

FINANCE

INVITATION TO BID
TOWN OF NORTH HAVEN

Sealed bids for two (2) Model Year 2017 International 7400 4x2 Dump Truck, Project No. 17-4, will be received at the Finance Office, Memorial Town Hall, 18 Church Street, North Haven, Connecticut, until 10:00 AM on Wednesday, July 27, 2016 at which time and place they will be opened and publicly read. Specifications may be obtained from the Finance Office. After bids are received the Director of Finance/Administration may analyze whether vendors have submitted comparable bids and meet the requirements called for. In reviewing the bids, the Director of Finance/Administration may consider the past performance, financial responsibility, and sales and service experience of the vendors. The Director of Finance/Administration reserves the right to reject any or all bids, to waive any defects in same, or to choose to make purchases other than strictly in accordance with price considerations, and/or to choose other than the lowest bidder, if it be deemed in the best interest of the Town of North Haven. **Bidders are advised hereby of the existence of an Ordinance concerning Bid Preference for Town-Based Businesses.**

Edward J. Swinkoski, CPA
Director of Finance/Administration

**BID SPECIFICATIONS
for Project No. 17-4**

(2) Model Year 2017 International 7400 SFA 4x2 (SA525) Construction Dump Truck

General Specifications

The Town of North Haven will receive bids for two (2) 2017 International 7400 4x2 as follows:

Cab and Chassis

Model: 2017 International 7400 SFA 4x2 (SA525)
Dimension: wheelbase: 171.00, CA:96.00,Axle to frame : 61.00
Engine: Navistar N9 (diesel) EPA 2010, scr,300 hp @ 2000 rpm
Transmission: Allison Automatic 3000 RDS 5th Generation controls, close ratio,6 speed with double overdrive.
Tire, front: (2) 315/80R22.5 Unisteel G291 Goodyear 491 (20) ply
Tire, Rear: (4) 12R22.5 Unisteel G177 Goodyear 493 (16) ply
Suspension, RR, Spring, Single: Vari-rate; 31000-lb Capacity, 4500-lb Multileaf Auxiliary.
Front Axle Non Driving; Dana Spicer I-160W Wide track,I beam type 16.000 Lb. capacity
Rear Axle single: Menitor RS-23-161 single reduction, 23.000 lb capacity, 200 wheel ends Driver controlled locking differential gear ratio: 6.43
Paint : Cab Schematic 100GN Location 1:0311, Omaha Orange.

(For detailed specifications of cab and chassis see attached)

DUMP BODY/ SPREADER/ PLOW

Monroe: Dts Stainless Steel All season Dump Body.
Hydraulic Pump: Danfoss series 45 axial piston pump model JR-R-S60B-LS-14-24.
Hydraulic Tank: Shall be a minimum capacity of 40 GL.
Hydraulic Controls: Body, Plow, Load cover, shall be air over Hydraulic.
Plow : Monroe model MPJ45R11-ISTT
Torsion trip edge, single section. Rubber Flap, plow guide markers.
Load Cover: Asphalt tarp shall be Hydraulic Power Cover model DT-1200, operating From central hydraulic system.

(for detailed specifications of Dump Body, Spreader, plow, see attached)

WARRANTIES

The successful Bidder shall provide any/all available warranties that may be included with the 2017 International 7400 4x2 and shall guarantee the vehicle and all of its parts for a period not less than sixty (60) days after date of delivery to the Town of North Haven.

NOTES TO BIDDERS

The successful bidder shall maintain and operate a full factory supported sales, parts and service facility.

1. Please indicate clearly any substitutions contained in your bid.
2. All prices are to be FOB North Haven, Connecticut.
3. **Delivery of complete truck to Town Garage shall be made by January 31, 2017. There will be a \$100 per day deduction charge off the purchase price for each day after January 31, 2017.**
4. Available manufacturer's service/operating literature and warranties to be provided for each and every component of this unit at time of delivery.
5. The Town of North Haven will hold the successful bid prices firm for a period not to exceed 6 months from the date of award such that an additional vehicle may be purchased under the same set of specifications and conditions.
6. Envelope (s) must be plainly marked BID, with the purpose and time of opening.
7. Bids must be submitted on the bid sheet.

Bid No. 17-4
2017 INTERNATIONAL 7400 4X2

Unit Price per Vehicle \$ _____

Total Bid Price \$ _____

DELIVERY DATE: _____

Bids Submitted By:

Date: _____

Name of Firm

Telephone Number Fax Number

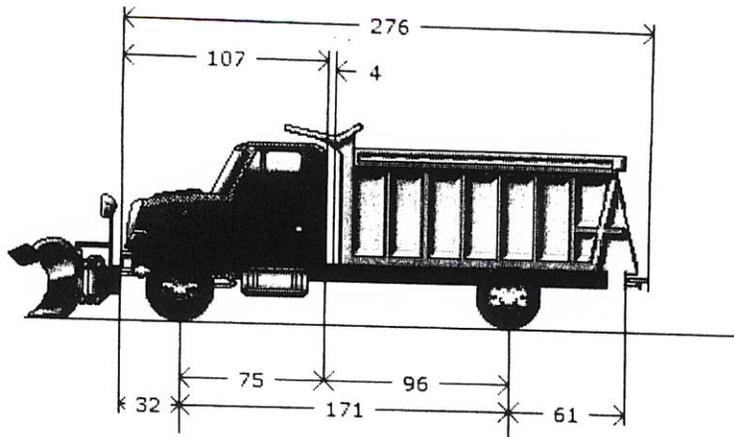
Address

Printed Name Title

City, State, Zip

Authorized Signature

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Model Profile
2017 7400 SFA 4X2 (SA525)

