

500 West Big Beaver Troy, MI 48084 troymi.gov

CITY COUNCIL AGENDA ITEM

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Date: May 14, 2025

To: Frank A. Nastasi, City Manager

- From: Robert J. Bruner, Deputy City Manager Chris Wilson, Assistant City Manager Rob Maleszyk, Chief Financial Officer Kyle Vieth, Controller Kurt Bovensiep, Public Works Director Brian Varney, Fleet Division Manager Emily Frontera, Purchasing Manager
- Subject: Standard Purchasing Resolution 4: MITN Cooperative Purchasing Agreement Dump Trucks with Snow Removal Equipment.

<u>History</u>

- Three (3) trucks being purchased replace current fleet trucks that are used on a daily basis by the DPW Streets and Water Divisions for snow plowing and de-icing major and local roads, grading, material hauling, road repairs and ditch cleaning.
- These trucks have exceeded their intended life expectancy.
- The (3) three obsolete vehicles will be removed from service and sold at auction for the estimated total proceeds of \$60,000.00.
- Truck chassis will be purchased from *Wolverine Freightliner* and service bodies and snow removal equipment will be provided and installed by *Truck and Trailer Specialties*.
- The new dump trucks will have current technology which is very effective and efficient for snow and ice removal.
- This purchase replaces existing vehicles and does not increase the size of the existing Department of Public Works motor pool fleet.

Purchasing

- On February 10, 2020, the Cities of Rochester Hills, Auburn Hills, Huntington Woods, Troy, Farmington Hills, Livonia, Madison Heights and Charter Township of Bloomfield; members of the Michigan Inter-governmental Trade Network (MITN), cooperatively developed and issued a Request for Proposal (RFP) for the purchase of Single/Tandem Axle Dump Truck(s), parts, and related services, RFP-RH-20-023, utilizing the Michigan Inter-governmental Trade Network (MITN) website.
- Five (5) proposal responses were received as listed below:

Tri-County International Trucks Wolverine Freightliner Michigan CAT M&K Truck Center Truck & Trailer Specialties, Inc.



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Purchasing (continued)

- Proposals were evaluated by the City of Rochester Hills Fleet personnel and purchasing staff, as well as the representatives from the participating cooperative MITN members which were the Cities of Troy, Auburn Hills, Huntington Woods, Farmington Hills, Livonia, Madison Heights and Charter Township of Bloomfield;
- The City of Troy was instrumental in developing the Request for Proposal specifications and was also an integral part of the evaluation team with the above listed cities.
- Wolverine Freightliner-Eastside, Inc. of Mt. Clemens, MI and Truck and Trailer Specialties, Inc. of Howell, MI were selected and unanimously supported by the entities as providing the best value, quality product, timely delivery, exceptional services, an ongoing training program and also offering the most comprehensive options to meet all of the entities needs.
- City Council authorized participation in the Cooperative Purchasing Programs on February 5, 2024 (Resolution #2024-02-031-J-5)

Financial

- On February 10, 2014 City Council authorized departments to utilize sites such as GovDeals.com to dispose of City owned surplus items (Resolution# 2014-02-017-J-4a). Therefore, note that the City will utilize and market the three (3) obsolete vehicles on *GovDeals.com* site for optimal trade-in value and transparency.
- Funds are available in the Public Works Fleet Division Capital Fund under project numbers 2025C0086 and 2025C0087 for the 2025 Fiscal Year.
- Expenditures of \$854,519.00 will be charged to Account Number 661.571.565.981.

Qty.		Vendor	Project Number	Unit Cost	Total Cost
	Tandem Axle 108SD	Wolverine			
2	Truck Chassis	Freightliner	2025C0087	\$123,603.00	\$247,206.00
	Dump Bodies & Snow	Truck & Trailer			
2	Equipment	Specialties	2025C0087	\$168,825.00	\$337,650.00
	Tandem Axle 108SD	Wolverine			
1	Truck Chassis	Freightliner	2025C0086	\$125,603.00	\$125,603.00
	Heated Dump Body with	Truck & Trailer			
1	Snow Equipment	Specialties	2025C0086	\$144,060.00	\$144,060.00
Gran	Grand Total \$854,519.00				

Recommendation

City Management requests authorization to purchase three (3) Freightliner truck chassis from *Wolverine Freightliner-Eastside Inc. of Mt. Clemens, MI. and* Three (3) dump bodies with snow equipment including installation from *Truck and Trailer Specialties Inc. of Howell, MI.* as per the MITN Cooperative Contract #RFP-RH-20-023 for an estimated grand total cost of \$854,519.00 as detailed in the attached quotes; not to exceed budgetary limitations.



