H	800SH	1100H	1500H	2500H	3000H	4000H	5000H	7500H	10000H	12000
INFORMATION								ÿ=-							
Carrier Class	1000 lb	1.6 - 5	2.2 - 5	3.3 - 8.8	6.6 - 14.2	10 - 18	10 - 18	13 - 22	22 - 34	28 - 40	38 - 54	44 - 66	60 - 92	76 - 132	99 - 17
Carrier Class	m ton	7 - 2.3	1 - 2.3	15-4	3-64	4.5 - 8	4.5 - 8	6 - 10	10 - 15	13 - 18	17 - 25	20 - 30	27 - 42	35 - 60	45 - 80
Impact Energy	ft lb	150	225	375	550	850	1100	1500	2500	3000	4000	5000	7500	10000	12500
Class	Joules	203	305	509	746	1153	1492	2034	3390	4068	5424	6780	10170	13560	16950
Operating Weight	lb	195	265	413	575	730	1118	1667	1990	2550	3500	4400	5950	8400	9921
Operating weight	kg	88	120	187	261	331	507	756	902	1156	1587	1995	2698	3810	4499
Unit Working	inch	48	48	55	62	63	75	83	89	91	103	114	124	141	142
Length	cm	122	122	139	157	160	190	212	226	231	262	290	315	358	361
Tool Diameter	inch	1.77	1.77	2.24	2.75	2.95	3.15	3.54	4.1	4.5	5.3	5.7	6.1	6.7	7.1
1001 Diameter	mm	45	45	57	70	75	80	90	104	114	135	145	155	170	180
Tool Working	inch	11.9	11.9	14.1	15.9	16.2	19.5	22.6	23.4	24	28.9	28.2	30.2	34.9	32
Length	mm	302	302	357	404	411	496	575	594	610	734	716	767	886	813
Frequency	L Model bpm	550-1000	550-1000	600-1500	380-1000	380-900	400-800	350-700	350-550	320-550	320-480	270-400	230-400	230-330	270-38
rrequency	S Model bpm	n/a	n/a	n/a	n/a	n/a	600-1100	490-1000	600-900	400-4700	400-600	330-500	270-470	270-500	380-53
85 db (A)	ft	- 3	8 - 15	25 - 36	30 - 50	35 - 58	57 - 95	65 - 91	75 - 105	78 - 109	83 - 116	98 - 137	119 - 167	120 - 162	131 - 1
Level Distance	m		24-5	7.6 - 11	91-152	11 - 18	17 - 19	20 - 28	23 - 32	24 - 33	25 - 35	30 - 42	36 - 51	36 - 49	40 - 5
ENERGY															
Mechanical Energy	hp	3.6 - 11	4.5 - 11	4.6 - 19	12 - 30	17 - 33	14 - 37	15 - 38	35 - 65	45 - 78	62 - 98	73 - 117	98 - 133	94 - 158	101 - 17
wechanical Energy	kW	2.7 - 8	3.3 - 8	3 - 14	9 - 22	13 - 25	10 - 28	11 - 28	26 - 48	33 - 58	47 - 73	55 - 87	73 - 99	70 - 117	75 - 13
Mechanical Energy	hp	7.3	7.8	11.8	21	25	25.5	26.5	50	61.5	80	95	115.5	126	138.5
Average	kW	5.4	6	9	16	19	19	20	37	46	60	71	86	94	103
HYDRAULICS															
Oil Flow Range	gpm	4 - 9	5 - 9	8 - 18	11 - 18	14 - 20	15 - 23	16 - 26	25 - 35	32 - 42	40 - 53	47 - 63	63 - 72	64 - 85	69 - 9
Oil Tow Range	lpm	15 - 34	19 - 34	30 - 70	49 - 64	64 - 83	56 - 87	60 - 98	83 - 117	110 - 132	114 - 132	163- 200	178 - 238	238 - 273	280 - 35
Operating	psi	1300-1740	1300-1740	1280-1706	1600-2400	1740-2400	1990	-2418	2030	2700		2275 - 2700		2130 -	2700
Pressure	bar	90 -	120	88 - 118	110 - 165	120 - 165	137 -	- 167	140	- 180		157 - 180		147 -	180

- 1) Box style housings are available for all models. The model ORV550H, 800SH, 1100H, 1500H and larger units are all box housed units as the standard configuration.
- 2) Sound attenuated box housed units required for approximated noise level distances provided.
- 3) The L- mode frequency is the normal mode.
- 4) Operating weight includes complete breaker assembly with UMB.