APPLICATION:	Front Plow with spreader
MISSION:	Requested GVWR: 39000. Calc. GVWR: 39000 Calc. Start / Grade Ability: 31.39% / 2.76% @ 55 MPH Calc. Geared Speed: 66.1 MPH
DIMENSION:	Wheelbase: 171.00, CA: 96.00, Axle to Frame: 61.00
ENGINE, DIESEL:	{Navistar N9} EPA 2010, SCR, 300 HP @ 2000 RPM, 860 lb-ft Torque @ 1200 RPM, 2200 RPM Governed Speed, 300 Peak HP (MAX)
TRANSMISSION, AUTOMATIC:	{Allison 3000_RDS_P} 5th Generation Controls; Close Ratio, 6-Speed, With Double Overdrive; On/Off Hwy; Includes Oil Level Sensor, With PTO Provision, Less Retarder, With 80,000-lb GVW & GCW Max.
CLUTCH:	Omit Item (Clutch & Control)
AXLE, FRONT NON-DRIVING:	{Dana Spicer I-160W} Wide Track, I-Beam Type, 16,000-lb Capacity
AXLE, REAR, SINGLE:	{Meritor RS-23-161} Single Reduction, 23,000-lb Capacity, 200 Wheel Ends, Driver Controlled Locking Differential Gear Ratio: 6.43
CAB:	Conventional
TIRE, FRONT:	(2) 315/80R22.5 UNISTEEL G291 (GOODYEAR) 491 rev/mile, load range J, 18 ply
TIRE, REAR:	(4) 12R22.5 UNISTEEL G177 (GOODYEAR) 478 rev/mile, load range H, 16 ply
SUSPENSION, RR, SPRING, SINGLE:	Vari-Rate; 31,000-lb Capacity, Includes 4500-lb Capacity Multileaf Auxiliary
PAINT:	Cab schematic 100GM Location 1: 0311, Omaha Orange (Std) Chassis schematic N/A

INTERNATIONAL®**Vehicle Specifications
2017 7400 SFA 4X2 (SA525)**

<u>Description</u>	<u>F/R Wt</u> (lbs)	<u>Tot Wt</u> (lbs)
Base Chassis, Model 7400 SFA 4X2 with 171.00 Wheelbase, 96.00 CA, and 61.00 Axle to Frame.	6814/3966	10780
TOW HOOK, FRONT (2) Frame Mounted	8/0	8
FRAME RAILS Heat Treated Alloy Steel (120,000 PSI Yield); 10.866" x 3.622" x 0.433" (276.0mm x 92.0mm x 11.1mm); 456.0" (11582mm) Maximum OAL	148/339	487
BUMPER, FRONT Steel, Swept Back	0/0	0
<u>Includes</u>		
: BUMPER, FRONT Powder Coated Gray (Argent) Color		
FRAME EXTENSION, FRONT Integral; 20" In Front of Grille	142/-37	105
WHEELBASE RANGE 146" (370cm) Through and Including 195" (495cm)	0/0	0
AXLE, FRONT NON-DRIVING {Dana Spicer I-160W} Wide Track, I-Beam Type, 16,000-lb Capacity	109/0	109
<u>Notes</u>		
: Axle Lead Time is 52 Days		
: The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.		
SUSPENSION, FRONT, SPRING Parabolic, Taper Leaf; 16,000-lb Capacity; With Shock Absorbers	76/0	76
<u>Includes</u>		
: SPRING PINS Rubber Bushings, Maintenance-Free		
<u>Notes</u>		
: The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.		
BRAKE SYSTEM, AIR Dual System for Straight Truck Applications	0/0	0
<u>Includes</u>		
: BRAKE LINES Color and Size Coded Nylon		
: DRAIN VALVE Twist-Type		
: GAUGE, AIR PRESSURE (2) Air 1 and Air 2 Gauges; Located in Instrument Cluster		
: PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel		
: PARKING BRAKE VALVE For Truck		
: QUICK RELEASE VALVE Bendix On Rear Axle for Spring Brake Release: 1 for 4x2, 2 for 6x4		
: SLACK ADJUSTERS, FRONT Automatic		
: SLACK ADJUSTERS, REAR Automatic		
: SPRING BRAKE MODULATOR VALVE R-7 for 4x2, SR-7 with relay valve for 6x4		
<u>Notes</u>		
: Rear Axle is Limited to 23,000-lb GAWR with Code 04091 BRAKE SYSTEM, AIR and Standard Rear Air Cam Brakes Regardless of Axle/Suspension Ordered.		
BRAKES, FRONT, AIR CAM 16.5" x 6", Includes 24 SqIn Long Stroke Brake Chambers	0/0	0
<u>Notes</u>		
: The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.		
TRAILER CONNECTIONS Four-Wheel, With Hand Control Valve and Tractor Protection Valve, for Straight Truck	2/0	2
DRAIN VALVE {Berg} Manual; With Pull Chain, for Air Tank	0/0	0
<u>Includes</u>		
: DRAIN VALVE Mounted in Wet Tank		
AIR BRAKE ABS {Bendix AntiLock Brake System} Full Vehicle Wheel Control System (4-Channel)	0/0	0
AIR DRYER {Bendix AD-9} With Heater	0/0	0
<u>Includes</u>		
: AIR DRYER LOCATION Inside Left Rail, Back of Cab		
BRAKE CHAMBERS, REAR AXLE {MGM TR3030LP3TSHD} 30/30 Spring Brake	0/0	0
<u>Includes</u>		
: BRAKE CHAMBERS, SPRING (2) Rear Parking; WITH TRUCK BRAKES: All 4x2, 4x4; WITH TRACTOR BRAKES: All 4x2, 4x4; 6x4 & 6x6 with Rear Tandem Axles Less Than 46,000-lb. or GVWR Less Than 54,000-lb.		
BRAKE CHAMBERS, FRONT AXLE {Bendix} 24 SqIn	0/0	0
BRAKES, REAR, AIR CAM S-Cam; 16.5" x 7.0"; Includes 30/30 Sq.In. Long Stroke Brake Chamber and Spring Actuated Parking Brake	0/0	0
<u>Notes</u>		

INTERNATIONAL®**Vehicle Specifications
2017 7400 SFA 4X2 (SA525)****Description**