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Freightliner 108SD Truck with Dump Body & Snow Removal Equipment Installed (not actual vehicle, for example only)



107 S. Groesbeck • Mt. Clemens, MI 48043 • (586) 783-2444 FAX (586) 469-8054

4/11/2025

City of Troy

RE: RH Co-Op Chassis Pricing Attn: Mr. Brian Varney

The following is 2026 Model Year, Freightliner chassis pricing information per your request. Pricing and conditions are per the proposed Rochester Hills Co-op RFP-RH-20-023 agreement.

Tandem Axle 64,000 GVW

Chassis Model: 108SD Plus Tandem UTS Dump	
Base Chassis Price:\$	97,183
2022 MY- 108SD Models:	900 Add
2023 MY- 108SD Models	1,000 Add
2023 pricing surcharge	6,700 Add
2024 Pricing & Surcharges	5,925 Add
2025 Actual Model, Surcharge & Plus Model	3,500 Add
2026 Pricing and Surcharge	4,305 Add
370 HP Cummins Upgrade	2,869 add
Frame reinforcement	544 add
Power Windows & Locks (required for power mirrors)	no charge
Driver's Seat 3 Chamber upgrade	134 add
Fender extenders	50 add
Spare Tire & Wheel (front)- 315/80R22.5	595 add
4 pack of switches	50 add
Cooling System Warranty	315 add
Extended Warranty Price Increases	795 Add
Delete Air Conditioning	420 deduct
Right side, under cab, raised exhaust	842 Deduct

TOTAL:

\$ 123,603 each

Steven Sexton Municipal Sales Manager Wolverine Truck Group



May 6, 2025

City of Troy 4693 Rochester Road, Troy, MI 48085 Attn: Brian Varney, Fleet Superintendent, ph: (248) 524-3390 HQ0005033

Equipment Quotation

The following pricing is based on City of Rochester Hills RFP-RH-20-023 contract awarded September 2020

Tandem Axle Plow UTS with High-Lift Tailgate

Install	Crysteel 14' Select Dump Body including the following:
	168" body length, 96" outside width, 84" inside width
	62" front height, 36" side height, 46" rear height (10.9-13.9 cubic yard capacity water level)
	Single panel, pressed-in horizontal side braces
	7-gauge 201 stainless steel front, sides and rear pillars
	¼" AR450 floor
	8" floor-to-sides radius
	Crossmemberless Western-style understructure shall have 10" trapezoidal ¼" A1011 longsills 24" wide rear pillars
	9-panel tailgate design constructed of 7-gauge 201 stainless steel
	Air-operated tailgate with Velvac air controller
	Tailgate finger latches and pivot plate are stainless steel construction
	24" cabshield constructed of 10-gauge type 201 stainless steel
	Install body prop kit on each side of the frame
	Install Cougar model 3200 DC box vibrator on body
	Install bolt-on 12" spillshield apron with endplates at rear of body, 7-gauge A1011
	Install 3-hole light wedges on rear pillars for lighting
	Install fold-down stainless steel ladder on streetside rear of the body
	Install two (2) shovel holders on curbside of dump bulkhead
	Install branch deflector/tarp-arm guard on curbside of cabshield
	Install license plate bracket in upper left corner of tailgate
	Install plain mudflaps in front of and behind the drive tires
	Paint Dump Body & Rear Spillshield Orange to match the cab
Install	Hydraulic-operated High-lift Tailgate with in-cab control
Install	Mailhot model G4130-5-3 DA Telescopic Hoist including the following:
	Greaseable rear hinge and replaceable rear stainless steel pin
	Hoist is double-acting and trunnion-mounted
	Install remote lube grease line extension kit for Mailhot hoists
Install	Roll-Rite Electric Tarp System including the following:
	Aluminum tarp and tension arms with offset elbows
	Aluminum wind deflector
	Direct drive motor
	Mesh-type tarp cover
Install	Central Hydraulic System including the following:
	Rexroth A10VO100 Load-sense Piston Pump