WORKING TOOLS

Selected special high quality steel and the most advanced heat treatment available anywhere ensure outstanding wear and shock resistance.

Moil Point • Cross Cut Chisel • Blunt







June 30, 2021

City of Washington Public Works Department 301 Walnut St. Washington, IL 61571

RE: NO. PW-21-12



We are pleased to provide the following proposal for your review:

One (1) New CAT® 420XE Backhoe Loader, S/N H9X00282

Includes the following standard equipment and options:

Sound Suppressed, ROPS/FOPS Cab Air Conditioner & Heater/ Defroster CAT Comfort Air Suspension, Cloth Seat Front & Rear Window Wipers/ Washers 4 LED Head Lights, 4 LED Rear Flood Lights Hazard Flashers, Turn Signals, Stop & Tail Lights

Front Tires: 12.5 80-18, 12PR Rear Tires: 500 70-24, 20PR

E/H Loader Controls Single Tilt Loader

Return-To-Dig and Self-Leveling Controls Multi-Purpose Loader Hydraulics w/ IT Coupler CAT 1.31 yd³ Multi-Purpose Loader Bucket

Bolt-On Cutting Edge

Front Fenders

CAT C3.6 ACERT™ Tier 4f Engine 4WD Powershift Transmission

120V Engine Heater

Two, Maintenance Free 850 CCA Batteries

Flip-Over Stabilizer Pads

Six-Function Backhoe Hydraulics

Extendible-Stick (E-Stick) 1,015 lbs. Counterweight CAT Product Link Ready

AM/FM Radio

Mechanical Rear Coupler w/ Dual Lock

CAT 24" High Capacity 8.5 ft³ Bucket w/ Tips

Seat Mounted Controls

Ride Control

Security Bluetooth Key

Equipment Protection Plan (EPP)

Includes 12-Months Premier EPP & 60 month / 2,000 hour PWT+HYD+TECH EPP.

CAT 420XE \$ 110,000.00 CAT B6 Hammer (incl. bracket, lines & tools) \$ 7,000.00 SUB-TOTAL \$ 117,000.00 420F IT & NPK Hammer Trade Value \$ (30,000.00)

Net Difference

\$ 87,000.00

Altorfer is offering a Guaranteed Buyback to the City of Washington 60 months / 2,000 hours = \$60,000

Availability

MACHINE IN STOCK. Available in 2 weeks, subject to prior sale.

We appreciate the opportunity to submit this proposal, and trust that it will merit your favorable consideration.

Sincerely,

Regan Jones | Altorfer CAT

309.573.3903 | regan.jones@altorfer.com

CAT 420XE

BACKHOE LOADER BID SPECIFICATION

EXCEPTIONS

1. Is Backhoe built in the United States?

a. No. The machine is built in Leicester, England. The machine is assembled in England and shipped to North Carolina or Texas. Machines' final pre-delivery inspection takes place in North Carolina or Texas before being shipped to the dealer.

2. The transmission shall be hydraulically actuated powershift and a torque converter with transport speed of 24 mph or greater. The machine shall have clutch-free, synchronized, five forward and three reverse speeds.

a. No. The CAT machine has a powershift transmission but no torque converter. The max speed of the CAT 420XE is 25 mph. However, safe operation suggests not exceeding 19-20 mph in-town driving with today's distractions. 20,000 lbs. does not stop immediately; therefore CAT offers 4 wheel braking while using 4WD or 2WD. This is exclusive to CAT. The CAT 420XE offers 4 forward gears and 3 reverse gears. Furthermore, 4WD engages when both brakes are depressed at speeds greater than 12+ MPH.

3. Minimum digging depth shall be 14' and 18' extended.

a. No. The CAT machine has a 14' digging depth and 17'8" extended digging depth.

4. Machine shall lift 4,100 lbs., 5' off the ground when fully extended

a. No. The CAT machine has a BOOM lifting capacity of 4,000 lbs. up to 12' in height. The CAT machine has a STICK lifting capacity of 4,451 lbs. up to 8' in height. Furthermore, the CAT 420XE has 15% more boom lifting capacity than the previous models, the 420F and 420F2. The machine will not have issues lifting heavy objects such as manholes, road plates and smaller trench boxes.

5. Machine will be equipped with GP bucket as standard equipment.

a. No. This CAT machine comes with an MP bucket at no extra cost to the City of Washington. The MP bucket is a \$6,000 premium that CAT and ALTORFER are including. If the City elects not to receive the premium bucket, ALTORFER will supply a GP bucket at no extra charge.

6. Machine will be equipped with GP bucket as standard equipment.

a. See above. Repeat spec.

7. Machine shall have full 1-year comprehensive manufacturer's warranty.

a. YES. However, ALTORFER has included a 60 month / 2,000-hour Powertrain + Hydraulic + Technology EPP (warranty) at no extra cost to the City of Washington. Previously, the City of Washington has requested additional warranty. The current 420F being traded was originally sold with a 60 month / 2,000 hour warranty.

8. The 420XE is a premium model fitting between the 420 and 430. No other manufacturer builds a backhoe in this size class. The 420XE provides 10% better fuel economy and 15% more lifting capacity than the City's current 420F machines. This machine is in stock and presented to ALTORFER at a discounted rate specifically for the City of Washington by Caterpillar.

			7	2020 Backhoe	Loader Comp	etitive Lineup		-	
Make	Industria	al Loader			ft.		15	ft.	17 ft.
Cat	415IL		415	416	420	420XE	430	440	450
Horsepower (net)	69		70	86	92	92	107	104	131
Operating Weight- Base Config (lb)	14035		15426	16532	17271	17,271	18.051	21544	24.03
Hinge Pin Height	11'5"		11'5"	1175*	11'5"	11'5"	11'5"	11'11'	12'
Loader Lift Capacity (lb)	5864		6730	6730	7230	7230	7230	8782	8886
Digging Depth- Standard			14"	14'	14'	14'	15'2"	15'6"	17'0"
Bucket Digging Force- Std (ib)			13290	13290	14431	14431	16163	16890	
John Deire	2101 EP	2151	Arth ER	3100	310%	14401	31031.10	4101	17782
Horsepower (net)	73	93	89	93	99		110		710L
Operating Weight- Base Config (a)	13,449	14206	13822	14669	15872		16,571	113	148
Hinge Pin Height	10'11"	10' 11"	11*5*	11'5"	11'5")	11'3"	17,786	25,58
oader Lift Capacity (%)	5432	5432	6435	6435	7632	/	7552	1144	12'3'
Digging Depth- Standard		•	14' 1"	14144	14'3"	1		7211	9866
Bucket Digging Force- Std (Ib)			10844	10844	12356		15' 1"	15' 11"	17' 3"
Casa	570N EP		580N EP	SUDA		Charles and the sand	15723	17350	18959
forsepower (net)	72		GB	83	95	5NO Super N WT	590 Super N		
Operating Weight-Base Config (lb)	14508		15796	18589	17269		108		
finge Pin Height	11'3"		11' 3"	11'3'	11'3"	20,077	19,307		
onder Lift Capacity (lb)	6503		6503	6803	7044	11'3"	11'6"		
Digging Depth-Standard			14'11'	14' 8"	14'4"	8425	8202		
bucket Digging Force- Std (lb)			11517	11517	13975	14' 5" 13975	15' 5" 15132		

PROPOSAL

The undersigned proposes, in accordance with the terms and conditions of the Contract Documents, of which this Proposal is a part, to furnish 1 Backhoe Loader with hydraulic hammer to the City of Washington

Quantity: 1	
Description: Backhoe Loader	
Price of Fully Assembled and Demonstrated full Working Condition	\$_110,000
<u>Frade Allowance</u> 2012 Cat 420F IT VIN# JWJ00656	\$ 28,000
Description: Hydraulic Hammer	
Price of Fully Assembled and Demonstrated full Working Condition	\$ 7,000
Trade Allowance NPK H-3XA SN37595	\$ 2,000
Total - Backhoe and Hydraulic Hammer After Trades	\$ 87,000
Cash Billing Terms: NET 30 AFTER MACHINE HAS BEEN	DELIVERED
Person to Contact Regarding This Proposal: REGAN JONES	
Phone Number: 309 - 573 - 3903	
The undersigned also acknowledges having received a full set of the Addenda Nos. 1 (None unless indicated).	e Contract Documents and
Signature:	
Name of Business: ALTORFER, INC.	
Business Address: 1 CAPITOL DR.	
EAST PEORIA, IL 61611	
Business Phone: 309-694-1234	

Addendum #1 To **PROPOSAL** For

Backhoe Loader with Hydraulic Hammer Date: 6-29-2021

-						
R	AT	711		\mathbf{n}	10	٠
17	v		21	U.	ΤŒ	٠

(1) Revise the following from P-1 Spec No. PW-21-12

(1) Kevise the following from 1-1 Spec 110.1 11-21	-14			
From				
Trade Allowance 2012 Cat 420F IT VIN# JWJ00491	\$			
То				
Trade Allowance 2012 Cat 420F IT VIN# IWI00656	\$ 28,000			

SPECIAL PROVISIONS

1. Basis of Award

Unit price shown on the proposal shall include <u>all</u> delivery charges for the proposed equipment. The City reserves the right to waive technicalities or to reject any and all bids when, in the opinion of the City Council, the best interests of the City of Washington will be served by such action.