	F/R Wt (lbs)	Tot Wt (lbs)
: The following features should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam; Brake Shoes, Rear; Special Rating, GAWR; Wheels; Tires.		
AIR COMPRESSOR {Bendix Tu-Flo 550} 13.2 CFM Capacity	0/0	0
AIR TANK Painted Aluminum, With Straight Thread O-Ring Ports	0/0	0
AIR TANK LOCATION (2) : One Mounted Under Each Frame Rail, Front of Rear Suspension, Parallel to Rail	0/0	0
STEERING COLUMN Tilting	0/0	0
STEERING WHEEL 2-Spoke; 18" Dia., Black, Leather Wrapped	1/0	1
STEERING GEAR (2) {Sheppard M100/M80} Dual Power	119/0	119
EXHAUST SYSTEM Switchback Horizontal Aftertreatment Device, Frame Mounted Right Side Under Cab; Includes Single Vertical Tail Pipe, Frame Mounted Right Side Back of Cab	116/-13	103
ELECTRICAL SYSTEM 12-Volt, Standard Equipment	0/0	0
<u>Includes</u>		
: DATA LINK CONNECTOR For Vehicle Programming and Diagnostics In Cab		
: FUSES, ELECTRICAL SAE Blade-Type		
: HAZARD SWITCH Push On/Push Off, Located on Top of Steering Column Cover		
: HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever		
: HEADLIGHTS (2) Sealed Beam, Round, with Chrome Plated Bezels		
: JUMP START STUD Located on Positive Terminal of Outermost Battery		
: PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light		
: STARTER SWITCH Electric, Key Operated		
: STOP, TURN, TAIL & B/U LIGHTS Dual, Rear, Combination with Reflector		
: TURN SIGNAL SWITCH Self-Cancelling for Trucks, Manual Cancelling for Tractors, with Lane Change Feature		
: WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays), Integral with Turn Signal Lever		
: WINDSHIELD WIPERS Single Motor, Electric, Cowl Mounted		
: WIRING, CHASSIS Color Coded and Continuously Numbered		
CIGAR LIGHTER Includes Ash Cup		
HORN, ELECTRIC (2) Disc Style	1/0	1
ALTERNATOR {Delco Remy 28SI} Brush Type, 12 Volt 160 Amp. Capacity, Pad Mount, with Remote Voltage Sensor	1/0	1
BODY BUILDER WIRING Back of Standard Cab at Left Frame or Under Extended or Crew Cab at Left Frame; Includes Sealed Connectors for Tail/Amber Turn/Marker/ Backup/Accessory Power/Ground and Sealed Connector for Stop/Turn	-1/0	-1
ELECTRIC TRAILER BRAKE/LIGHTS Accommodation Package to Rear of Frame; for Separate Trailer Stop, Tail, Turn, Marker Light Circuits; Includes Electric Trailer Brake accommodation package With Cab Connections for Mounting Customer Installed Electric Brake Unit, Less Trailer Socket	0/2	2
BATTERY SYSTEM {International} Maintenance-Free, (3) 12-Volt 1950CCA Total	41/14	55
2-WAY RADIO Wiring Effects; Wiring With 20 Amp Fuse Protection, Includes Ignition Wire With 5 Amp Fuse, Wire Ends Heat Shrink and 10' Coil Taped to Base Harness	2/0	2
RADIO AM/FM/WB/Clock/3MM Auxiliary Input, with Multiple Speakers	1/0	1
AUXILIARY HARNESS 3.0' for Auxiliary Front Head Lights and Turn Signals for Front Plow Applications	2/0	2
TRAILER AUXILIARY FEED CIRCUIT for Electric Trailer Brake Accommodation/Air Trailer ABS; With 30 Amp Fuse and Relay, Controlled by Ignition Switch	1/0	1
HORN, AIR Black, Single Trumpet, Air Solenoid Operated	0/0	0
WINDSHIELD WIPER SPD CONTROL Force Wipers to Slowest Intermittent Speed When Park Brake Set and Wipers Left on for a Predetermined Time	0/0	0
SWITCH, TOGGLE, FOR WORK LIGHT Lighted; on Instrument Panel and Wiring Effects for Customer Furnished Back of Cab Light	2/1	3
CLEARANCE/MARKER LIGHTS (5) {Truck Lite} Amber LED Lights, Flush Mounted on Cab or Sunshade	0/0	0
TEST EXTERIOR LIGHTS Pre-Trip Inspection will Cycle all Exterior Lamps Except Back-up Lights	0/0	0
HEADLIGHTS ON W/WIPERS Headlights Will Automatically Turn on if Windshield Wipers are turned on	0/0	0
STARTING MOTOR {Delco Remy 38MT Type 300} 12 Volt; less Thermal Over-Crank Protection	0/0	0
INDICATOR, LOW COOLANT LEVEL With Audible Alarm	0/0	0
ALARM, PARKING BRAKE Electric Horn Sounds in Repetitive Manner When Vehicle Park Brake is "NOT" Set, With Ignition "OFF" and any Door Opened	0/0	0