Spicer drive line with companion flange for easy removal 12-volt auto shutdown block Low-oil shutdown valve and override circuit Rexroth 9m4-12 Load-sense Hydraulic Valve with pressure-compensated flow controls for the following: DA EPC section for Dump Hoist with 500 PSI A- port load-sense limit DA EPC section for Scraper up/down 500 PSI A- port load-sense limit DA EPC section for Scraper swing DAEPC section for Front Plow up/down DA EPC section for Front Plow angle SA EPC section for Auger SAEPC section for Spinner SA EPC section for Pre-wet SA EPC 3-way section for High-lift Tailgate with 1,500 PSI LS relief Install stainless steel pipe to the rear for spreader circuits Install stainless steel hydraulic couplers for plow and spreader circuits Install Monroe Hydraulic Oil Reservoir/Valve Enclosure Combination unit including the following: Type 201 stainless steel construction (mos. 00141843 & 15570) Mounted behind cab above frame with ship and car channel mounting brackets Tank-mounted Zinga-type return filter 2" suction line with a 100-mesh suction strainer Ball valve shutoff on hydraulic tank for case drain and suction ports 18" Low oil sensor mounted inside the tank 40-gallon oil capacity, filled with 35-gallon AW32 hydraulic oil Tank is full of AW32 hydraulic oil Sight gauge/Temperature gauge Tank label Stainless steel step installed on the end of the tank Install **Rexroth CS660 Electric Spreader Controller including the following:** Touch screen Closed-loop operation for spreader, spinner and pre-wet operations Programmable blast and pause Data download and programming is with a thumb drive Training is included Install RoadWatch with adapter & wire into the CS660 controller, mount sensor on driver's-side mirror bracket Install **Rexroth CS160 controller including the following functions:** Button 1 is pause Button 2 is hoist up/down Button 3 is plow up/down & plow swing Button 4 is scraper up/down & scraper swing Button 5 is open Button 6 is blast Control console switches include the following: Switch 1 is camera air Switch 2 is low oil override/low oil shutdown Switch 3 is low oil indicator light/body-up indicator light Switch 4 is SPARE Switch 5 is momentary switch for box vibrator Switch 6 is momentary on/off/momentary on for tarp Additional standalone switch for air tailgate with safety cap (rightside of console)

Install Monroe 34" Husting-type Front Hitch (mount at 38-39" pin height) including the following:



Tapered front bumper Stirrup steps on each side with stainless steel pooched step in stirrup steps Stainless steel open grating in area between bumper and grille Front tow hooks fastened to frame rails with bumper cut-outs Monroe 12' Full-Trip Moldboard Reversible Plow (mo. MP41R12-CT) including the following: Install 12' long x 41" high moldboard 3/16" roll-formed moldboard Six, 1/2" x 4" tapered one-piece flame-cut ribs 2" x 3" x 3/8" top moldboard angle 4" x 4" x ¾" bottom moldboard angle Horizontal moldboard brace angles Dual compression-trip spring assemblies 4" x 4" x 3/8" cross-tube support; full-width with 6-point attachment 3-1/2" x 3-1/2" x 1/2" semi-circle; additional angle braces to front push tube Two, 4" x 10" double-acting power-reverse cylinders with 2" nitrided rods Cushion valve Moldboard and pushframe 100% continuously welded Powder coated with the moldboard orange and a black pushframe 3/4" x 8" x 12' one-piece top-punch cutting edge 12" x 12' rubber deflector with steel retainer bar, installed Husting 34" plow-portion hitch installed Pair Monroe 42" cable markers Two (2) Monroe wraparound curbguards with carbide wear strip installed one on each side Monroe 10' Underbody Scraper (mo. MS4510) including the following: Install 1" thick x 20" high moldboard 1/2" thick hanger board with grease manifold brackets installed 2-1/2" O.D. hinge shaft Two heavy-duty shock absorbers Bolt-in trunnion caps for canisters; outer arm remains bolt-on style Two 3-1/2" x 10" actuating cylinders; Socatri rods Cushion valve 1" solid circle with 5" center pin Center pin is piloted into hanger board Two 4" x 12" reversing cylinders; Socatri rods Three hinge anchor points Hydraulic pipes 20.5" x 7" poly hold-down blocks Mounting hardware Parts-installation manual Hose kit and j-50 type relief valve ¾" solid hanger plates Grease line kit with manifolds Install protective stainless steel guards on grease manifolds, both sides Install two (2) Kennametal carbide curbguards, one each end of moldboard Install Kennametal single-insert carbide cutting edges Install Ray Stop moldboard protection kit Paint Orange bands on ends of moldboard to match cab Monroe Undertailgate Spreader (mo. MS966-RF-GB) including the following: Install Type 201 stainless steel construction, unpainted Full top and bottom opening



