



# HEIGHTS MACHINERY

## SPECIFICATIONS - TWO (2) FRONT, ONE-WAY RIGID SNOW PLOWS

BIDDER PROPOSES  
TO FURNISH

Moldboard sheet thickness shall be minimum of 10 gauge roll-formed A569 steel with a tensile strength of 55,000 lbs to 70,000 lbs.

COMPLY

Height at nose - 38"

COMPLY

Height at discharge end - 64"

COMPLY

Cutting edge 5/8" x 8" x 14' ASSHO center punched.

EXCEPTION, 1/2" x 8"

Set up for 8' 6" width of cut.

COMPLY

Bottom moldboard reinforcement to be constructed of 1/2" x 6" flat strap welded to a 1/2 x 10" flat plate running full length of the moldboard with minimum 3/16" support gussets on the underside, spaced between the bolt holes and all to be continuously welded.

COMPLY

The landslide end plate is to be built of 1/4" thick x 40" high plate, to be continuous welded on the leading edge, molded discharge and shall have a 3/4" round reinforcement continuously welded full edge. The top moldboard angle shall be a minimum 3" x 3" x 3/8" angle iron manufactured from A36.

EXCEPTION, 3/16" x 40"

Moldboard to have minimum of (3) 3/8" one piece flame cut ribs. They are to be manufactured from A36 steel with a tensile strength of 58,000 lbs to 80,000 lbs. Ribs must be continuously welded to the top angle, moldboard and bottom reinforcements.

COMPLY

Snow plow shoes (2) cast 2" x 7" x 16" - Both shoes to include a boomerang rocker assembly with adjusting height bar with hole and pin adjustment.

COMPLY

Plow horizontal bracing top, to be minimum 3" x 3" x 1/4" angle iron, bottom to be minimum 3" x 3" x 3/8" angle iron, continuously welded.

COMPLY

Back frame to be constructed from minimum 3 1/2" x 3 1/2" x 1/2" angle iron.

COMPLY

Plow hitch section (installed) to be HD 34" Hustings quick hitch, continuously welded, including heavy duty top yoke assembly.

COMPLY.

BIDDER PROPOSES  
TO FURNISH

Bidder to state weight of plow with plow section of 34" Hustings quick hitch

2600 lbs.

Lift Hook: A lift eye to be provided to lift plow. Lift eye to be mounted so plow will be balanced when lifted

COMPLY

Plow must be sand blasted and powder coated urethane orange (No Exceptions)

EXCEPTION, ZINC PRIMER WITH TOP COAT OF COLOR.

Rubber snow deflector: 18" wide x 3/8" thick, full length of plow, attached to leading edge with a 2-1/2" x 2-1/2" x 3/8" angle full length using 1/2" stainless steel bolts on 12" center. Including (8) 3/8" x 2" flat stock reinforcements evenly space welded to the angle and bolted to the flap with stainless hardware.

EXCEPTION, 5/16" THICK.

100% continuously welded plow assembly.

COMPLY.

All equipment must be equipped in compliance with all applicable State, Federal, ANSI, and OSHA safety standards and regulations in effect at time of manufacture.

Bids submitted must meet or exceed specifications. Items not meeting specifications must be noted in the comply column and/or listed on a separate sheet of paper and submitted with bid.

BIDDERS MUST SUBMIT WITH THEIR BID COMPLETE SPECIFICATIONS AND A COPY OF MANUFACTURERS LITERATURE ON THE UNITS THEY PROPOSE TO FURNISH.

TERMS: NO TRADE-IN. NET CASH - 30 DAYS AFTER DELIVERY. Price quoted shall include any title fees and all delivery cost to the City Garage, 625 Woodmere Ave, Traverse City, MI 49686.

Vendors shall make a complete inspection, make sure product meets bid specifications, and perform pre-delivery service BEFORE the unit is delivered.

PLOWS TO BE DELIVERED COMPLETE, READY TO OPERATE. (ALL SHOES, DEFLECTORS, ETC. ARE TO BE INSTALLED.

IF you have any questions relative to, or for clarification of, these specifications, call Mr. Scott Meteer at 231-922-4900, ext. 111, BEFORE THE BID IS SUBMITTED.