INTERNATIONAL®**Vehicle Specifications
2017 7400 SFA 4X2 (SA525)**

<u>Description</u>	<u>F/R Wt</u> (lbs)	<u>Tot Wt</u> (lbs)
CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III With Trip Indicators, Replaces All Fuses Except For 5-Amp Fuses	0/0	0
BATTERY BOX Steel, With Aluminum Cover, 14" Wide, 3 Battery Capacity, Mounted Left Side Under Cab	-3/-2	-5
TURN SIGNALS, FRONT Includes LED Side Turn Lights Mounted on Fender	0/0	0
FENDER EXTENSIONS Rubber	6/0	6
INSULATION, UNDER HOOD for Sound Abatement	10/0	10
GRILLE Stationary, Chrome	0/0	0
INSULATION, SPLASH PANELS for Sound Abatement	2/0	2
BUG SCREEN Front End; Mounted Behind Grille	5/0	5
FRONT END Tilting, Fiberglass, With Three Piece Construction; for 2007 & 2010 Emissions	0/0	0
PAINT SCHEMATIC, PT-1 Single Color, Design 100	0/0	0
<u>Includes</u>		
: PAINT SCHEMATIC ID LETTERS "GM"		
PAINT TYPE Base Coat/Clear Coat, 1-2 Tone	0/0	0
OVER THE AIR PROGRAMMING	0/0	0
VEHICLE REGISTRATION IDENTITY ID for 49 States, Excluding California	0/0	0
PROMOTIONAL PACKAGE Government and Municipal Silver Package; Two Year Limited Subscription of On-Command Service Information (Formerly Fleet ISIS), and On-Command Parts Information (Formerly Fleet Parts Catalog), Requires Specific Feature Combinations	0/0	0
CLUTCH Omit Item (Clutch & Control)	-63/-12	-75
ANTI-FREEZE Red, Extended Life Coolant; To -40 Degrees F/ -40 Degrees C, Freeze Protection	0/0	0
ENGINE, DIESEL (Navistar N9) EPA 2010, SCR, 300 HP @ 2000 RPM, 860 lb-ft Torque @ 1200 RPM, 2200 RPM Governed Speed, 300 Peak HP (MAX)	0/0	0
<u>Includes</u>		
: AIR COMPRESSOR AIR SUPPLY LINE Naturally-Aspirated (Air Brake Chassis Only)		
: COLD STARTING EQUIPMENT Intake Manifold Electric Grid Heater with Engine ECM Control		
: CRUISE CONTROL Electronic; Controls Integral to Steering Wheel		
: ENGINE OIL DRAIN PLUG Magnetic		
: ENGINE SHUTDOWN Electric, Key Operated		
: FUEL FILTER Included with Fuel/Water Separator		
: FUEL/WATER SEPARATOR Fuel/Water Separator and Fuel Filter in a Single Assembly; With Water-in-Fuel Sensor; Engine Mounted		
: GOVERNOR Electronic		
: OIL FILTER, ENGINE Spin-On Type		
: WET TYPE CYLINDER SLEEVES		
FAN DRIVE {Horton Drivemaster Polar Extreme} Direct Drive Type, Two Speed, With Residual Torque Device for Disengaged Fan Speed	0/0	0
<u>Includes</u>		
: FAN Nylon		
RADIATOR Aluminum, Cross Flow, Series System; 1228 SqIn Core and 648 SqIn Charge Air Cooler	0/0	0
FEDERAL EMISSIONS {Navistar N9 & N10} EPA, OBD and GHG Certified for Calendar Year 2016	0/0	0
AIR CLEANER Single Element, with Integral Snow Valve and In-Cab Control	2/0	2
<u>Includes</u>		
: GAUGE, AIR CLEANER RESTRICTION Air Cleaner Mounted		
THROTTLE, HAND CONTROL Engine Speed Control; Electronic, Stationary, Variable Speed; Mounted on Steering Wheel	0/0	0
ACCESSORY WIRING, SPECIAL for Road Speed Wire Coiled Under Instrument Panel for Customer Use	0/0	0
ENGINE CONTROL, REMOTE MOUNTED - No Provision Furnished for Remote Mounted Engine Control	0/0	0
BLOCK HEATER, ENGINE {Phillips} 120V/1250W, With "Y" Cord From Socket in Standard Location, For a Dealer Installed Oil Pan Heater, With Extended Life Coated Metal/Plastic/Metal Material Oil Pan	4/0	4
<u>Includes</u>		
: BLOCK HEATER SOCKET Receptacle Type; Mounted below Drivers Door		
<u>Notes</u>		
: MPM material is single sheet composite with two layers of sheet metal sandwiching plastic material. MPM material has electro-deposition prime coat with powder coating for the final finish coat.		
EMISSION COMPLIANCE Federal, Does Not Comply With California Clean Air Idle Regulations	0/0	0

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**Vehicle Specifications
2017 7400 SFA 4X2 (SA525)**