7-gauge trough and ¼" endplates, stainless steel inner tailgate shields 5:1 gear box with direct-mounted motor Application-rate sensor built into auger motor 6" auger with reverse-flighting and 4" flight spacing for center-left discharge Trough-hung self-leveling spinner with 18" poly spinner disc Spinner motor shall include a seal-saver kit with grease zerk Extended integral side plates on spreader Jumper hoses with stainless steel hydraulic couplers for auger and spinner circuits Install Monroe Closed-Loop Pre-Wet System including the following: One (1) 120-gallon poly pre-wet tank behind cab (measuring 36" long x 60" high x 14" wide) Secured on the passenger side with stainless steel mounting brackets Hydraulic-driven motor/pump motor with application rate sensor installed inside a poly enclosure, and mounted alongside the frame Stainless steel piping to the rear for pre-wet liquid Nozzle bar mounted inside the auger trough One-way check in the pre-wet hose with a Y-type strainer Ball valve shutoff on pre-wet tank All weather pack connectors for electrical disconnects Bulk fill and flusher kit included (2" bulk fill) Install Custom Lighting & Electrical including the following: Utilize OEM switches for front flasher, rear flashers, scraper lights and spreader lights Grote heated LED plow lights (mo. GR-84661-4) with aluminum mounting brackets on the hood, mount at approximately 68" to the base of the plow lights Install City-supplied radio antenna on cab roof, in front of curbside horn One (1) SoundOff Pinnacle (mo. EPL730001-P) amber/green LED mini lightbar on cab roof riser Eight (8) Code3 MR6 (mo. MR6MC-AG) amber/green LED flashers, surfaced-mounted: Two (2) on chassis grille on separate switch Two (2) on cabshield, front-facing Two (2) on bottom of cabshield, side-facing Two (2) under front bottom of body side-facing, one each side Install stainless steel 3-hole light boxes at rear of body with the following: Two (2) SoundOff oval LED solid amber flashers in top holes Two (2) Maxxima oval LED combination STT/BU lights in middle holes Two (2) SoundOff oval LED solid green flashers in bottom holes Two (2) Weldex LED work lights, one on each side for scraper Two (2) Weldex LED work lights at rear, one on each side for spreader SoundOff LED markers on rear corners of body 3-light cluster in the middle above the hinge Install proximity switch for body-up light Install backup alarm Install Betts junction box at the rear for chassis lighting circuits and trailer wiring circuits Install **Rearview Camera with Wash System including the following:** Camera system tying into chassis wiper fluid reservoir Chassis wiper controls for activating wash system, momentary in-cab switch for air puffer Air puffer & washer fluid tubing VCMS24B color camera mounted at the rear CEC34L1 main cable for monitor VOSHD6MNT LCD monitor mount MSF5000 stainless steel camera box

VOM719WP 7" LCD color monitor



 Install
 Rear Hitch Assembly including the following:

 %" rear hitch mounting plate

 PH20 Pintle hook, multi-drill pattern – 20-ton rated height TBD to cradle

 Rear tow hooks to outside of frames

 D-rings for safety chains

 7-way RV plug

 Install
 Electric Brake Controller

Install Minimizer Floor Mats for Freightliner 108 SD (mo. FKFRTL2B-MIN / 10002265)

Install Rear 4" x 6" or 5" x 7" tube along the back of the truck to act as a Bumper, and paint Black

Paint All body underfloor, frame attachments, hoist, front hitch and rear bumper assembly Black

Above equipment installed and painted pricing: \$168,825.00 ea.

