# **CITY of NOVI CITY COUNCIL**



Agenda Item 2 September 14, 2009

SUBJECT: Approval to purchase an International 7400 SBA 4X2 Dump Truck from Tri-County International Trucks Inc, the low bidder, in the amount of \$166,309.

SUBMITTING DEPARTMENT: Department of Public Services – Field Operations Division

# CITY MANAGER APPROVAL

EXPENDITURE REQUIRED	\$166,309
AMOUNT BUDGETED	\$378,000 (for 2 replacement dump trucks)
APPROPRIATION REQUIRED	N/A
LINE ITEM NUMBER	101-442.20-984.000

#### BACKGROUND INFORMATION:

The Novi City Council appropriated \$378,000 in the 2009-2010 fiscal year for the purchase of two single-axle large dump trucks with front plows and underbody scrapers (or \$189,000 budgeted per truck). The purchase of one truck will take place this quarter, and the second has been deferred until fourth quarter of the fiscal year. The existing trucks scheduled for replacement are 19 years old and have no underbody scraper or advanced technology to assist with winter maintenance operations. This piece of equipment enhances service to the community by allowing operators to pre-wet salt, which reduces activation time and the amount of salt that scatters off the road (estimated to be as much as 40% without pre-wetting). In addition, this truck will add an underbody scraper to our fleet and is equipped with a stainless steel dump body and auger, minimizing corrosion and associated maintenance costs (see attached memo).

On August 19, 2009 one bid was received, with three dump body options, following a public bidding period. Upon a thorough evaluation, the Department determined that Tri-County International Trucks Inc. met all specifications by providing a responsive bid on Option 3: the International 7400 Set Back Axle (SBA) 4X2 Dump Truck with Pollard Performance components and a stainless steel dump bed. We recommend Option 3 because it provides superior materials as well as standardization with our dump truck fleet.

Because the procurement of this dump truck results in a savings of \$22,691 (\$189,000 budgeted less the \$166,309 expenditure), DPS proposes to bring to Council at a future meeting the purchase of five tailgate-mounted tank and pump units to dispense salt brine to allow rock salt to be prewetted. Doing so will augment the fleet by giving the City a total of nine out of 16 dump trucks that have pre-wetting capability. Implementing pre-wetting as part of the City's winter maintenance program is expected to result in a significant savings in terms of reduced rock salt consumption.

**RECOMMENDED ACTION:** Approval to purchase an International 7400 SBA 4X2 Dump Truck from Tri-County International Trucks Inc, the low bidder, in the amount of \$166,309.

	1	2	Y	N
Mayor Landry				
Mayor Pro Tem Gatt				
Council Member Burke				
Council Member Crawford				

	1	2	Y	N
Council Member Margolis				
Council Member Mutch				
Council Member Staudt				



# International 7400 Dump Truck

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## CITY OF NOVI Dump Truck – Single Axle International or Equivalent Bid Tabulation August 19, 2009

Company	Make/Model	Sub-Total	Stainless Steel Dump Bed	Grand Total
Tri-County International, Inc. (Option 1)	2010 Model Year International 7400 SBA 4X2 with NBC Equipment Body Quote	\$140,612	N/A	\$140,612
Tri-County International, Inc. (Option 2)	2010 Model Year International 7400 SBA 4X2 with Cannon Equipment Quote	\$142,187	N/A	\$142,187
Tri-County International, Inc. (Option 3)	2010 Model Year International 7400 SBA 4X2 with C.E. Pollard Body Quote	\$164,252	\$2,057	\$166,309

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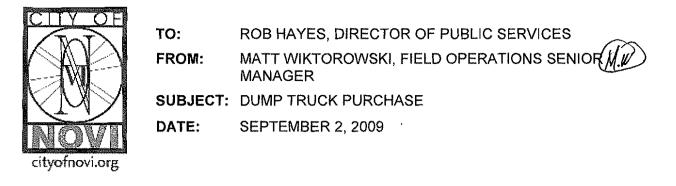
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## MEMORANDUM



The Novi City Council appropriated \$378,000 in the 2009-2010 fiscal year for the purchase of two single-axle large dump trucks with front plows and underbody scrapers. The purchase of the initial truck is scheduled for the first quarter, and the second is scheduled in quarter four. The trucks scheduled for replacement are 19 years old, have no underbody scrapers or advanced technology to assist with winter maintenance operations. As part of the Departments effort to reduce winter expenditures, new trucks are fitted with sodium chloride tanks, allowing operators to pre-wet salt, reducing the activation time and overall consumption of rock salt. Additionally, this truck adds an underbody scraper to our fleet and is equipped with a stainless steel dump body and auger, minimizing corrosion and maintenance costs.

An equipment purchasing committee was assembled to review chassis specifications and three equipment options provided by the bidding manufacturer. Three options included quotes from NBC Truck Equipment, Cannon Equipment and Pollard Performance. After reviewing equipment specifications against proposed options it was determined that Pollard Performance was the only equipment manufacturer that met or exceeded specified documents through superior materials, design and standardization.

After further consideration was given to maintaining our fleet assets, the department requested an upgrade from original equipment bid documents for a stainless steel dump body. This Upgrade added \$2,057 to the original base bid. A standard steel box requires replacement every 10-15 years and costs approximately \$7000. A stainless box will outlast the life of the chassis and will not require replacement from corrosion.

The overall price of the truck and upgraded equipment is \$166,309. Upon notification of award an order will be placed, with delivery anticipated in April 2010.

Company Name Tri - County



CITY OF NOVI SPECIFICATIONS

2010 or Current Year International 7400 – S.B.A. - 4 x 2 Truck or Equivalent

## 1. COMPONENTRY

- a. The bidder shall supply with this bid a certified letter stating that ALL parts and ALL componentry, either manufactured or purchased by the bidder which are a part of the equipment bid upon, are NEW, and further, that NO USED and/or RECONDITIONED parts or componentry are incorporated in this equipment.
- b. Appurtenances and/or accessories not herein mentioned, but are necessary to furnish a complete unit, ready to use upon delivery, shall be included and confirm to the best practice known in design, quality of material, and be subject to these minimum specifications in full. These specifications shall be construed as minimum. Should the manufacturer's current published data or specifications exceed these, they shall be considered minimum and be furnished.
- c. Exceptions Disclosure: Any exceptions, clarifications, deviations or substitutions shall be indicated on the Bid Form and referenced by page and paragraph number and adequately described in this section (Specifications). If no such descriptions are provided the City of Novi will hold the bidder responsible for materials, systems and brand name items as described in the specifications. Where no substitution is described in the specifications, no deviations will be allowed. Specifications section AND Bid Form must be submitted in order to be considered a complete bid.

YES, MEETS ALL SPECIFICATIONS

#### 2. GROSS WEIGHT

a. Minimum 44,000 lbs., GVWR.