<u>Description</u>	<u>F/R Wt</u> (lbs)	<u>Tot Wt</u> (lbs)
TRANSMISSION, AUTOMATIC {Allison 3000_RDS_P} 5th Generation Controls; Close Ratio, 6-Speed, With Double Overdrive; On/Off Hwy; Includes Oil Level Sensor, With PTO Provision, Less Retarder, With 80,000-lb GVW & GCW Max.	186/63	249
OIL COOLER, AUTO TRANSMISSION {Modine} Water to Oil Type	25/0	25
TRANSMISSION SHIFT CONTROL {Allison} Push-Button Type; for Allison 3000 & 4000 Series Transmission	0/0	0
SHIFT CONTROL PARAMETERS {Allison} 3 Speed S1 Secondary Shift Schedule for 5 or 6 Speed Allison Gen4/Gen 5 3000 & 4000 Series Transmissions	0/0	0
TRANSMISSION OIL Synthetic; 29 thru 42 Pints	0/0	0
ALLISON SPARE INPUT/OUTPUT for Rugged Duty Series (RDS); General Purpose Trucks, Construction	0/0	0
TRANSMISSION TCM LOCATION Located Inside Cab	0/0	0
PTO LOCATION Dual, Left and Right Side of Transmission	0/0	0
AXLE, REAR, SINGLE {Meritor RS-23-161} Single Reduction, 23,000-lb Capacity, 200 Wheel Ends, Driver Controlled Locking Differential . Gear Ratio: 6.43	0/266	266
<u>Includes</u>		
: REAR AXLE DRAIN PLUG (1) Magnetic, For Single Rear Axle		
<u>Notes</u>		
: The following features should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam; Brake Shoes, Rear; Special Rating, GAWR; Wheels; Tires.		
: When Specifying Axle Ratio, Check Performance Guidelines and TCAPE for Startability and Performance		
SUSPENSION, RR, SPRING, SINGLE Vari-Rate; 31,000-lb Capacity, Includes 4500-lb Capacity Multileaf Auxiliary	0/88	88
<u>Notes</u>		
: The following features should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam; Brake Shoes, Rear; Special Rating, GAWR; Wheels; Tires.		
AXLE, REAR, LUBE {EmGard FE-75W-90} Synthetic Oil; 30 thru 39.99 Pints	0/0	0
FUEL/WATER SEPARATOR with Thermostatic Fuel Temperature Controlled Electric Heater, and Filter	5/0	5
Restriction/Change Indicator, Includes Standard Equipment Water-in-Fuel Sensor		
LOCATION FUEL/WATER SEPARATOR or Fuel Filter, Mounted Inside Left Rail, Back of Cab	0/0	0
FUEL TANK Top Draw; Non-Polished Aluminum, 24" Diam., 50 U.S. Gal., 189 L Capacity, Mounted Left Side Under Cab	12/2	14
DEF TANK 5 U.S. Gal. Capacity; Frame Mounted Outside Left Rail, Under Cab	8/5	13
CAB Conventional	0/0	0
<u>Includes</u>		
: ARM REST (2) Molded Plastic; One Each Door		
: COAT HOOK, CAB Located on Rear Wall, Centered Above Rear Window		
: CUP HOLDERS Two Cup Holders, Located in Lower Center of Instrument Panel		
: DOME LIGHT, CAB Rectangular, Door Activated and Push On-Off at Light Lens, Timed Theater Dimming, Integral to Console, Center Mounted		
: GLASS, ALL WINDOWS Tinted		
: GRAB HANDLE, CAB INTERIOR (1) "A" Pillar Mounted, Passenger Side		
: GRAB HANDLE, CAB INTERIOR (2) Front of "B" Pillar Mounted, One Each Side		
: INTERIOR SHEET METAL Upper Door (Above Window Ledge) Painted Exterior Color		
: STEP (4) Two Steps Per Door		
GAUGE CLUSTER English With English Electronic Speedometer	0/0	0
<u>Includes</u>		
: GAUGE CLUSTER (6) Engine Oil Pressure (Electronic), Water Temperature (Electronic), Fuel (Electronic), Tachometer (Electronic), Voltmeter, Washer Fluid Level		
: ODOMETER DISPLAY, Miles, Trip Miles, Engine Hours, Trip Hours, Fault Code Readout		
: WARNING SYSTEM Low Fuel, Low Oil Pressure, High Engine Coolant Temp, and Low Battery Voltage (Visual and Audible)		
GAUGE, OIL TEMP, ENGINE	1/0	1
GAUGE, OIL TEMP, REAR AXLE	1/0	1
GAUGE, AIR APPLICATION	1/0	1
IP CLUSTER DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster	0/0	0
GAUGE, DEF FLUID LEVEL	0/0	0
SEAT, DRIVER {National 2000} Air Suspension, High Back With Integral Headrest, Vinyl, Isolator, 1 Chamber Lumbar, With 2 Position Front Cushion Adjust, -3 to +14 Degree Angle Back Adjust	27/12	39

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**Vehicle Specifications
2017 7400 SFA 4X2 (SA525)**

<u>Description</u>	<u>F/R Wt</u> (lbs)	<u>Tot Wt</u> (lbs)
<u>Includes</u>		
: SEAT BELT 3-Point, Lap and Shoulder Belt Type		
MIRROR, CONVEX, LOOK DOWN {Lang Mekra} Right Side; 6" x 10 1/4", With Bright Finish	2/0	2
MIRRORS (2) {Lang Mekra} Styled; Rectangular, Power Both Sides, Thermostatically Controlled Heated Heads, Clearance Lights LED, Bright Finish Heads & Brackets, Breakaway Type, 7.09" x 15.75" & Integral Convex Both Sides, 102" Inside Spacing	8/0	8
GRAB HANDLE Chrome; Towel Bar Type With Anti-Slip Rubber Inserts; for Cab Entry Mounted Left Side Only at "B" Pillar	3/0	3
SEAT, PASSENGER {National} Non Suspension, High Back, Fixed Back, Integral Headrest, Vinyl	14/9	23
WINDSHIELD Heated, Single Piece	0/0	0
ARM REST, RIGHT, DRIVER SEAT	3/0	3
AIR CONDITIONER {Blend-Air} With Integral Heater & Defroster	41/6	47
<u>Includes</u>		
: HEATER HOSES Premium		
: HOSE CLAMPS, HEATER HOSE Mubea Constant Tension Clamps		
: REFRIGERANT Hydrofluorocarbon HFC-134A		
INSTRUMENT PANEL Center Section, Flat Panel	0/0	0
WINDOW, POWER (2) and Power Door Locks, Left and Right Doors, Includes Express Down Feature	5/0	5
HVAC FRESH AIR FILTER	0/0	0
FRESH AIR FILTER Attached to Air Intake Cover on Cowl Tray in Front of Windshield Under Hood	0/0	0
CAB INTERIOR TRIM Premium	0/0	0
<u>Includes</u>		
: "A" PILLAR COVER Molded Plastic		
: CAB INTERIOR TRIM PANELS Cloth Covered Molded Plastic, Full Height; All Exposed Interior Sheet Metal is Covered Except for the Following: with a Two-Man Passenger Seat or with a Full Bench Seat the Back Panel is Completely Void of Covering		
: CAB SOUND INSULATION Includes Dash and Engine Cover Insulators		
: CAB, INTERIOR TRIM, CLOSEOUT Lower Dash Closeout Panel; Molded Plastic; Under Instrument Panel Driver Side		
: CONSOLE, OVERHEAD Molded Plastic; With Dual Storage Pockets with Retainer Nets, CB Radio Pocket, Speakers, and Reading Lights		
: COURTESY LIGHT (2) Mounted In Front Map Pocket Left and Right Side		
: DOOR TRIM PANELS with Cloth Insert on Bolster Driver and Passenger Doors		
: FLOOR COVERING Rubber, Black		
: GAUGE, TEMPERATURE, AMBIENT Includes Wiring and Sensor With Display Unit Mounted in Cluster		
: HEADLINER Soft Padded Cloth		
: INSTRUMENT PANEL TRIM Molded Plastic with Black Center Section		
: STORAGE POCKET, DOOR (2) Molded Plastic (Carpet Texture), Full-Length; Driver and Passenger Doors		
: SUN VISOR (3) Padded Vinyl: 2 Moveable (Front-to-Side) Primary Visors, Driver Side with Vanity Mirror and Toll Ticket Strap, plus 1 Auxiliary Visor (Front Only), Driver Side		
CAB REAR SUSPENSION Air Bag Type	0/0	0
WINDSHIELD WIPER BLADES Snow Type	2/0	2
WHEELS, FRONT {Accuride 29039} DISC; 22.5x9.00 Rims, Powder Coat Steel, 5-Hand Hole, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs, Non-Standard Offset, with .5" Thick Disc	0/0	0
WHEELS, REAR {Accuride 29169} DUAL DISC; 22.5x8.25 Rims, Powder Coat Steel, 5-Hand Hole, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with .472" Thick Increased Capacity Disc and Steel Hubs	0/0	0
WHEEL GUARDS, FRONT {Accuride} for Metric Hub Piloted Wheels with Flanged Mounting Nuts Mounted Between Hub and Wheel	2/0	2
WHEEL GUARDS, REAR {Accuride} for Metric Hub Piloted Wheels with Flanged Mounting Nuts, Mounted Between Hub & Wheel and Between Dual Wheels	0/4	4
BDY INTG, REMOTE POWER MODULE Mounted Inside Cab behind Driver Seat; Up to 6 Outputs & 6 Inputs, Max. 20 amp. per Channel, Max. 80 amp Total (Includes 1 Switch Pack With Latched Switches)	0/0	0
BDY INTG, PTO ACCOMMODATION for Electric over Hydraulic PTO, Does Not Include Solenoids, With Latched Switch Mounted on Dash Includes Audible Alarm and Indicator Light in Gauge Cluster (Requires 1 Remote Power Module input & 1 output)	0/0	0
BDY INTG, INDICATOR LIGHTS (2) 1 for Body Up, 1 for Gate Open, Includes Audible Alarm, Programmable Mode for Various Switch Actions. (Requires 2 Remote Power Module Inputs)	0/0	0