# SPECIFICATIONS

## RR-95 and RR-96

March 3, 2006

	RR-95	RR-96
Height at nose	38"	38"
Height at wing tip	64"	76"
Length of moldboard overall	168"	190"
Blades (2)	1/2"x8" center punched	1/2"x8" or 551V 1/2"x6"
Angle of cut	38°	38°
Moldboard thickness	10 gauge	10 gauge
Shoe (2) Cast Chilled	7"x16"	7"x16"
Width of cut	8'6"	9'3"
Weight of plow less Hitch	2,100 lbs.	2,575 lbs.
Back frame angle size	3-1/2"x3-1/2"x1/2"	4"x4"x1/2"
Brace angle size	3"x3"x1/2"	3"X3"X1/2"
Top moldboard angle	3"x3"x3/8"	3"x3"x3/8"
Moldboard upper stiffener	3"x3"x1/4"	3"x3"x1/4"
Moldboard lower stiffener	3"x3"x3/8"	3"x3"x3/8"
Cutting edge length	129"	141"
Moldboard gussets	3-3/8 flame cut	1-3/8" & 3-1/2" flame cut

1. Front plate shall consist of 1/2" x 6" bar welded to 3/8" x 10" top plate and continuously welded to the moldboard sheet, supported by 3/16" gussets between the blade bolt holes and continuous weld to the moldboard sheet.
2. The blade push plate shall consist of 1/2" x 6" bar bolted to the front plate.
3. The landslide or leading end shall consist of 3/16" material, 40" high and parallel to the line of cut.
4. Nose guard shall be replaceable and secured by bolts through the blade, bottom plate and landslide.
5. Moldboard discharge end shall be stiffened by 3/4" diameter hot roll round material.
6. Leading edge shoe shall be located 22" inboard of the rear of the landslide. The adjusting bar shall consist of 1" x 3" bar and shall have holes for adjusting in 1" increments, using 1" diameter pins.
7. As an option, the leading edge support shall consist of a 14" automotive style tire and hub assembly, located 3" inboard of the rear of the landslide and adjustable in 1" increments. The tire assembly shall also be covered with a protective fender.
8. The discharge shoe shall be not less than 36" from the centerline of the hitch. Adjusting bar shall consist of 1" x 3" bar and shall have holes for adjusting in 1" increments, using 1" diameter pins.
9. Hitch to be: Root Quick Detachable Hitch 29" or 34", Root Tip-Up Hitch, Root Loop Hitch, Root Bumper to Axle Hitch, Root QAS Hitch.

Bidder agrees that the bid may not be withdrawn for a period of thirty (30) days from the actual date of the opening of the bid.

**TWO (2) FRONT, ONE-WAY RIGID SNOW PLOWS**

**PRICE QUOTED SHALL INCLUDE ALL DELIVERY CHARGES FULLY PREPAID TO THE CITY GARAGE, 625 WOODMERE AVENUE, TRAVERSE CITY MI 49686. PLOWS TO BE DELIVERED COMPLETE, READY TO OPERATE.**

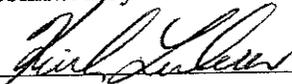
**MAKE, MODEL OF SNOW PLOWS BID:**

2013 ROOT MODEL RR95

TOTAL COST FOR 2 PLOWS: \$ #13,547.00

EXPECTED DELIVERY DATE: 30-45 ~~Wks~~ WORKING DAYS A.R.O.

Submitted by:

  
Signature

KEITH LEEDER SALES/SERVICE  
Name and Title (Print)