Chassis requirements to be confirmed prior to order entry:

CT: 136" Highest ground clearance package Batteries and DEF tank mounted on left side behind the cab Undercab raised horizontal DPF and SCR with vertical tail pipe Front of engine PTO provision Trailer wiring to rear for electric brake controller 2-way heavy-duty 150-amp receptacle wired hot between seats (code: 30K-063) Front frame extension Delete OEM front bumper 50-gallon fuel tank mounted below driver's door, raised mounting Stationary grille Plow light/Headlight switch Programmable chassis switches

Parts and owner's manuals, minimum full 1-year parts and labor warranty on all components.

Payment Terms: Net 30 days. Pricing effective for 30 days.

	Pricing does not include any of the Rochester Hills RFQ discounts that may be applicable.
	2% discount off total taken at invoice if payment received within 30 days.
FOB:	City of Troy
Delivery:	16-18 months ARO, depending on chassis arrival

Thank you for the opportunity to quote.

Respectfully submitted by, Jon Luea/Brian Bouwman



107 S. Groesbeck • Mt. Clemens, MI 48043 • (586) 783-2444 FAX (586) 469-8054

4/11/2025

City of Troy

RE: RH Co-Op Chassis Pricing Attn: Mr. Brian Varney

The following is 2026 Model Year, Freightliner chassis pricing information per your request. Pricing and conditions are per the proposed Rochester Hills Co-op RFP-RH-20-023 agreement.

Tandem Axle 64,000 GVW

Chassis Model: 108SD Plus Tandem Heated Dump	
Base Chassis Price:\$9	97,183
2022 MY- 108SD Models:	900 Add
2023 MY- 108SD Models	1,000 Add
2023 pricing surcharge	6,700 Add
2024 Pricing & Surcharges	5,925 Add
2025 Actual Model, Surcharge & Plus Model	3,500 Add
2026 Pricing and Surcharge	4,305 Add
370 HP Cummins Upgrade	2,869 add
Frame reinforcement	544 add
Power Windows & Locks (required for power mirrors)	no charge
Driver's Seat 3 Chamber upgrade	134 add
Fender extenders	50 add
Spare Tire & Wheel (front)- 315/80R22.5	595 add
4 pack of switches	50 add
Cooling System Warranty	315 add
Extended Warranty Price Increases	795 Add
Heated Dump electronics and programming	2,000 Add
Delete Air Conditioning	420 deduct
Right side, under cab, raised exhaust	842 Deduct

TOTAL:

\$125,603 each

Steven Sexton Municipal Sales Manager Wolverine Truck Group



May 6, 2025

City of Troy 4693 Rochester Road, Troy, MI 48085 Attn: Brian Varney, Fleet Superintendent, ph: (248) 524-3390 HQ0005030

Equipment Quotation

The following pricing is based on City of Rochester Hills RFP-RH-20-023 contract awarded September 2020

Tandem Axle Heated Plow with High-Lift Tailgate

Install	Crysteel 14' Select Dump Body including the following:
	168" body length, 96" outside width, 84" inside width
	62" front height, 36" side height, 46" rear height (10.9-13.9 cubic yard capacity water level)
	Single panel, pressed-in horizontal side braces
	7-gauge 201 stainless steel front, sides and rear pillars
	¼" AR450 floor
	8" floor-to-sides radius
	Crossmemberless Western-style understructure shall have 10" trapezoidal ¼" A1011 longsills
	24" wide rear pillars
	9-panel tailgate design constructed of 7-gauge 201 stainless steel
	Air-operated tailgate with Velvac air controller
	Tailgate finger latches and pivot plate are stainless steel construction
	24" cabshield constructed of 10-gauge type 201 stainless steel
	Install body prop kit on each side of the frame
	Install Cougar model 3200 DC box vibrator on body
	Install 3-hole light wedges on rear pillars for lighting
	Install fold-down stainless steel ladder on streetside rear of the body
	Install two (2) shovel holders on curbside of dump bulkhead
	Install branch deflector/tarp-arm guard on curbside of cabshield
	Install license plate bracket in upper left corner of tailgate
	Install plain mudflaps in front of and behind the drive tires
	Paint Dump body Orange to match the cab
Install	Hydraulic-operated High-lift Tailgate with in-cab control
Install	Heated Body Design including the following:
	Trapezoidal longsills and floor/side radius with heated design exiting at top of rear pillars with exit covers
	Heated Body Kit includes: Diverter box, spring box, air cylinder/valve & on/off switch
	Chassis output wire for regen mode to disable heated dump option
	Exhaust control box switch in-cab with heated box indicator light
Install	Mailhot model G4130-5-3 DA Telescopic Hoist including the following:
	Greaseable rear hinge and replaceable rear stainless steel pin
	Hoist is double-acting and trunnion-mounted
	Install remote lube grease line extension kit for Mailhot hoists
Install	Roll-Rite Electric Tarp System including the following:
	Aluminum tarp and tension arms with offset elbows
	Aluminum wind deflector