INTERNATIONAL®**Vehicle Specifications
2017 7400 SFA 4X2 (SA525)****Description**

	F/R Wt (lbs)	Tot Wt (lbs)
(4) TIRE, REAR 12R22.5 UNISTEEL G177 (GOODYEAR) 478 rev/mile, load range H, 16 ply	0/132	132
(2) TIRE, FRONT 315/80R22.5 UNISTEEL G291 (GOODYEAR) 491 rev/mile, load range J, 18 ply	22/0	22

Services Section:

WARRANTY Standard for WorkStar 7300/7400 (4x2, 4x4, 6x4, 6x6), Effective with Vehicles Built January 2, 2015 or Later, CTS-2002U	0/0	0
SERVICES, TOWING {Navistar} Service Call to 36-Month/Unlimited Mileage to the Nearest Navistar Dealer for Navistar Warrantable Failure as Contract Defined; Includes Engine Failure if Supplier Declines Tow Coverage & ESC Supplied thru Navistar; \$550 (USA) Maximum Benefit per Incident	0/0	0
SRV CONT, EXT AFTERTREATMENT {Navistar} To 60-Month/125,000 Miles (200,000 km), 4,500 Hours; Aftertreatment Coverage for MaxxFORCE DT, MaxxFORCE 7, MaxxFORCE 9, and Navistar N9 Engines	0/0	0
SRV CONTRACT, EXT ENGINE {Navistar} To 60-Month/125,000 Miles (200,000 km), 4,500 Hours; Includes Engine, Engine Electronics and Injectors; for MaxxFORCE 9 and Navistar N9 Engines	0/0	0

Total Component Weight:**7918/4845 12763**

The weight calculations included in this proposal are an estimate of future vehicle weight. The actual weight as manufactured may be different from the estimated weight. Navistar, Inc. shall not be liable for any consequences resulting from any differences between the estimated weight of a vehicle and the actual weight.

It is the intent of these specifications to describe the minimum requirements for a Monroe DTS stainless steel all season dump body, hoist, and snow plow package, or town approved equal, to be installed on the Town of North Haven supplied cab & chassis. Bidder must indicate compliance with each item listed. Failure to indicate "yes or no" for each line item are grounds for rejection of bid. All exceptions or deviations no matter how small must be submitted on a separate itemized statement. The following specifications are meant as a minimum acceptable standard and are not meant to be restrictive. The Town of North Haven reserves the right to accept or reject any bid that is in the best interest of the town.

Make And Model Proposed:	Comply		Deviations From Specifications
	Yes	No	

	Body shall be constructed entirely from 304 Stainless Steel with the exception of the center floor plate and the long members. Multiple material test samples will be taken from the awarded supplier to ensure they are as stated in the specification. The body shall be manufactured in America by an American company. No exceptions.			
Item 1	Body			
	Body shall have the ability to be used as a conventional dump body or as a material spreader. Unit shall have an integral removable conveyor with the discharge on the left front of body			
Item 2	The body shall have an inside length of 120" and inside width of 88"			
Item 3	Inside side height shall be 28", with the tailgate and front head sheet 38"			
Item 4	Body capacity shall be 6 – 7 cubic yards			
Item 5	All welds shall be 100% continuous			
Item 6	The sides, front and tailgate shall be constructed from 3/16" 304 Stainless steel, 85,000 PSI. No Exceptions			
Item 7	The floor shall be constructed from 3/16" Hardox 450 205,000 PSI steel. No Exceptions			
Item 8	Long members shall be 12" x 25.4 # S-Beam reinforced internally with three 1/4" x 3" channel and externally with eight 1/4" x 2" x 3/16" stainless steel box tubes and one additional 4" channel. "I" beam channel or formed long members will not be accepted.			