231-267-9300 / 267-9324  
Phone Fax

HEIGHTS MACHINERY  
Company Name

8434 M-72 E.  
Company Address

WILLIAMSBURG, MI. 49690  
City, State, Zip

CORPORATION  
Sole proprietorship/partnership/corporation

MICHIGAN  
If corporation, state of corporation

# BELL EQUIPMENT

## SPECIFICATIONS - TWO (2) FRONT, ONE-WAY RIGID SNOW PLOWS

	BIDDER PROPOSES TO FURNISH
Moldboard sheet thickness shall be minimum of 10 gauge roll-formed A569 steel with a tensile strength of 55,000 lbs to 70,000 lbs.	<u>10 Gauge</u>
Height at nose - 38"	<u>32"</u>
Height at discharge end - 64"	<u>63"</u>
Cutting edge 5/8" x 8" x 14' ASSHO center punched.	<u>5/8"x8x10' ASSHTO</u>
Set up for 8' 6" width of cut.	<u>9' @ 37°</u>
Bottom moldboard reinforcement to be constructed of 1/2" x 6" flat strap welded to a 1/2 x 10" flat plate running full length of the moldboard with minimum 3/16" support gussets on the underside, spaced between the bolt holes and all to be continuously welded.	<u>C Channel &amp; Brake Formed Dimple Box of EX-TEM-50 Steel</u>
The landslide end plate is to be built of 1/4" thick x 40" high plate, to be continuous welded on the leading edge, molded discharge and shall have a 3/4" round reinforcement continuously welded full edge. The top moldboard angle shall be a minimum 3" x 3" x 3/8" angle iron manufactured from A36.	<u>Top Reinforcement is a Channel Formed Into the Moldboard Material</u>
Moldboard to have minimum of (3) 3/8" one piece flame cut ribs. They are to be manufactured from A36 steel with a tensile strength of 58,000 lbs to 80,000 lbs. Ribs must be continuously welded to the top angle, moldboard and bottom reinforcements.	<u>4-5/16" Ribs</u>
Snow plow shoes (2) cast 2" x 7" x 16" - Both shoes to include a boomerang rocker assembly with adjusting height bar with hole and pin adjustment.	<u>1"x6"x20"</u>
Plow horizontal bracing top, to be minimum 3" x 3" x 1/4" angle iron, bottom to be minimum 3" x 3" x 3/8" angle iron, continuously welded.	<u>Flat Bars Between Plow Ribs</u>
Back frame to be constructed from minimum 3 1/2" x 3 1/2" x 1/2" angle iron.	<u>5/16" C Channel</u>
Plow hitch section (installed) to be HD 34" Hustings quick hitch, continuously welded, including heavy duty top yoke assembly.	<u>COMPLY</u>

BIDDER PROPOSES  
TO FURNISH

Bidder to state weight of plow with plow section of 34" Hustings quick hitch

2,220 Pounds Appx.

Lift Hook: A lift eye to be provided to lift plow. Lift eye to be mounted so plow will be balanced when lifted

COMPLY

Plow must be sand blasted and powder coated urethane orange (No Exceptions)

Urethane Wet Coat  
Paint

Rubber snow deflector: 18" wide x 3/8" thick, full length of plow, attached to leading edge with a 2-1/2" x 2-1/2" x 3/8" angle full length using 1/2" stainless steel bolts on 12" center. Including (8) 3/8" x 2" flat stock reinforcements evenly space welded to the angle and bolted to the flap with stainless hardware.

COMPLY

100% continuously welded plow assembly.

COMPLY

All equipment must be equipped in compliance with all applicable State, Federal, ANSI, and OSHA safety standards and regulations in effect at time of manufacture.

Bids submitted must meet or exceed specifications. Items not meeting specifications must be noted in the comply column and/or listed on a separate sheet of paper and submitted with bid.

**BIDDERS MUST SUBMIT WITH THEIR BID COMPLETE SPECIFICATIONS AND A COPY OF MANUFACTURERS LITERATURE ON THE UNITS THEY PROPOSE TO FURNISH.**

**TERMS: NO TRADE-IN. NET CASH - 30 DAYS AFTER DELIVERY.** Price quoted shall include any title fees and all delivery cost to the City Garage, 625 Woodmere Ave, Traverse City, MI 49686.

Vendors shall make a complete inspection, make sure product meets bid specifications, and perform pre-delivery service BEFORE the unit is delivered.

**PLOWS TO BE DELIVERED COMPLETE, READY TO OPERATE. (ALL SHOES, DEFLECTORS, ETC. ARE TO BE INSTALLED.**

IF you have any questions relative to, or for clarification of, these specifications, call Mr. Scott Meteer at 231-922-4900, ext. 111, BEFORE THE BID IS SUBMITTED.

Bidder agrees that the bid may not be withdrawn for a period of thirty (30) days from the actual date of the opening of the bid.