	Direct drive motor
	Mesh-type tarp cover
Install	Central Hydraulic System including the following:
	Rexroth A10VO100 Load-sense Piston Pump
	Spicer drive line with companion flange for easy removal
	12-volt auto shutdown block
	Low-oil shutdown valve and override circuit
	Rexroth 6m4-12 Load-sense Hydraulic Valve with pressure-compensated flow controls for the following:
	DA EPC section for Dump Hoist with 500 PSI A- port load-sense limit
	DA EPC section for Scraper up/down 500 PSI A- port load-sense limit
	DA EPC section for Scraper swing
	DA EPC section for Front Plow up/down
	DA EPC section for Front Plow angle
	SA EPC 3-way section for High-lift Tailgate with 1,500 PSI LS relief
	Install stainless steel hydraulic couplers for plow circuits
Install	Monroe Hydraulic Oil Reservoir/Valve Enclosure Combination unit including the following:
	Type 201 stainless steel construction (mos. 00141843 & 15570)
	Mounted behind cab above frame with ship and car channel mounting brackets
	Tank-mounted Zinga-type return filter
	2" suction line with a 100-mesh suction strainer
	Ball valve shutoff on hydraulic tank for case drain and suction ports
	18" Low oil sensor mounted inside the tank
	40-gallon oil capacity, filled with 35-gallon AW32 hydraulic oil
	Tank is full of AW32 hydraulic oil
	Sight gauge/Temperature gauge
	Tank label
المعدما	Stainless steel step installed on the end of the tank
Install	Rexroth CS160 joystick controller with stand-alone monitor including the following functions:
	Button 1 is open Button 2 is hoist up/down
	Button 3 is plow up/down & plow swing
	Button 4 is scraper up/down & scraper swing
	Button 5 is open
	Button 6 is open
	Control console switches include the following:
	Switch 1 is camera air
	Switch 2 is low oil override/low oil shutdown
	Switch 3 is low oil indicator light/body-up indicator light
	Switch 4 is SPARE
	Switch 5 is momentary switch for box vibrator
	Switch 6 is momentary on/off/momentary on for tarp
	Additional standalone switch for air tailgate with safety cap (rightside of console)
Install	Monroe 34" Husting-type Front Hitch (mount at 38-39" pin height) including the following:
	Tapered front bumper
	Stirrup steps on each side with stainless steel pooched step in stirrup steps
	Stainless steel open grating in area between bumper and grille
	Front tow hooks fastened to frame rails with bumper cut-outs
Install	Monroe 12' Full-Trip Moldboard Reversible Plow (mo. MP41R12-CT) including the following:
	12' long x 41" high moldboard