	No Exceptions.			
Item 9	The boxed design front corner post shall be 1/4" x 4-1/2" x 6" No Exceptions			
Item 10	The 3/16" front head sheet shall be reinforced vertically with two evenly spaced 3" boxed angles and one full width horizontal boxed angle Both sides will have 2 vertical 5" box braces on each side			
Item 11	The boxed rear corner post shall be 1/4" x 4-1/2" x 8-3/4" No Exceptions. Four banjo plates two each post, upper and lower tailgate hardware shall be integral with rear corner post			
Item 12	The 4-1/2" x 4-1/2" boxed top rails shall be dirt shedding inward. Top rails shall have 6" board pockets welded to the front and rear corner post			
Item 13	The double acting tailgate shall be six panel Boxed perimeter and verticals shall be 4" x 2-3/4" channel with boxed reinforcement, dirt shedding			
Item 14	Upper offset tailgate hinges shall be 3/4" lube able and retained with a 1-1/4" stainless steel pin. The 1-1/4" lower pins shall rest in the pin saddle when the tailgate is closed			
Item 15	The latches shall be air operated, over center self locking type, with a timed 1-1/4" cross shaft. All tailgate linkage including air cylinder brackets shall be constructed from 304 Stainless Steel and lube-able. Brake chamber type actuators will not be accepted. No Exceptions. There shall be two GR43. 3/8" chains and four banjo plates, two each side to secure tailgate in the open position			
Item 16	The underside of the Hardox 450 tilting floor shall be reinforced with a minimum of eight 4" x 2" x 3/16" Stainless steel tubes. The underside of the body shall have factory applied, snow and ice melt resistant undercoat material meeting FMVSS 302-49CFR Code. Mild steel, honeycomb or channel understructure will not be accepted.			
Item 17	The front of the tilting floor shall have 3/16" tapered reinforcement from the inside of the boxed top rail to the hinged floor. A, 2" x 2"			

	angle reinforcement shall be at the top of the taper and retain the front wiper			
Item 18	The rear corner post of the tilting floor shall have 2-1/2" x 2-1/2" capped vertical reinforcement angle			
Item 19	There shall be a minimum of four, heavy duty, bolt on, 304 Stainless steel, replaceable hinges, that the floor rotates on. The Stainless steel hinge tubes shall be 2-1/4" OD and machined to accept 1-1/4" Stainless steel hinge pin, double lip seals on each end and a grease fitting. Mild steel and or piano type hinges will not be accepted. No Exceptions.			
Item 20	Grease line extensions from each hinge shall terminate on a remote manifold mounted in a convenient location. A telescopic safety prop shall be centered on the bottom of the floor			
Item 21	Two 4" double acting cylinders with 2" rods shall be positioned in such a way to achieve a minimum of 35 degree tilt angle with 20 ton capacity. Cylinder rods shall be constructed of Socatri induction hardened nickel alloy steel. Chrome Cylinders or cylinders with external packing glands will not be accepted.			
Item 22	Cab shield shall be 24" 304 Stainless steel 10 Gauge. Maximum height for the cab shield will be 9'6" No Exceptions.			
Item 23	The conveyor assembly will be fully removable by 16 stainless steel carriage bolts. Single pin systems or fixed conveyor assemblies will not be accepted.			
Item 24	There shall be two hinged Hardox 450 Floor plates that cover the conveyor when not in use. No Exceptions. Provisions to retain floor plates in the open position shall be provided			
Item 25	The conveyor shall be constructed completely from 3/16" 304 Stainless steel longitudinal, cross members and Hardox 450 floor No Exceptions.			
Item 26	Conveyor chain will have two polymer wear strips mounted on the return side to prevent wear. No exceptions			
Item 27	Conveyor chain will be adjusted by two 1" stainless steel threaded tensioners with jam nuts. Grease type tensioners will not be			

	accepted.			
Item 28	An adjustable & tapered 304 Stainless Steel poly lined material chute shall be frame mounted on stainless steel tube bracket along with an adjustable 304 stainless steel spinner assembly with 18" poly disc. Mild steel spinner assemblies will not be accepted. Body mounted poly only material chute assemblies will not be accepted.			
Item 29	The trunion mounted front telescopic hoist shall be nitrated and allow a minimum of 50 degree dump angle with 25 ton capacity. Frame saddle and mounting is to be provided and factory powder coated black			
Item 30	The rear hinge shall be 4" angle, 1" plate, and 3" wide flame cut hinge pads with Delrin bushings, grease zerks and 2" Stainless steel hinge pins. Mild steel pins will not be accepted. No Exceptions.			
Item 31	The plow frame attachment shall be manufactured in such a way as too allow the hood of the chassis fitted with a tilt cowl and stationary grill work to tilt forward over the upper portion of such attachment. Side plates shall be 3/4" thick, reinforced and bolted with a minimum of 6, 3/4" grade 8 flange bolts each side of chassis rails as far back as possible. Top cross members and vertical risers shall be constructed of 4" x 3" x 1/2" angle. Bottom member shall be 15" x 4-15" 1/2" C-channel, interlaced with vertical members. Dual push centers and cylinder base mounting bracket are mounted to this member. Lift yoke shall be constructed of 1/2" steel side to form a frame. 1-1/8" tube for pivot and 1/4" top plate. Factory powder coated black. Cheek plates will not be accepted.			
Item 32	Yoke pivots on 1" diameter full width bolt with castle nut and cotter pin.			
Item 33	Plow lift cylinder shall be 4" double acting, 4" bore with 10" stroke			
Item 34	Whelen emergency lighting system shall consist of Stainless steel "D" 3 light boxes recessed in to each rear body corner post, with One Whelen amber LED emergency flasher with one TR-3 LED side post amber			