6. Ordering and Delivery

Order shall be placed by telephone direct to the selected vendor by personnel of the City of Washington, Department of Public Works. A purchase order number will be furnished to the vendor and a delivery date will be agreed to at that time.

7. Billing

An invoice for the accepted equipment will be presented at the time of delivery, a check will be presented for payment. The invoice must clearly show the description, unit price, and the City's Purchase Order number.

8. Price Escalation

The price quoted herein shall remain firm for the equipment ordered.

9. Certification of Compliance

In accordance with Article 33E of the Criminal Code of 1961, as amended, the bidder is required to fill out and submit with his proposal the Certification of Compliance included with this bid document.

10. Exceptions to Specifications

Any exceptions to the specifications and these provisions shall be clearly explained on a separate page by the bidder on his firm's letterhead, to be attached to and submitted with these documents prior to or at the time of bid opening. Should a bidder submit a proposal without a separate statement of exception, it shall be assumed the proposal is in full compliance with these specifications.

11. Corrections

All prices and notations must be typed in or written in ink.

CERTIFICATION OF COMPLIANCE

The undersigned, being first duly sworn on oath, deposes and states that he has the authority to make this certification on behalf of the bidder.

ALTORFER, INC.
(Name of Company)

- (a) That in connection with this procurement,
 - (1) the prices in this bid have been arrived at independently, without consultation, communication, or agreement, for the purpose or restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
 - (2) the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not be knowingly disclosed by the bidder prior to opening directly or indirectly to any other bidder or to any competitor; and
 - (3) no attempt has been made or will be made by the bidder to induce any other person or firm to submit or not to submit a bid for the purpose of restricting competition.
- (b) The undersigned further states
 - (1) he is the person in the bidder's organization responsible within that organization for the decision as to the prices being bid herein and that he has not participated, and will not participate, in any action contrary to (a)(1) through (a)(3) above; or
 - (2)(a) he is not the person in the bidder's organization responsible within that organization for the decision as to the prices being bid herein but that he has been authorized to act as agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to (a)(1) through (a)(3) above, and as their agent does hereby so certify; and (b) that he has not participated, and will not participate in, any action contrary to (a)(1) through (a)(3) above.
- The undersigned certifies that the bidder is not barred from bidding on this contract as a (c) result of a conviction for the violation of State laws prohibiting bid-rigging or bid-rotating.
- It is expressly understood that the foregoing statements, representations, and promises are (d) made as a condition to the right of the bidder to receive payment under any award made hereunder.

Authorized Signature:

Title: TERKITORY

SUBSCRIBED AND SWORN TO before me this

Page P-1

CRISTY ANNE HASTY Official Seal Notary Public - State of Illinois My Commission Expires Nov 7, 2021

	BACKHOE	LOADER BID SPECIFICATION
Basic Spec	cifications	
Υ	N_	Is Backhoe built in the United States?
YY	N	Maximum operating weight must be less than 20,000 pounds
YY	N	Machine shall have full 1 year comprehensive manufacturers warranty & See NoTo
Υ	N	Machine shall be equipped with an economy control function
Y	N	Maximum overall transport height shall be 11' -12' with standard tires and
		extendable stick
Y V.	N	Unit shall have a max, height to the top of canopy of 9' 3" w/std. tires
Y	N	Maximum overall transport length shall be 23'6" with standard tires,
		extendable stick, and loader coupler
Y	N	Units maximum width shall be no more than 7'7" with GP bucket
Y	N	Unit shall have a minimum wheel base of 7'1"
Engine		
YV	N	Engine must comply w/ US EPA Tier 4 Final/EU Stage IV off road emission
Y	N	Unit shall utilize Selective Catalytic Reduction (SCR)
Y	N	Engine shall have an economy mode to max fuel efficiency, while
		maintaining backhoe performance
Y	N	Unit shall have a hinged cooler system for easy cleanout
YV	N	The engine shall have a standard glow plug starting aid to -20 degrees F
		without using ether and electric engine coolant heater
y V	N	Engine shall be protected to -34 degrees w/extended life antifreeze
y V	N	Engine cooling fan shall have a heavy duty guard that prevents contact
Y	N N	Engine shall have charging capacity of 140 amperes minimum
y V	N	Engine shall be equipped with one maintenance free battery
		with the option for two such batteries equaling 1800 CCA
y V	N	Engine shall be equipped with 12-volt starting and charging system
v V	N.	Engine shall be equipped with a standard battery disconnect switch with
		easy access
v /	N	Engine shall be Turbocharged and at least 100HP and built by manufacturer
v V	N	Machine shall have a automatic engine speed control with auto idle and
		auto shutdown when not in use
v	N	Engine net peak power shall be at least 105 HP (ISO 9249)
Υ	N	The tilt hood shall have two service positions for easy operation
	n/Transmis	
V	N V	The transmission shall be hydraulically actuated powershift and a torque
·		
,		converter with transport speed of 24 mph or greater. The machine shall have clutch-free, synchronized, five forward and three reverse speeds
v 1/	N	The machine shall have a sealed axle, with no breather, and will be
<u> </u>		mechanical front wheel drive with traction control limited-slip
		differential with electric on/off control
v V	N	The manual 4WD shall have momentary 4WD standard or full time 4WD
\ <u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	14	with the ability to lock out selected gears if required
v /	N	The clutch engaged MFWD can be engaged on the fly during operation
1	N	The machine shall have hydrostatic power steering with emergency
1 V	11/	
	1	manual mode The machine shall have a dial throttle that will allow the apprator to road.
η	IV	The machine shall have a dial throttle that will allow the operator to road

lydraulic :	N	the machine on cruise control and upon braking the RPM's return to idle The parking brake shall be independent of the service brakes, spring applied, hydraulically released, wet multi disk, and sealed
ydraulic !	N	
/draulic !	^	applied, hydraulically released, wet multi disk, and sealed
draulic !	^	applica, lightenies in a cicadea, wee trigite along and desire
V	system	
	N	Machine shall be equipped with auto idle to lower rpm when hydraulics
	·	are not active to conserve fuel and reduce noise levels
	NI.	Hydraulic pump shall be at least 42 gpm @2200 rpm at 3625 psi closed
<u> </u>	14	
		center hydraulic pressure compensated load sensing, axial piston driven
ectrical		
V	N	Cab shall be pre-wired for rotating beacon and radio ready
V	N	Unit shall be equipped with optional LED lights
perator S	itation	
V	N	Access to the cab shall be from the right and left with protected, wide,
		rigid, slip resistant steps and ergonomically located hand holds
	N	3" retractable seatbelt shall be provided
1/	N	Machine manufacturer shall provide a factory installed onboard security
	1.4	system for total machine integration. System will have the ability to
		- '
	/	accommodate no less than ten operator codes
	N	The keyless start shall have an electric fuel shut-off and ability to have
. /		auto shutdown in monitor # See exception
<u></u>	N	The tilt hood shall have two service positions for easy operation
	N	
ackhoe -		
V	N _	Machine shall be able to grab current City of Washington attachments
	N	Minimum digging depth shall be 14' and 18' extended # See exception
	N 1/	Machine shall lift 4100 punds 5' off the ground when fully extended & See C.
- 1	N	Machine will be equipped with GP bucket as standard equipment
ader	••	mer to to the telephone and the second and the seco
V	N	The loader shall have a non-removeable, hinged loader boom service hook
V	N	Loader coupler shall be able to grab current City of Washington attachments
V	N	Loader bucket shall not roll back, and must not move under normal dig
,		operations
V	N	Loader shall have positive down pressure to lift tractor front end off the
		level ground
V	N	Loader shall be equipped with a lift cylinder brace to mechanically hold
		the loader arms in the raised position
1/	NI.	Loader bucket shall be suitable for general purpose with heavy duty
	IV	
		characteristics including high strength wear material in the leading edges
		of the lower side corners, equaling the material properties of the base
		cutting edge
	N	Loader bucket shall be self leveling for truck loading spoil
	N V	Machine will be equipped with GP bucket as standard equipment 🔌 See 🗪
rakes		
V	N_	Parking Brake shall activate automatically when engine shuts off regardless
		of whether the operator engages it or not