YES, MEETS ALL SPECIFICATIONS \_\_\_\_\_NO, DESCRIBE DEVIATIONS:

#### 3. CHASSIS - INTERNATIONAL 7400 4x2 S.B.A.

- a. Shall be the latest production model, conventional cab, 7400 SBA 4x2 series, with a CA dimension of 114", wheel base shall be 181".
- b. The frame shall be pressed steel channel with a yield strength of 120,000 P.S.I. and a full C-channel reinforcement for a combined section modulus of 31.72 and a resisting bending moment of 3,806,400 inch pounds minimum. Front frame extension integral. No bolt on or weld on type.
- c. Two (2) front hooks or eyes shall be provided, one (1) mounted on each frame rail adjacent to front bumper.
- d. Front bumper shall be heavy-duty structural steel channel, 12" in depth, C-type, 25 lb./ft., flared back, approximately 1" from each end to within 1" of front fender so as to protect fenders, two (2) 3/8" I.D. pipes 6" long welded vertically to each end of front bumper.
- e. All bolted construction, including attachments, must use grade-8 bolts and/or huck bolts.
- f. Ample frame must be provided for mounting necessary equipment (i.e. dump body, hoist, front pump etc.). Frame cut after mounting of equipment shall be held to truck manufacturer's recommended standards.

X YES, MEETS ALL SPECIFICATIONS NO, DESCRIBE DEVIATIONS: NOTE: BUNNER HAR OF BOAY BUILDED QUOTE (SDEC.

#### 4. CAB

- a. Manufacturer's conventional cab of sufficient BBC dimension so that the power plant (engine) is located ahead of the cowl and requires no special "in cab" housing.
- Driver seat air suspension cloth hi-back lumbar support integral headrest. Passenger seat – non-suspension highback cloth – fixed back w/ under seat storage
- c. Door-mounted dispatch compartment.
- d. Left and right hand arm rests, sun visors, grab handles and running boards, exterior mounted sun visor with L.E.D. marker lights.
- e. Steering column shall be tilting.
- f. Air horn. Single, frame mounted.
- g. AM/FM radio with speakers, code 08RGP
- h. Accommodation package for 2-way radio, code 08RGA
- i. Cab sound insulation package.
- j. Cigarette lighter for diagnostic equipment power.
- k. Left and right hand rectangular heated and remote power mirrors, 6" x 16", "Westcoast" Break-a-way – type, with auxiliary convex mirror bright finish heads, and brackets w/ L.E.D. clearance lights.
- Illuminated direct-reading gauges, including: \*Air Pressure Gauges, \*Tachometer, \*Speedometer, \*Odometer, \*Fuel Gauge, \*Water Temperature Gauge, \*Oil Pressure Gauge Direct Reading, \*Voltmeter, \*Hourmeter, \*High-

Temperature Water Warning Light, and \*Air Cleaner Restriction Gauge Mounted Inside Cab.

- m. Engine Alarms: \*Air, audible, \*Oil and water, audible and visual.
- n. Standard Tilt hood (without hood hatches) and fixed grille.
- o. Electric intermittent windshield wipers with washers.
- p. Tinted glass throughout, with power windows left & right w/ driver control.
- q. Electronic throttle control, variable.
- r. Hydraulic controls must be moved closer to operator.
- s. Instrument Panel, Ergonomic style-Code 16 WJT.
- t. Painted IHC Code #2303RED (Cab & Dump Body)

YES, MEETS ALL SPECIFICATIONS

## 5. ENGINE

- a. International MaxxForce 9, Diesel, 300 HP, 800 lb-ft Torque @ 1200 RPM, 2200 RPM Governed Speed, #2 Bell Housing.
- b. Fuel/water separator spin-on type, heated type.
- c Air cleaner, dual element heavy-duty type with restriction gauge in dash and under hook intake with inside-outside valve or integral snow separation module.
- d Automatic hi-temp low oil pressure engine shutdown. Block heater; plug at driver's side, with provision for an oil pan heater.
- e Provide manufacturers temporary fuel tank.
- f Horizontal muffler and vertical tailpipe, must be mechanically fastened to frame rails behind cab for maximum stability, with safety shield. Furnish stainless steel exhaust pipes and clamps. Furnish 45 degree elbow pipe above muffler exhaust.
- g. Radiator shall have necessary frontal area to provide adequate cooling when used in conjunction with transmission and hydraulic coolers and shall have no cut-outs or holes for PTO shaft, On/Off cooling fan drive
- h. Silicone hose package, radiator and heater hoses.
- i. Engine control remote mounted (provision for body builder installation of PTO controls) and ground speed pickup wire.
- j. Engine must be a wet sleeve type w/ extended life coolant to -40° below zero.
- k. Extended engine & engine electronics including injectors. Service contract for 84 months, 100,000 miles.
- I. Engine must be of wet sleeve cylinders design.

YES, MEETS ALL SPECIFICATIONS

#### 6. FLUID LEVELS

- a. All hydraulic oil tanks, if provided, shall be full upon delivery.
- b. All engine fluids including reservoirs, if provided, shall be at manufacturer's suggested levels at delivery.
- c. All fluid reservoirs shall be properly labeled in a visible location.

#### Fuel Tank:

- d. Tank to be 82 gallon capacity rectangular 20" x 24" x 42" frame mounted on the drivers side with mounting brackets & straps, and a Webb electronic fuel sending unit. Tank to be painted black and labeled "DIESEL FUEL".
  - YES, MEETS ALL SPECIFICATIONS

#### 7. TRANSMISSION

- a. Allison Electronic 3500 RDS 5-speed automatic, with T-bar shifter, left & right P.T.O. opening.
- b. Magnetic drain plug.
- c. Temperature gauge, direct reading.
- d. External Transmission Cooler, water to oil type.
- e. Trans Syn'd oil, castrol and warranty for 5 years (2 yrs. Std. Plus 3 yrs. extended).
- f. Trans oil level sensor.
- g. Locate transmission ECM inside cab interior

X YES, MEETS ALL SPECIFICATIONS NO, DESCRIBE DEVIATIONS: NOTE: TRANSYND NO LONDER FEATURED OR LEQUILED FOR WARDANTY.

#### 8. ELECTRICAL

- a. 12 volt light system throughout.
- b. Daytime running lights and fender mounted turn signals dual faced amber.
- c. Halogen headlights.
- d. Electric junction box in cab.
- d. Batteries three (3) 12-volt, maintenance free, 2100 CCA at O degrees F combined with jump start stud. Truck manufacturer's battery box must be repositioned by Pollard in accordance with Fleet Directors instructions. Battery box must be vented by drilling (2) two (1/2") half inch diameter holes in front and rear side panels.

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- f. Leece-Neville 135 amp Alternator w/ higher current output @ idle.
- g. Starter shall be heavy-duty type with thermal over crank protection.
- h. Lighting shall conform to federal Motor Vehicle Safety Standards #108.
- i. Electrical system shall be protected by circuit breakers, manual-reset SAE Type 11.
- , i. Shall be equipped with a Cole-Hersee Socket #12063, wired to the light and equipment color code using a single loom, seven- (7) conductor 12 gauge wire. Also furnish and install Kelsey Hayes Brake Controller.
- k. The vendor shall install the Betts Lighting System utilizing the parts detailed in EXHIBIT A, Page 1 and 2.
  - I. Install weather tight connectors on back-up alarm.
- m. Wiring for all rear lights shall be incorporated with the Betts lighting system w/ 8 foot of rear stop tail light wire furnished by chassis mfc'r.
  - n. Grommets must be used where wire passes through steel gussets and crossmembers.
- o. All Betts lighting wiring must conform to truck color code.
  - p. 6-Pak Switch Rocker type Lighted IHC supplied.
- q. The Betts lighting system shall be connected starting from inside the truck cab at terminal strip to a sealed plastic junction box mounted at the left rear upper section of dump body. All connections will be sealed in the junction box with no other connection in the harness, other than at the light fixtures.
- r. Furnish and install one (1) Star strobe light system consisting of (2) Star Warning Model #3901-A Convert-A-Strobe heads mounted in front of OEM turn signals with sealed wiring and connectors, all lights to be self powered.
- s. Furnish and install (2) Star Model LDHEF Amber (LED) Strobe Heads on vertical rear corner braces intermediately spaced (one on each side) with plastic boxes.
- $\checkmark$ t. Furnish and install (2) Star Model LDHEF Amber (LED) Strobe Heads in Cab Guard, intermediately spaced (one on each side)
  - u. Furnish electrical adapter to step down 7 conductor socket to 6 conductor socket.
  - v. Crossover wiring harness shall be installed on 2<sup>nd</sup>. Underbody crossmember forward of rear most crossmember.
  - w. Auxiliary Harness front Head Lights and turn signals for front plow application.