3/16" roll-formed moldboard Six, 1/2" x 4" tapered one-piece flame-cut ribs 2" x 3" x 3/8" top moldboard angle 4" x 4" x ¾" bottom moldboard angle Horizontal moldboard brace angles Dual compression-trip spring assemblies 4" x 4" x 3/8" cross-tube support; full-width with 6-point attachment 3-1/2" x 3-1/2" x 1/2" semi-circle; additional angle braces to front push tube Two, 4" x 10" double-acting power-reverse cylinders with 2" nitrided rods Cushion valve Moldboard and pushframe 100% continuously welded Powder coated with the moldboard orange and a black pushframe 3/4" x 8" x 12' one-piece top-punch cutting edge 12" x 12' rubber deflector with steel retainer bar, installed Husting 34" plow-portion hitch installed Pair Monroe 42" cable markers Two (2) Monroe wraparound curbguards with carbide wear strip installed one on each side Monroe 10' Underbody Scraper (mo. MS4510) including the following: Install 1" thick x 20" high moldboard 1/2" thick hanger board with grease manifold brackets installed 2-1/2" O.D. hinge shaft Two heavy-duty shock absorbers Bolt-in trunnion caps for canisters; outer arm remains bolt-on style Two 3-1/2" x 10" actuating cylinders; Socatri rods Cushion valve 1" solid circle with 5" center pin Center pin is piloted into hanger board Two 4" x 12" reversing cylinders; Socatri rods Three hinge anchor points Hydraulic pipes 20.5" x 7" poly hold-down blocks Mounting hardware Parts-installation manual Hose kit and j-50 type relief valve ¾" solid hanger plates Grease line kit with manifolds Install protective stainless steel guards on grease manifolds, both sides Install two (2) Kennametal carbide curbguards, one each end of moldboard Install Kennametal single-insert carbide cutting edges Install Ray Stop moldboard protection kit Paint Orange bands on ends of moldboard to match cab **Custom Lighting & Electrical including the following:** Install Utilize OEM switches for front flasher, rear flashers, scraper lights and spreader lights Grote heated LED plow lights (mo. GR-84661-4) with aluminum mounting brackets on the hood, mount at approximately 68" to the base of the plow lights Install City-supplied radio antenna on cab roof, in front of curbside horn One (1) SoundOff Pinnacle (mo. EPL730001-P) amber/green LED mini lightbar on cab roof riser Eight (8) Code3 MR6 (mo. MR6MC-AG) amber/green LED flashers, surfaced-mounted: Two (2) on chassis grille on separate switch



Above e	equipment installed and painted pricing: \$144,060.00 ea.
Install Paint	Rear 4" x 6" or 5" x 7" tube along the back of the truck to act as a Bumper, and paint Black All body underfloor, frame attachments, hoist, front hitch and rear bumper assembly Black
Install	Minimizer Floor Mats for Freightliner 108 SD (mo. FKFRTL2B-MIN / 10002265)
Install	Electric Brake Controller
	7-way RV plug
	D-rings for safety chains
	Rear tow hooks to outside of frames
	PH20 Pintle hook, multi-drill pattern – 20-ton rated height TBD to cradle
	%" rear hitch mounting plate
Install	Rear Hitch Assembly including the following:
	VOM719WP 7" LCD color monitor
	MSF5000 stainless steel camera box
	VOSHD6MNT LCD monitor mount
	CEC34L1 main cable for monitor
	VCMS24B color camera mounted at the rear
	Air puffer & washer fluid tubing
	Camera system tying into chassis wiper fluid reservoir Chassis wiper controls for activating wash system, momentary in-cab switch for air puffer
Install	Rearview Camera with Wash System including the following:
Install	Install Betts junction box at the rear for chassis lighting circuits and trailer wiring circuits Bearview Compress with Wash System including the following:
	Install backup alarm
	Install proximity switch for body-up light
	3-light cluster in the middle above the hinge
	SoundOff LED markers on rear corners of body
	Two (2) Weldex LED work lights, one on each side for scraper
	Two (2) SoundOff oval LED solid green flashers in bottom holes
	Two (2) Maxxima oval LED combination STT/BU lights in middle holes
	Two (2) SoundOff oval LED solid amber flashers in top holes
	Install stainless steel 3-hole light boxes at rear of body with the following:
	Two (2) under front bottom of body side-facing, one each side
	Two (2) on bottom of cabshield, side-facing
	Two (2) on cabshield, front-facing

Chassis requirements to be confirmed prior to order entry:

CT: 136" Highest ground clearance package Batteries and DEF tank mounted on left side behind the cab Undercab raised horizontal DPF and SCR with vertical tail pipe Front of engine PTO provision Trailer wiring to rear for electric brake controller 2-way heavy-duty 150-amp receptacle wired hot between seats (code: 30K-063) Front frame extension Delete OEM front bumper 50-gallon fuel tank mounted below driver's door, raised mounting Stationary grille Plow light/Headlight switch



Programmable chassis switches

Parts and owner's manuals, minimum full 1-year parts and labor warranty on all components.

Payment Terms: Net 30 days. Pricing effective for 30 days.

Pricing does not include any of the Rochester Hills RFQ discounts that may be applicable. 2% discount off total taken at invoice if payment received within 30 days. City of Troy 16, 18 months ABO, depending on chassis arrival

Delivery: 16-18 months ARO, depending on chassis arrival

Thank you for the opportunity to quote.

Respectfully submitted by, Jon Luea/Brian Bouwman

FOB: