

**ADVERTISEMENT FOR BIDS  
TRACTOR LOADER BACKHOE EQUIPMENT**

The Village of Summit is accepting bids for new Tractor Loader Backhoe equipment.

Bids must be in the Village Clerk office by 9:30 A.M. February 23, 2016  
Specifications are available in clerk's office, 2911 N. Dousman Road,  
Oconomowoc, Wisconsin. Bids will be opened at 9:30 A.M. February 23, 2016  
and considered for action at the Village Board meeting on March 3, 2016 6:30  
P.M.

The Village Board reserves the right to reject any or all bids and to accept the bid deemed to be most advantageous to the Village.

Debra Michael-  
Clerk  
Village of Summit

Note: If you should have any questions please feel free to contact Bill Miller at  
262-567-2422

**VILLAGE OF SUMMIT**  
**SPECIFICATION OF EQUIPMENT**  
**NEW TRACTOR LOADER BACKHOE**

**18 Foot Six Inch Dig Depth Side Shifting Backhoe (Hydraulic)**

**ENGINE**

The machine's engine shall be 4 Cylinder, 16 Valve, 4 – cycle, turbocharged, direct injection engine with minimum 4.4L displacement.

EPA T4F regulations without AFTERTREATMENT (NO DPF) (NO REGENERATION)

The engine shall be a minimum of 101 Net Horsepower.

The engine shall be water cooled.

The machine's throttle control shall be - Hand and Foot Operated.

The machine's engine shall have 381 lb ft torque @ 1500 RPM

The shall have Air to Fluid Coolers for Maximum Efficiency

The following components shall be separately serviceable radiator, hydraulic cooler and transmission internal cooler

The unit will have a 5 Gallon DEF tank that is heated by engine coolant

The unit will have heated DEF Lines

There will be a different key for the DEF tank vs. the Diesel tank

There will be a DEF quality sensor

The DEF tank and Diesel tank will be mounted on different sides to reduce chances of contamination

**TRANSMISSION/FINAL DRIVE**

The unit will have single lever power shift transmission

The transmission will be a separate unit mounted to the engine.

The machine shall have a maximum speed of not less than 22 MPH.

The Transmission shall be 4 –speed, full synchromesh gear box with integral torque convertor and electrically operated reversing power shuttle.

The unit shall allow for on the move gear changes

The unit shall have planetary transmission gears.

The unit shall have 4 forward and 4 Reverse Gears.

The Torque Converter stall ratio should be 2.52: 1

There will be a column mounted electric reversing shuttle which can change machine direction while allowing the operator to keep hands on the steering wheel.

The unit shall be 4 wheel drives with the ability to turn on / off 4WD braking

The rear drive axle will be rigidly mounted, incorporating torque proportioning

The Front Steer Axle will be centrally pivoted with oscillation of 16 degrees

The Front axle includes torque proportioning differential transferring torque to wheel with traction.

The Front axle will have a 36,376 lb static load rating

The rear axle will have a 55,125 lb static load rating

The Service Brakes shall be hydraulically actuated dual line, self adjusting, oil immersed, and multi disc type on the rear axle. Well protected from dirt, water. No maintenance required.

There will be a hand operated parking brake

## **ELECTRICS**

There will be a 12 Volt negative ground.

A 150 AMP Alternator will be standard

There will be 2 fixed and 2 adjustable work lights

There will be a 12 volt outlet

There will be light indicators for work lights on, rear work lights on, turn signal and 4 way flashers

The unit will be equipped with Cab, Heat and Air Conditioning, AM-FM Radio

The unit will have a smooth ride system

The operator ear noise level will be at 72dB or below at rated speed with no load

The loader will have true parallel lift to maintain level loads on raise and lower cycles

The loader will have Amber LED strobe light roof mounted (ECCO Model 7965A or equal)

## **FRONT LOADER**

The loader must have a minimum break out force of 13,603 lbf

The loader must have a minimum of 9,321 lbs lift capacity

The loader must have a minimum 9' dump height

It must be equipped with return to dig option

The loader must allow for full bucket roll over for dozing

The loader must have heavy duty lifting eyes

The loader must be a 6-1 bucket

## **BACHHOE**

The backhoe must be a hydraulically operated extending for a maximum depth must be 18'6" with a normal duty 24" bucket

The backhoe must be a hydraulically operated side shifting backhoe.

The bucket breakout force must not be less than 12940 lbf

The bucket rotation must be a minimum of 201 degrees

The backhoe must have a minimum of 18,000lbs of swing torque

The backhoe dipper must lift a minimum of 3,939 lbs @ six feet above ground

The backhoe must have replaceable bushings in the swing tower to boom base mounting pins

The boom and dipper must be equal length for better stability, visibility and productivity

## **HYDRAULICS**

The machine must have open center hydraulics

The main relief setting shall be 3655 PSI

The unit shall have axial piston pump for improved productivity and fuel consumption.

## **CONCLUSION**

This specification is considered a minimum acceptable tractor loader backhoe specifications and aforementioned are assumed to be standard.

Items not offered as standard, but as advertised standard available production options, will be accepted if required to comply with this bid specification only if they are highlighted in the original bid as such.