X YES, MEETS ALL SPECIFICATIONS (FOR CHASSISTEEMS) NO. DESCRIBE DEVIATIONS: ITEUS HET DE BODYBUILDER WORES NOTE: CHELKED COMPLIANCE YALLAGE.

## 9. FRONT AXLE, SPRING, AND STEERING

- a. Axle capacity not less than 18,000 lbs. set back
- b. Spring capacity not less than 9,000 lb., each at ground multi-leaf.
- c. Power assist steering dual.

 $\checkmark$ 

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- d. Double-acting shock absorbers.
- e. Oil lubricated wheel seals with sight gauge.
- Must have three stage taper leaf front suspension, feature code 03AGL

YES, MEETS ALL SPECIFICATIONS

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	KNO, DESCRIBE DEVIATIONS: FEATURE CODE DIAGL DO LONGER AUIALABLE FROM JATEDNATIONAL. SOPPLIER WENT OUT OF BUSINESS
RI	EAR AXLE AND SUSPENSION
	Type-single speed axle Meritor RS-26-185, Gear ratio: 5.63
	Axle capacity <u>not less than</u> 26,000 lbs. Rear axle ratio to provide maximum road speed of 65 mph at GVWR while
0.	providing compatibility with manufacturer's recommendations for engine,
.1	transmission and other drive-train components.
	Suspension capacity <u>not less than</u> 31,000 lbs. at ground. Magnetic drain plug.
F.	Driveline – To be equipped with Spicer Lifeline Series Driveline to match torque requirements.
X	YES, MEETS ALL SPECIFICATIONS
	NO, DESCRIBE DEVIATIONS:
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BF	AKES
	Full air brakes, S-Cam, Auto slack adjusters and anti-lock A.B.S.
	Front brake shoes shall be 16-1/2" x 6" OR Disc Brakes
: 1	Rear brake shoes shall be 16-1/2" x 7".
.	Bendix BW750 Series 13.2 CFM. SEE Nove Below
	Heated DV2 Automatic Drain Valve. Air drier BWAD-IP or equal model.
	AGM Parking brake.
. E	Backing plate shields for brakes, front and rear.
Ē	Brake Chambers installed to accommodate asphalt-paving machine.
$\checkmark$	YES, MEETS ALL SPECIFICATIONS
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 $\lambda$  Yes, meets all specifications NO, describe deviations:

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**13. MISCELLANEOUS EQUIPMENT** S - a. Rear tow hooks mounted to frame, (1) pair b. Electronic 12-volt back-up alarm installed on drivers' side below left rear taillight/turn signal assembly below steel guard. 5c. O.E.M. Air Conditioning System with fresh air filter. d. O.E.M. AM/FM Radio installed with power point, code 08RGP & 08718 5 -< ... e. Completely Z-Bart undercoating to cab, chassis and dump body. f. Line-X coated dump body, exterior, sides, and ends only. g. Furnish and install Phillips & Temro Model V-3000 dump body vibrator on right front understructure of dump body. h. Furnish and install 1/2" thick rubber mud flaps with anti-sail feature behind rear tires secured to dump body understructure. i. Furnish and install S hooks and chains to allow for stowage of flaps while dumping j. Furnish and install body raised warning light in cab. k. Furnish and install Donovan Model 7000 EDL Tarp System. Furnish Black Mesh cover material. I. Furnish and install 381NPXD392 Pintle Hook on reinforcement structural steel channel rear of truck frame, per Fleet Directors direction. m. 4 wheel trailer connection for Straight Truck which includes hand control valve, service and emergency electrical lines plumbed to rear of truck frame ending at a junction block with quick coupler gland hands installed on rear of dump hoist frame. n. Furnish and install Preco 1040 back-up alarm. Furnish and install Preco SWM 43 actuating switch for body raised light. o. Furnish and install compound to protect both fenders and act as a gripping surface when tilting hood, furnish safety items, flares, triangle reflector kit. 5 lbs. fire extinguisher. p. Furnish and install two lift sockets, one on left and right front of body; lift sockets constructed with 3" x 3" x 5" tubing ¼" wall thickness with braces. q. Furnish and install 1" diameter re-rod on rear vertical 7" side braces, each side, at a height of 64" from ground to centerline of re-rod. r. Furnish and install 2" wide x 6" height, rectangular steel tubing side boards, one each side. ¼" wall thickness. 12.2 lbs./ft. s. Two sets of Operators manual (s) and Operation instructions covering this 5 equipment, all added auxiliary equipment and all other components included in these specifications that require testing, adjustments, replacement, and periodic preventive maintenance. t. One set of Service manual (s) covering this equipment, all added auxiliary ጓ equipment and all other components included in these specifications that may require testing, adjustment, part replacement, and periodic preventive maintenance, CD-Rom only. Circuit diagram & electrical system trouble shooting manuals - paper only. u. One set of Parts manual (s) covering this equipment, all added auxiliary equipment and Page 12 of 29

all other components included in these specifications that may require part replacement, and periodic preventive maintenance, CD-Rom and paper type. Also Master Diagnostics software – ZTS4463-4 and IC3 Com interface cable ZTSE 4632.

- v. One set of all "Special Tools" for this equipment, all added auxiliary equipment and all other components included in these specifications that require periodic preventive maintenance. These special tools are defined as: Any tool, other than common hand tools and those already owned by the City of Novi, that are required to perform periodic preventive maintenance as described in the service manual (s) of the equipment, all added auxiliary equipment, and all other components included in these specifications. Coordination with the City of Novi, Motor Transport Division is required!
- w. Vendor must specify warranty coverage and location (s) of repairs of this equipment, all added auxiliary equipment and all other components that are included in these specifications that may be different than that of the general warranty coverage and/or extended coverage.
- x. All equipment as specified, manuals, and special tools must be delivered to the Motor Transport Division, 26300 Dewal, Novi, Michigan. No payment shall be made until our terms of this sales agreement have been met and are verified by the Motor Transport Division.

X\_YES, MEETS ALL SPECIFICATIONS NOTE: LHASSIS THEMS DULY = "S"

#### 14. SPECIFICATIONS FOR DUMP BODY

- a. Thiele Model 12 body. Recognized N.T.E.A. Dump Body properly matched with Thiele Model 1825 D.A. hoist, all dump body steel must be ASTM-A607 Grade 50 Composition. OR EQUIVALENT
- b. Capacity to be 7 cubic yard water level capacity dump body with reinforced head sheet extending 32" above sides, reinforced (9 panel) tailgate extending 12" above sides, body to include side board pockets 12" height x 2" wide.
- c. Dimensions, inside body length 132", inside body width 7', sides to be 29" high, rear end 38" high.
- d. Sides to be 8 Ga. Hi-Tensile steel with five (5) full height intermediate vertical side braces. Braces to be minimum 7" x 4" tapered formed steel. Body sides to include 10" wide front and rear corner posts in addition to side braces.
- e. Running Boards to be not less than 8 Ga. Hi-Tensile continuous formed steel construction. Approximately 3" in depth and 5" in width integrally built with sub-framing sides, intermediate vertical bracing and front and rear corner posts. Running boards to be sloped, self-draining and self-cleaning, built with continuity preventing accumulation of moisture or foreign materials.
- f. Tailgate to be fully boxed 8 Ga. Hi-Tensile steel construction with two (2) Dirt Shredder 5" wide full width intermediate horizontal braces and two (2) 5" wide full height vertical braces. Height not less than 12" above sides to conform with rear side pockets. All welds to be continuous. All hardware to be extra heavy-duty with upper and lower pins not less than 1" diameter. Tailgate to be double acting

with two (2) pair of banjo eyes. Furnish (four) 48" spreader chain, #5201-10601 – 3/8" G-70 ISO chain, all air operated tailgate release and lock mechanism. Upper & lower spreader chain clips provided, nine (9) panel tailgate design.

- g. Headsheet to be not less than 8 Ga. Hi-Tensile steel with 2" radius floor to sides.
- h. Floor to be ¼" Hi-Tensile steel with 2" radius floor to sides.
- i. Understructure to be not less than (10) 4" 7.7 lb./ft. structural I-beam crossmembers fully welded and gusseted to (2) two 6" 12.5 lb./ft. structural I-Beam longmembers.
- j. Body side top rails to be fully boxed  $-2\frac{1}{2}$  wide x 5" height.
- k. Rear Bolster to be 6" in depth width and constructed of 8 Ga. Hi-Tensile steel.
- I. Furnish & install LED marker lights.
- m. Furnish ½ cab shield offset to clear tail pipe, 8GA hi-tensile steel, load bearing type.
- n. Painted IHC Code #2303Red (Cab & Dump Body)

NIA - YES, MEETS ALL SPECIFICATIONS

NO, DESCRIBE DEVIATIONS: ESE'S ) SEE BODYBULDER WOOTELS

## 15. HOIST SPECIFICATIONS- EXTRA HEAVY DUTY UNDERBODY STYLE

- a. Thiele Model 1825
- b. Hinge point located to provide clearance (no contact with chassis) for salt spreader at all dumping angles up to and including **55 degrees** or more, while providing weight distribution compatible with chassis, dump body and related components.
- c. Hydraulic Hoist designed for dump body to be furnished with <u>minimum</u> 12" overhang, **dumping angle minimum 55 degrees** or more, and mounting height approximately 13".
- d. Payload capacity not less than 46,000 lbs.
- e. Hydraulic Cylinder <u>not less than 8.5" inside diameter</u>, 9-1/2" outside diameter, double acting with power up and down feature. Cylinder to be seamless steel precision honed construction with screw on, head design, 1026 DOM Cylinder tubing 70,000 PSI, replaceable packing, bronze packing nut, urethane wipers, glass reinforced nylon bearing rings on piston.
- f. Piston Rod: hardened steel 2.75" minimum diameter, precision fitted, removable seals, hard chrome plated.
- g. Steel lifting arms with full-width bearing crosshead and links with blocks bolted directly to dump body long sills. Both the rocker assembly pivot shaft and the base cylinder trunnion shaft must be extended through the hoist frame and joined with heavy-duty truss tie bar to provide needed strength when body is elevated for salt spreading mode. NOTE: FRONT TELESCOPIC, SCISSOR OR ROLLER-COMBO TYPE HOISTS ARE NOT ACCEPTABLE.
- h. Hoist frame <u>not less than</u> 5" x 2" x 3/8" wall cold drawn structural minimum, b/b to match truck frame side rails and dump body long sills, integrally built with trunnion and adequate number of cross members to prevent frame from spreading under off-highway operating conditions with full payload.

- i. Hinges minimum of two (2) weld-on hinges with **precision fitted hardened 3"diameter shaft** and zerk-type lubrication fittings.
- j. Full width 3" O.D. cold rolled C1045 steel rear hinge shaft is supported by 4-1/2" O.D. cold drawn C1026 tubing (3/4" wall) and nested within the <u>full</u> <u>depth of body understructure.</u>
- k. Both the rocker assembly pivot shaft and the base cylinder trunnion shaft are extended through the hoist frame and joined with heavy-duty truss tie bar.
- I. Lift links shall be fabricated from 2 7/8" cold drawn steel tubing, C1026.
- m. All shafts must be pinned to prevent "egg-shaping" of bearing surfaces.
- n. Hoist must be supplied and installed by the factory authorized distributor or dealer for the City of Novi.

NIA - YES, MEETS ALL SPECIFICATIONS NO, DESCRIBE DEVIATIONS; SEE BOSYBULLDER QUOTES & SPECS

## 16. UNDER-TRUCK SCRAPER SPECIFICATIONS-ROOT MODEL F8900-DPR-12'

- a. Hangerboard minimum 10" X 30 lb. structural channel reinforced by ½" x 8" plate and 4" S&C 13.8# channel the entire length of hinge line, with a hardened, replaceable center pin bushing.
- b. Hinge Shaft 2-1/2" O.D. x 96 linear inches minimum high carbon steel running the total length of the hangerboard (660 square inches of bearing surface area) with zerk fittings located along the hinge line for lubrication. The hinge system shall consist of two (2) 6" end hinges with greasable thrust bearing at each end of hinge shaft and one (1) 15" center hinge with six attaching bolts, all 3-1/4" O.D. x 2-9/16" I.D. The hangerboard cut-out for the center hinge bracket shall have beveled corner cuts and have a 3/8" x 1" reinforcing bar welded over the entire length of the bracket.
- c. Moldboard 1" thick x 20" wide x 12' long, heat treated carbon steel reinforced in the center with 2-1/2" x 2-1/2" x ½" angle 52" long. The bottom shall be offset to accommodate beveled cutting edges.
- d. Actuation and shock assembly moldboard to be actuated by two Root designed 3-1/2" I.D. x 10" stroke double acting cylinders with 2" nitrated piston rods and 3/8" ports & plumbing. Cylinders to be mounted horizontally on the scraper by 1" thick reinforced steel trunnion brackets. The cylinder shall be retained in the housing by means of a retaining ring consisting of ½" w x 1-1/2" long tubing secured to the shock housing with three 5/8" bolts. Trunnion bearings to be 2-3/4" O.D., 3/8" wall carbon steel bored to accept 2" trunnion pin.
- e. Circle 1" thick solid steel, notchless, 1 pc. design. The center pivot hole shall have a 5" I.D. replaceable bushing for center pin. The center pin is to have a 6" min. O.D. top, 5" O.D. shoulder, 1-1/4" O.D. stub shaft, grease zerk and bolt through hangerboard with three (3) ¾" Gr. 8 attaching bolts. Circle clamps shall be 20.5" with 1" top plate. The lower plate shall be welded to hangerboard. The top plate and a polyethylene shim shall bolt to the lower

plate with 3-1" Gr. 8 bolts with locknuts.

- f. Power Reverse to be cab controlled with cushion valve relief, and shall be accomplished using two 4" bore by 14-1/2" stroke double acting cylinders with ½" ports working in tandem and providing positive hydraulic locking. The piston rods shall be nitrated CR steel 2" in diameter. The piston rod ends and the barrel ends of the cylinders shall be welded 2" thick greasable wear blocks. The hangerboard bosses shall be 3" O.D. tubing, solid welded top and bottom of the hangerboard. Both the anchor and live end pins shall be 2" in diameter and held in place by a 5/8" gr. 8 bolt with nut & washer.
- g. Installation to include modification or relocation of exhaust parts, battery boxes, air tanks & dryers, etc. to achieve maximum height and allow for proper operation.
- h. Hydraulic power is to be provided by a central hydraulic system (specified elsewhere) with proper pressure and flow requirements for proper and satisfactory operation.
- i. Under body scraper must be installed by an **authorized dealer or distributor for the City of Novi, Michigan** and to include modification or relocation of exhaust parts, battery boxes, air tanks and dryers, etc. to make for proper height of 20-1/2" to bottom of circle (the only exceptions to this are if drive line, transmission, transfer case, etc. are too low). Hydraulic power to scraper is to be 1,500 psi maximum pressure for up and reverse functions and 500 psi for down pressure and approximately 10 GPM flow to provide for satisfactory and safe operation.

NIA YES, MEETS ALL SPECIFICATIONS NO, DESCRIBE DEVIATIONS: NOTE: SEE BODYBUILDER QUOTES & SPEC'S.

#### 17. CENTRAL HYDRAULIC SYSTEM (No Substitution)

- a. <u>HYDRAULIC PUMP & HOTSHIFT PTO:</u> (Parker PGP330 / CHELSEA) Pump shall be a heavy-duty bushing type positive displacement gear pump. Pump to be cast iron three-piece rebuildable Parker PGP330 series gear pump with a flow rate of 15.4 GPM at 1000 engine rpm. The pump shall be direct mounted to Chelsea hot-shift PTO. The PTO shall run at 100-110% of the engine RPM. The pump shall have a 7/8" 13 tooth spline shaft. The pump shall have a minimum of 2.0" I.D. SAE 100-R4 suction. Pump inlet shall be supplied with SAE #20. Outlet of pump shall have a SAE #16 port..
- b. <u>SHUT DOWN SYSTEM:</u> The hot-shift PTO shall be wired to an in-tank mounted float type level indicator rated at 3-amps and mounted from top of reservoir. System shall be designed so when float contacts close, the PTO will be disengaged and enunciator in the cab alerts the operator. There shall be a low oil control panel mounted in the cab that will have a low oil override switch to de-energize the shutdown system to facilitate diagnostics and equipment storage.
- c. RESERVOIR / VALVE ENCLOSURE:
  - The hydraulic reservoir will be of 35 gallons nominal capacity.

- The hydraulic reservoir will be constructed of 10-gauge steel and be internally baffled.
- Mounting bracket is to be designed and supplied by the reservoir supplier.
- Mounting system should allow for a 1" frame clearance for frame obstructions.
- Shall be mounted in a manner as to not transmit any truck torsional loads thru the tank.
- The enclosure will use a gasket-less passive technology. (No rubber seals, gaskets, or weather stripping.)
- The enclosure lid will be removable within seconds by one person without the use of tools.
- All valve fittings, hose ends, filter, filler breather, sending units and any electrical connections are to be protected by enclosure cover.
- The reservoir supplier will provide all valve fittings (JIC connections) and plumb the return linc from the valve to the filter.
- The cover will protect from both road and pressure washer spray.
- The use of bulkhead fittings is not permitted.
- The directional control valve must be easily accessible from all (6) sides without the use of tools.
- Hose exit and entrance must allow for components to be mounted adjacent to the enclosure.
- A 2" full flow brass ball valve shall be plumbed at the suction port of the tank.
- A level/temp sending unit shall be mounted in the reservoir.
- d. The valve/tank assembly shall be a Force America model "VT35 Valve/Tank Assembly" or prior approved equal.

#### e. FILTER: (Tank mount filter)

Hydraulic oil filter shall be mounted in the reservoir. Hydraulic filter shall be a 16-micron absolute and rated for no less than 60 GPM. Filter shall be model TEF31016VG16SP-UG60E115 or prior approved equal and include visual and electrical bypass indicators. A warning light shall be mounted in the cab and wired to the electrical indicator.

#### f. CONTROL VALVE: (ADD-A-STACK)

Control valve shall be U.S. manufactured. Valve shall be a load sensing type with o-ring ports.

Mid-inlet section porting will be #16 inlet, #20 outlet, #16 hoist section, #4 load sense port, and #10 or #12 for all other sections. The hoist section shall be stacked to one side of the mid-inlet and all other sections will be stacked on the other side. All ports shall be level with each other so as to lay flat on its base. There will be a main relief in the mid-inlet section that will be set at 2000 PSI to protect the system from being over pressurized.

Valve section to be arranged as follows:

- 1. Hoist, 4-way for a double acting cylinder with down side work port relief set at 500 and flow control.
- 2. Under body lift, 4-way for a double acting cylinder with an adjustable

down side work port relief set at 500 PSI with flow control.

- 3. Under body swing, 4-way for a double acting cylinder with flow control.
- 4. Sander Auger, 12 volt EPC cartridge with 5 GPM spool, built in pressure compensator and 7/16-20 UNF screw style manual over-ride with weather pack connectors.
- 5. Sander Spinner, 12 volt EPC cartridge with 5 GPM spool, built in pressure compensator and 7/16-20 UNF screw style manual over-ride with weather pack connectors.
- 6. Liquid Prewet, 12 volt EPC cartridge with 5 GPM spool, built in pressure compensator and 7/16-20 UNF screw style manual over-ride with weather pack connectors.
- 7. Valve shall be Force America Add-A-Stack® valve or prior approved equal.

## g. <u>VALVE CONTROLS:</u> (Air Controls)

The valve controls shall be a feathering remote air control with air shift actuators for valve. The hoist control shall be a single axis control with lock in the center position to prevent accidental actuation. The plow and scraper controls shall be multiple single axis controls stacked together in a swivel pedestal that will allow for either driver or wing man operation. There shall be two spacer blocks between the hoist joystick and bank of plow and scraper joysticks. There shall be a Pressure Protection Valve to protect against loss of pressure in the primary system caused by a broken line or an air leak somewhere in the auxiliary system. There shall also be a FLR (filter, lubricator, and regulator) plumbed into the auxiliary air system to protect the air controls from contamination and being over pressurized. All the air tubing will be color coded to identify each individual hydraulic function.

## h. HYDRAULIC LINES AND PLUMBING:

All hydraulic lines and plumbing shall be of sufficient capacity so as not to create heat or turbulence within hydraulic system. Suction line between reservoir and pump shall be a minimum of 2 in. I.D. with a minimum SAE 100-R4 rating and shall be secured on both ends via heavy duty banding straps, radiator hose clamps unacceptable. All pressure hoses, including signal sense to pump shall have swivel fittings on <u>both</u> ends and have a minimum SAE 100-R2 rating. Return lines and case drain shall have minimum SAE 100-R1 rating.

Hoses shall not be routed near exhaust manifolds pipes, bolts, sharp edges, and exhaust system to prevent wear, fatigue, or fire. <u>Pipe fittings</u> are not acceptable in any high-pressure line. Maximum distance between support clamps on all hydraulic lines shall be 24 in.

## i. SPREADER CONTROL CONSOLE: (SSC-2500)

The electronic spreader control shall be designed for precise Open Loop control of granular material and pre-wet application. The spreader control shall regulate the auger and spinner speeds as well as pre-wetting liquid. There shall be three individual detented knobs providing proportional control from closed to fully open on the control valve of the auger, spinner and liquid. Front face panel shall have "standby" indicator light activated by pushing the auger dial, blast mode adjustable for momentary or timed up to 16 seconds with cancellation and flashing indicator light. Other features shall include remote standby and blast inputs, adjustable back lighting via vehicle controls. The unit must be protected from reverse polarity, as well as be over-voltage protected by using a five-amp reset circuit breaker. All circuit boards to be conformal coated. The unit must provide operational modes for manual or open loop (ground speed only). The liquid control will have a separate power switch with indicator lights. In addition, the liquid unit will have an optional blast as well as a low pressure, high pressure and low liquid warning indicators. The liquid control will operate hydraulic, electric, or gravity pre=wet systems. Spreader controls shall be Force America model SSC-2500 or prior approved equal.

#### HYDRAULIC OPEN LOOP CS-HOL: (LDS-CS120-HOL-0-SS)

#### a. General

i.

The open loop hydraulic liquid dispensing system is designed for use with a ground speed orientation controller (like a SSC2500) to control rate of application of deicing solution directly on material spread by an under tailgate type spreader. The system calibration is accomplished through a (PWM) type controller. The system is compatible with a variety of deicing solutions including, but not limited to, the following sodium chloride, calcium chloride, magnesium chloride, potassium acetate, and CMA. The system comes complete with a liquid spray pump, sprayer tank & mounting straps, discharge nozzles, plumbing and hardware. The Pump and motor are to be mounted in a stainless steel enclosure that is 17" wide x 13" high x 6" deep. The lid of the enclosure is to be held on by rubber straps and also have a handle on it.

#### b. Liquid Pump:

#### 11 GPM Bronze Pump

Pump shall be constructed of a **bronze** corrosion resistant casting with special cast bronze gears. The pump will have ½" npt ports with self lubricating carbon bearings, and be capable of producing 11 gpm @ 1800 rpm. The hydraulic motor will require a 5-gpm flow max @ 1500 psi. Pump and motor shall be connected with **one piece flex coupling**, coupling shall be protected with stainless steel guard/flow meter mount, entire assembly shall be attached to a stainless steel plate.

#### k. Liquid Tank & Frame:

The system uses one 120 gallon polyethylene rotationally molded tank, which is U.V. protected with a minimum of specific gravity rating of 1.9 and weight of approximately 97 lbs.. Tank dimensions are 42"H x 12"W x 68.5"L. The tank is mounted on a vehicle's frame between the cab and the dump body and used in conjunction with a under-tailgate or V-box spreader. Two 5 inch vented spin-on lid with a closed cell neoprene foam gasket, a 1-1/2 inch quick fill port with a male cam lock and dust cap, a ¾ inch suction port, and a ¾ inch bypass port. Tank is equipped with a positive ventilation device, which is splash proof. All tank ports are replaceable polypropylene bulkhead adapter not spin-welds. The tank is to come with a 12 gauge stainless steel frame. The frame is made to bolt directly to the chassis. The frame is to have four lifting points and a cut out to view the liquid level the whole length of the tank.

Page 19 of 29

#### I. Plumbing and Hardware:

The system includes a 1-1/2 inch polypropylene quick fill port with shut-off ball valve and integral cam locks. The pump inlet plumbing features a ball valve and a **Y-strainer with serviceable screen filter cartridge**. The bypass plumbing features a <sup>3</sup>/<sub>4</sub> inch polypropylene bypass valve with **adjustable pressure relief valve** with pressure gauge. All hose, which is supplied, is nylon reinforced PVC hose with a working pressure of not less than 200 psi with max temperature rating of 100°F. All fasteners will be **316 stainless steel**.

#### m. Discharge Nozzles:

The system uses two spray nozzles to apply solution on material being discharged to the spinner. The **brass** spray nozzles bodies offer a reliable and rugged mounting for the brass spray tips. The brass spray tips offer a fan pattern that gives an even disbursement of the chemical to the granular surface. The nozzle plumbing comes with an **in line check valve** to prevent the siphoning.

N|A-YES, MEETS ALL SPECIFICATIONS NO, DESCRIBE DEVIATIONS: DEE DODY BUILDER QUOTES & SPEC'S NOTE!

#### **18. BODY COATING**

Complete dump body exterior shall be coated with Pollard 100SXP two (2) component spray-in place flexible 100% solids thermoplastic (TPU) polyurethane/polyrea material. Surface shall be a texturized finish, colored to match cab, applied with a heated 120 degrees to 140 degrees (*minimum*) @ 1,500 PSI spray system (cold spray methods are not acceptable), with the following minimum physical properties @ 75 degrees F. <u>Rhino Lining Not</u> Acceptable.

<u>Acceptable</u> .	ASTM-Test Method	<u>Value</u>
	<i>Density (PCF) D-1622</i> Hardness (Shore "D") D-2240	<b>70</b> 45
	Abrasion resistance (Taber) D-4060	.10% per 1,000 cycles
	Tensile Strength (PSI) D-2370 Elongation (%) D-2370	1800 115
	Tear Resistance (PLI) D-1004 Color	304 Red

N|A Yes, meets all specifications

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### 19. SNOW PLOW SPECIFICATIONS, Root model TPR-PR-10'

SEE BODY BUILDER GODIES & SPEC'S.

NO, DESCRIBE DEVIATIONS;

- a. Moldboard (tapered): 11' long on top, 49" height at rear, 30" height at nose, 8'2" width of cut at 35 degrees, six (6) 1/2" x 3" vertical ribs, 4" x 4" x 3/4" moldboard bottom angle, 3" x 3" x 3/8" top moldboard stiffener, moldboard thickness to be 10 gauge, 1/2" x 6" x 10' high carbon steel cutting edge with SHS punching. Adjustable caster assemblies with skid shoes to be mounted on the plow. A rubber snow shield to be mounted across the top of the plow.
- b. Plate semi-circle: 4" square  $x \frac{1}{2}$ " wall tube front drive frame member welded to a 1/2" plate. The drive frame member shall be 87-1/2" long and have 6-1/2" inner ears and 2-3/4" outer hinge ears. The semi-circle shall consist of a 1/2" x 64" flame cut main plate welded to the front drive frame tube, with 3-1/2" x 3-1/2" x  $\frac{1}{2}$ " stop angles to be gusseted with  $\frac{1}{2}$ " x 3-1/2" bars.
- c. Hitch to be Root 34" quick detachable (Husting type). Truck half is to be welded to a 10" x 20# channel bumper, have top & bottom bracing with bumper & bracing all being bolted to frame - Not welded. The bumper ends are to be flared back just enough to assure clearance of plow when fully reversed.

Installation is to include being able to remove front pump, use front tow hooks, etc. Any modifications to hood or arill for clearance of hitch must meet approval of City personnel.

- d. Plow lift is to be 12-15" actuated by a 3" double acting lift cylinder.
- e. Power angling to be twin three (3) inch cylinders with a cushion relief valve.
- f. Hydraulic power is not included in this specification. A central hydraulic system should supply approx. flow of 6 GPM with a maximum pressure of 1500 psi.
- q. Note: For best installation of above hitch, cab & chassis should be ordered with minimum 18-24" integral frame extension.

## N A-YES, MEETS ALL SPECIFICATIONS NO, DESCRIBE DEVIATIONS: [ SEE BODYBUILDED DOOTES ! SERS

#### 20. Spreader

- a. Specifications for a Swenson model SBG-6S #304 spreader
- b. General: This under-tailgate spreader shall be of the bottom opening design. The entire unit will rigidly mount to the sides of the dump body and below the floor level of the dump box with single pin guick detachable hardware. This mounting shall allow the dumping of materials without interference from the spreader. The overall spreader width shall not be over

Page 21 of 29

96". This unit will spread free flowing granular materials, abrasives and chemicals and be factory adapted to accept automatic control systems. The auger feed rate and spinner speeds shall be independently variable.

- c. HOPPER: Rigid 7 gauge 304 stainless steel one piece end plates shall be continuously welded to a 10 gauge 304 stainless steel auger trough. The unit will have a 10 gauge 304 stainless steel three point hinged bottom that, when released, exposes the entire length of the auger for easy cleanout. This hinged bottom shall be held in place by two heavy duty cam locks with a lift handle for convenient one man operations. The anti-flow cover over the discharge opening is to be 10 gauge 304 stainless steel cover/back plate will be a one piece hinged integral part of the unit that may be raised when spreading and lowered when dumping. This cover shall be locked in the raised position by two (2) simple captivated latches. The tailgate shields are to be part of the spreader hopper constructed of stainless steel.
- d. FEED MECHANISM: Single 6" auger shall consist of 2" ERW (electrically resistance welded) pipe size tube and 3/8" x 2" HR mild steel bar stock fliting. This auger shall have continuous fliting to the discharge port for more uniform dump body emptying and shall be supported by 1-1/4" steel shaft ends. The auger shafts will be supported in sealed, self-aligning precision single row radial bearings with grease fittings. The bearings shall attach to removable ¼" end plates. The discharge port shall be located at the extreme left end of the trough.
- e. SPINNER: The spinner shall consist of a disc and six (6) vanes formed into a single unit from polyurethane, resulting in a flat trajectory and a uniform spreading pattern from four (4) to forty (40) feet. The spinner assembly shall be adjustable allowing for variable spreading patterns left, center or right. This will be accomplished by sliding the hinged frame sideways on the shaft so that the point at which the material hits the spinner disc is varied. The entire spinner assembly shall be easily removed by pulling two (2) pins and uncoupling two (2) hydraulic "quick disconnect" hoses. The spinner speed and the auger feed rate shall both be variable through the optional dual flow or servo valve systems. The 18" diameter polyurethane spinner disc will be mounted directly on to the hydraulic motor shaft by means of a cast iron spinner hub. The spinner assembly will be linked to the truck frame with a universally mounted parallel arm to keep the spinner horizontal to the road at all dump box angles. A spinner shield shall be provided to prevent material from striking the truck.
- f. POWER TRAIN: There shall be two separate hydraulic "orbital type" motors capable of delivering high torque at low speeds to power both the spinner and the auger. Power shall be transmitted from the motor into a 5:1 reduction gearbox. This gearbox shall mount directly onto the auger pipe by a non-corrosive sleeve with a ½" grade 5 bolt. The gearbox will have a right-hand rotation with a bronze worm gear drive. The gearbox is driven by a hydraulic orbital type motor. The independent spinner motor shall mount directly to the spinner disc. eliminating any power loss by transmission. The spinner speeds and auger feed rate are both variable.
- g. PAINTING: All stainless steel is not to be painted. The remaining carbon steel parts, bearings and motors, etc. are to be cleaned, primed and painted

gray.

	<ul> <li>h. MOUNTING: This spreader shall fasten to the side of the dump body using quick disconnect pins for quick mounting and removal of spreader without use of special tools.</li> <li>i. There shall be a spreader work light mounted at the rear for operation of the spreader, and have the switch mounted in the cab.</li> <li>j. Hydraulic power and components such as pump, tank, control valve, hoses, couplers, etc. are not to be included in this specification. They are to be provided by a central hydraulic system.</li> </ul>
	A-YES, MEETS ALL SPECIFICATIONS NO, DESCRIBE DEVIATIONS: SEE DODY RUILLER QUOTES SPECS.
21. E	Exceptions Disclosure. <u>Must be supplied with your bid proposal</u>
	YES, our bid meets or exceeds all specifications described here in.
	$\underline{\lambda}$ NO, our bid does not meet all specifications described here in. The deviations are as follows. State page and paragraph while describing deviations.
	PAGE IÙ, ITEM # J. FRATOLE LIDE DZAGL (FRT. SPRINGS) NO LONGER AUAILABLE FROM JATERNATIONAL. THE SUDDLIER WENT OF BUSINESS. NO OTHER IDENTIFIED AS OF THIS WATE
	· · · · · · · · · · · · · · · · · · ·
22. Lo	ocal Service Support
(CHASSIS)	<ul> <li>A. The successful truck bidder and truck equipment supplier <u>must have</u> <u>factory trained service personnel and stocked repair parts at a factory authorized service center located no more than one hundred (100) miles from the City of Novi Motor Transportation garage. This stipulation is required to insure a quick turn-around of a truck that requires repair so that down time will be greatly shortened. This also will reduce the time spent by City of Novi personnel in delivery and pick up of truck in need of repair.</u></li> <li>Name of truck equipment supplier: <u>121</u> - <u>Count</u> <u>TweenAttone</u> <u>TweenAttone</u> <u>City. State: FAPBO211</u>, <u>Nor.</u> <u>4812</u> L</li> </ul>
	City, State: DEADBORD, MIT 48126
Product	t brochure to be submitted with bid.

OPTION 3 OF 3

ICMIL CONS	
S AND	CITY OF NOVI
	BID FORM
Cityofnavi.org	JMP TRUCK - INTERNATIONAL 7400 4X2 S.B.A. OR EQUIVALENT
	as bidder, propose to furnish to the City of Novi, according to the itions and instructions attached hereto and made a part thereof:
	ULC.E. POLLARD BODY DUDIE \$ 164,252.00 EL.
Year/Make/M	oder 2010 MODEL YEAR JUT'L. 7400 SBA 4X2
We acknowledge r	eceipt of the following Addendums: <u>North Do MITN</u> (please indicate numbers)
<b>/</b>	STITUTIONS (list all):
· tEANDZE LDD	#23)
	150 132 CFM AIR BUILESSOL REPLACED BY
COMPOESSON?	L BENDIX TO-FLOSSO 13.2 CFM Air
. <u></u>	
Company (Legal Regis	tration) TRI- COUNTY TRATERNATIONALI TWC.
Address <u>S701</u>	NYOMING ALENDE
City LEARBORN	State $\underline{WI}$ $\underline{Zip}$ $\underline{YSIQL}$
Telephone (3(3)) Agent's name (please	print) ALALEN - CARACCIDED
Agent's signature	Mary 16 varaprioto
	olo@tricotruck.com



# facsimile transmittal

KUR	T WAGENNER	TO;	TRE-COUNTY IN	TERNATIONAL	
From: TIM	I POLLARD	Fax	۲ ظ ـ ل ل		
Re: CITY 0	OF NOVI OPTIONS TO YO	OUR BID Dat	e: 8/31/2009		
CC:		Pag	<u> es:</u>		
	T PReview	Comment	Repl	y Recycle	9
Regarding	<b>g:</b> OPTIONS REQUIRED	D BY CHRIS QUICK FRO	DM CITY OF NOVI	•	
PLE	ASE E-MAIL THIS NOT	IFICATION TO SUE MO	LIANTI AS FOLLO	WS:	
E-M	AIL ADDRESS smorant	i@cityo{novi.org			
OPT	TON (1) ORIGINAL BIT	D PROVIDED AUTOMOTI	E RED PAINT S	LINE X COATING ON	THIELE
	DUMP BODY.	THE COST TO DELETE	HE ABOVE & PRO	VIDE #201 POLISHED	STAINLESS
	SIDES AND EI	NDS IN LIEU OF HOT I	COLLED STEEL	ADD: \$2,057.00	$\overline{)}$
OPT	TON (2) APPLY ETCHI	NG ASID TO DUMP BODY	STAINLESS STE	EL SIDES & ENDS &	APPLY
	TWO COATS OF	AUTMOTIVE PRIMER PA	INT FINISHED W	ITH TWO COATS OF P	OLY-
	EURETHANE REI	D TO MATCH CAB		ADD: \$1,999.00	
······································			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		

Note:

If you do not receive the number of pages indicated above, or are experiencing problems with receiving a legible copy, call us @ 313-837-6776 or fax @ 313-837-5374



## TRI COUNTY IHC 5701 WYOMING DEARBORN, MI 48121 ATTN: KURT WAGNER

# Quotation

PROJECT: CITY OF NOVI – 4 x 2 S.B.A. DUMP TRUCK TERMS: NET 30 DAYS FOB: ORIGIN

r	TERMS: NET 30 DAYS F.O.B.: ORIGIN
	ITEM(S)
1	FRONT BUMPER SHALL BE HEAVY DUTY STRUCTURAL STEEL CHANNEL PER
	SPEC.
	GRADE 8 BOLTS SUPPLIED THROUGHOUT CONSTRUCTION
1	ELECTRIC JUNCTION BOX INSTALLED IN CAB
1	FACTORY INSTALLED BATTERIES WILL BE RE-POSITIONED PER SPEC
	FACTORY BATTERY BOX WILL BE VENTED BY C.E. POLLARD CO.
	LIGHTING TO CONFORM TO FMVSS #108 STANDARDS
<b>\$</b>	COLE HERSEE SOCKET #12063
**	BACK UP ALARM PER SPECS
	BETTS LIGHTING SYSTEM PER EXHIBIT A, PAGE 1 & PAGE 2
	BETTS LIGHTING SYSTEM PER SPECS
	STAR #3901-A CONVERT A STROBE SYSTEM
	STAR MODEL LDHEF STROBE HEADS (2)
•*•	STAR MODEL LDHEF AMBER STROBE HEADS ON VERTICAL REAR CORNER
	POSTS
****	FURNISH ELECTRICAL ADAPTER TO STEP DOWN SEVEN(7) CONDUCTOR TO SIX
	(6) CONDUCTOR SOCKET
	CROSS OVER WIRING SYSTEM PER SPECS
****	AUXILIARY HARNESS SYSTEM FOR HEAD LIGHTS, TURN SIGNALS & FRONT PLOW
	APPLICATION
	LINE-X COATED DUMP BODY PER SPECS
	PHILLIPS & TEMRO MODEL V-3000 VIBRATOR INSTALLED PER SPECS
	RUBBER FLAPS PER SPECS
	'S' HOOKS PER SPECS
	FURNISH BODY RAISED LIGHT PER SPECS
	FURNISH DONOVAN MODEL 7000 TARP SYSTEM PER SPECS
	FURNISH & INSTALL 381NPXD392 PINTLE HOOK PER SPECS
	PRECO BACK UP ALARM PER SPECS
	INSTALL LIFT SOCKETS PER SPECS.
	INSTALL RE-ROD PER SPECS
	FURNISH & INSTALL STEEL SIDE BOARDS PER SPECS
***	SERVICE & OPERATING MANUALS AS WELL AS PARTS MANUALS WILL BE
	PROVIDED
	TOOLS WHERE REQUIRED WILL BE SUPPLIED
\$ <sup>\$</sup>	THIELE MODEL 12 DUMP BODY FURNISHED & INSTALLED PER SPECS, PAINTED
	IHC RED #2303

CE Pollard Company • 13575 Auburn Street • Detroit, Michigan 48223 • 313-837-6776

[Dollard]
181Performance
<ul> <li>THIELE MODEL 1825 HYDRAULIC DUMP HOIST</li> <li>THIELE HALF STYLE CAB SHEELD INSTALLED</li> <li>ROOT MODEL F-8900-DPR-12' UNDERBODY SCRAPER INSTALLED</li> <li>CENTRAL HYDRAULIC SYSTEM AS SPECIFIED – ITEM #17, PAGE 16 THROUGH PAGE 20 INCLUSIVE</li> <li>BODY COATING AS SPECIFIED ON ITEM 18. WILL BE SUPPLIED</li> <li>ROOT MODEL TPR-PR-10' SNOW PLOW PER SPECS</li> <li>SWENSON MODEL SBG-6S #304 STAINLESS STEEL SALT SPREADER PER SPECS</li> </ul>
THIS BID MEETS & EXCEEDS ALL SPECIFICATIONS AS WRITTEN ON "DUMP TRUCK INTERNATIONAL 7400 4 x 2 S.B.A. DATED JULY 29, 2009"
NET PRICE INSTALLED F.O.B. 13575 AUBURN ST, DETROIT, MI 48223 <b>§ 83, 832.00</b>
Special Provisions
The quoted price is good only if there is clearance for installation of the underbody scraper, hydraulic valve/tank combination on the side of truck frame under the body passenger side, back-of-cab pre-wet tank, and an 82 gallon fuel tank on the side of truck frame under the body driver's side.
Note Also
<ul> <li>For installation of the above equipment, trucks must have:</li> <li>a) CA measurement approx. 114" for body &amp; back of cab liquid tank</li> <li>b) Transmission adapter plate for PTO/pump mounting</li> <li>c) Front integral frame extension, stationary grill</li> <li>d) Bucket seats in cab.</li> <li>e) 24" ground clearance for installation of scraper</li> <li>f) Exhaust to be single vertical with heat guard</li> </ul>
Signature Simothy C. Pollard, President

CE Pollard Company • 13575 Auburn Street • Detroit, Michigan 48223 • 313-837-6776

E-Mail: ceb1934@aol.com • Website: www.oollardperformance.com