**TWO (2) FRONT, ONE-WAY RIGID SNOW PLOWS**

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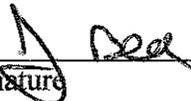
**MAKE, MODEL OF SNOW PLOWS BID:**

Wausau Model RG 3290 Fixed Angle One-Way Plow

**TOTAL COST FOR 2 PLOWS: \$** 17,300.00

**EXPECTED DELIVERY DATE:** 90 Days A.R.O.

Submitted by:

  
Signature

James Bell - President

Name and Title (Print)

248-370-0000      248-370-0011

Phone                      Fax

Bell Equipment Company

Company Name

78 Northpointe Drive

Company Address

Lake Orion, MI 48359

City,                      State,                      Zip

Corporation

Sole proprietorship/partnership/corporation

Michigan

If corporation, state of corporation

# TRUCK + TRAILER SPECIALTIES

## ADDENDUM #1 - See Highlighted Section Below

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Height at nose - 38"	<u>COMPLY</u>	
Height at discharge end - 64"	<u>COMPLY</u>	
<b>Cutting edge 5/8" x 8" x 11' ASSHO center punched.</b>	<u>COMPLY</u>	
Set up for 8' 6" width of cut.	<u>COMPLY</u>	
Bottom moldboard reinforcement to be constructed of 1/2" x 6" flat strap welded to a 1/2 x 10" flat plate running full length of the moldboard with minimum 3/16" support gussets on the underside, spaced between the bolt holes and all to be continuously welded.	<u>COMPLY</u>	
The landslide end plate is to be built of 1/4" thick x 40" high plate, to be continuous welded on the leading edge, molded discharge and shall have a 3/4" round reinforcement continuously welded full edge. The top moldboard angle shall be a minimum 3" x 3" x 3/8" angle iron manufactured from A36.	<u>COMPLY</u>	
Moldboard to have minimum of (3) 3/8" one piece flame cut ribs. They are to be manufactured from A36 steel with a tensile strength of 58,000 lbs to 80,000 lbs. Ribs must be continuously welded to the top angle, moldboard and bottom reinforcements.	<u>COMPLY</u>	
Snow plow shoes (2) cast 2" x 7" x 16" - Both shoes to include a boomerang rocker assembly with adjusting height bar with hole and pin adjustment.	<u>COMPLY</u>	
Plow horizontal bracing top, to be minimum 3" x 3" x 1/4" angle iron, bottom to be minimum 3" x 3" x 3/8" angle iron, continuously welded.	<u>COMPLY</u>	
Back frame to be constructed from minimum 3 1/2" x 3 1/2" x 1/2" angle iron.	<u>COMPLY</u>	"Continuously welded"
Plow hitch section (installed) to be HD 34" Hustings quick hitch, continuously welded, including heavy duty top yoke assembly.	<u>COMPLY</u>	

BIDDER PROPOSES  
TO FURNISH

Bidder to state weight of plow with plow section of 34" Hustings quick hitch

2600 Lbs.

Lift Hook: A lift eye to be provided to lift plow. Lift eye to be mounted so plow will be balanced when lifted

COMPLY

Plow must be sand blasted and powder coated urethane orange (No Exceptions)

COMPLY

Rubber snow deflector: 18" wide x 3/8" thick, full length of plow, attached to leading edge with a 2-1/2" x 2-1/2" x 3/8" angle full length using 1/2" stainless steel bolts on 12" center. Including (8) 3/8" x 2" flat stock reinforcements evenly space welded to the angle and bolted to the flap with stainless hardware.

COMPLY

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COMPLY

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**MAKE, MODEL OF SNOW PLOWS BID:**

Monroe, MP38-64-11-RGD (One way, Non-Trip, Snow Knife Plow)

**TOTAL COST FOR 2 PLOWS: \$12,542.00 (\$6,271.00 Ea.)**

**EXPECTED DELIVERY DATE: January 20, 2014**

Submitted by: Truck & Trailer Specialties of Boyne Falls

Lucky Baker  
Signature

Truck & Trailer Specialties of Boyne Falls  
Company Name

Lucky Baker - Sales  
Name and Title (Print)

00399 US 131  
Company Address

231-549-3500 / 231-549-3555  
Phone Fax

Boyne Falls, MI 49713  
City, State, Zip

Corporation  
Sole proprietorship/partnership/corporation

Michigan  
If corporation, state of corporation

OPTION: To have back side of plow and push frame powder coated flat black.

Add: \$145.00 each plow