	<p>emergency flasher, One red LED stop, tail and turn signal, and one Halogen back up light each side. Two Whelen "A" Stainless steel light boxes recessed in both front corners of the cab shield at 45 degree angles, boxes shall house 2 Amber LED emergency flashers</p>			
Item 35	<p>Electrical lighting system Plow lights shall be Truck Light #80800 mounted on the hood with custom fitted Stainless Steel brackets, Final location to be determined by Town of North Haven representative. Electrical system completely sealed, run by constant duty solenoid and protected by 100 amp resettable circuit breaker, in NAPA junction box, all terminals coated with silicone dielectric grease. Spinner light-Truck Light Load area light-Truck Light ICC lighting Back up alarm</p>			
Item 36	<p>Safety and Accessories Ladder, OSHA approved 3 step slide-out and down with self cleaning steps and grab handle located at left front corner of body. Stainless Steel spring loaded shovel holder. Safety leg to hold the body in raised position, safety leg to hold the floor in raised position, safety decals, mud flaps on stainless steel brackets front and rear of axle with anti sail braces, center mud flap to protect rear brake chambers, Life-Time poly fenders. Owner's manual.</p>			
Item 37	<p>The electronic auger, spreader and controller shall have a 16 bit color touch screen. Storm totals shall be instantly accessible by touching a button on the main screen. Menu items shall be accessible by holding a button on the front panel and shall include embedded help screen including "guided calibration." Night mode shall be available by touching a button on the main screen. The controller will have "on-screen" menu based programming using the touch screen for setup and calibration. The system shall incorporate three levels of security and access that is password protected</p>			

	<p>and defined by user. The three levels shall give the user varying levels of access to the system set-up, data, configuration fields and parameters base upon access given. The “administrator” shall have full access to all menus in the system and have the ability to make system configuration changes as well as changes to the system parameters. The software shall incorporate a “test speed” mode for use in testing the system safely without requiring the truck to be moving or the drive axles engaged.</p> <p>The unit shall be a durable lightweight metal design with a back lit front panel, tactile switches and encoders and field upgradeable using a USB 2.0 compatible thumb drive. The USB port can also be used to download and save storm total and system configuration.</p>			
Item 38	<p>The following are required features for the electronic spreader control.</p> <ul style="list-style-type: none"> Blast mode with adjustable timer. Unload mode Pass mode with instant on/off control Remote functions for blast and pause Four configurable granular materials On-screen error message in plain English Universal mounting bracket <p>The spreader control system shall be a Freedom 2.1 controller manufactured by Certified Power. No Exceptions</p>			
Item 39	<p>Hydraulic System</p> <p>The hydraulic system furnished shall be completely installed and be capable of powering and controlling all hydraulic requirements satisfactory, both independently and collectively. The components listed herein have been chosen for their ability to provide long-term durability and ease of service.</p>			
Item 40	<p>The hydraulic pump will be mounted and driven by a Chelsea transmission mounted power take off. The PTO will feature cast iron construction and hot shift style engagement operated through the in cab control system. The PTO shall have a rotatable pump</p>			

	mounting flange to avoid interference with transmission and chassis frame rail.			
Item 41	The hydraulic pump shall be a Danfoss series 45 axial piston pump model JR-R-S60B-LS-14-24 NO EXCEPTIONS. To ensure system compatibility the pump and valve shall be constructed by the same manufacture. The pump will feature an internal bleed down compensator and SAE flange type porting. Pump size to be a minimum of 60cc.			
Item 42	The hydraulic valve is to be Danfoss PVG32 and of mobile design. Valve must contain sections for plow raise/lower, plow angle, body raise, side tilt raise/lower with down side relief, and load cover. There shall be a three function cartridge type manifold directly bolted to the last section that provides hydraulic flow to the body auger, chassis mounted spinner. Power beyond type arrangements will not be accepted. Valve to be pressure and flow compensated for all functions. A valve that is a "Hybrid" with individual sections mounted to a common manifold will not be accepted. Due to the flow requirements full cartridge designs will also not be acceptable.			
Item 43	The hydraulic valve shall be installed in a combination hydraulic tank/valve enclosure, with internal stainless steel tubes and feed out the front side on the valve tank combo, bottom supplied units will not be accepted.. The enclosure shall be of 304 stainless steel construction. The cover shall be gasketed and held in place by rubber straps. There shall be two handles to allow easy removal of the cover. The valve shall be mounted in the enclosure through the use of bulkhead fittings. The tank section shall be a minimum capacity of 40 gallons. A 100 micron stainless steel suction line strainer shall be installed in the suction port. A magnetic drain plug and sight/temperature gage shall be provided. A 10 micron cartridge type return filter shall be			

	provided and integrally install in the reservoir section.			
Item 44	Body, plow and load cover controls shall DEL air over hydraulic. There shall be direct mounted air actuators on each valve section with fine proportional control of the spool. All connections shall be enclosed with no moving parts exposed.			
Item 45	Control levers to be mounted on a custom swivel tower with integrated arm rest, accessory switch panel and adjustable electronic control mount. Mounting location to be determined by the Town prior to installation. No exceptions			
Item 46	Load cover shall be Hydraulic Power Cover Model DT-1200, the asphalt tarp operating from central hydraulic system			
* Item 47	Tow Plate Shall be constructed from 3/4" steel, appropriately welded and braced, with 25 ton swivel-type pintle hook, heavy duty D-Rings and 7 wire trailer plug.			
* Item 48	Monroe snow plow model MPJ45R11-ISTT torsion trip edge, single section, brake formed integral shield, rubber flap, plow guide markers, 3" x 10" double acting angle cylinders, six independently adjustable square coil trip springs, 10, 1/2 vertical ribs fully welded to moldboard. No Exceptions.			
Item 49	Prior to assembly non Stainless Steel manufactured components shall be factory powder coated			
Item 50	Fasteners All fasteners used on body, hoist, hitch and other allied equipment and related parts shall be of USA origin with proper markings, grade 8 or better meeting the Fastener Quality Act (FCA) which requires them to meet or exceed the requirements of SAE J429 Standards			
Item 51	<i>NOTE: All Stainless steel components described above must be 304B Stainless steel</i>			
Item 52	<i>NOTE: All Hardox steel described above must be AR 450 205,000 PSI steel</i>			
Item 53	<i>All welding performed must be in compliance with current AWS procedures and guide lines</i>			

	<i>recognized within the state of manufacture</i>			
Item 54	<i>Manufacture shall attach their standard warranty statement. All components described herein shall carry a one year warranty</i>			