CITY OF Grand Junction COLORADO

Purchasing Division

ADDENDUM NO. 1

DATE: **December 9, 2021**
FROM: **City of Grand Junction Purchasing Division**
TO: **All Offerors**
RE: **CNG Street Sweeper RFP-4976-22-KH**

Offerors responding to the above referenced solicitation are hereby instructed that the requirements have been clarified, modified, superseded and supplemented as to this date as hereinafter described.

Please make note of the following clarifications:

1. **Q:** Chassis Item 14: The Schwarze M6SE CNG Avalanche is equipped with a live suspension at all times, with the exception of when dumping air suspension system. Being live during the sweeping process provides a smoother ride for the operator and less shock to sweeping components on rough roads. When dumping, the air suspension automatically deflates to a solid suspension and then automatically airs back up upon the hopper going back into sweeping position. Therefore, a sweep and transport switch are not required.
   A: Please mark this section No under as specified and add this comment in the deviation section.

2. **Q:** Side Brooms Item 69: The Schwarze M6SECNG is equipped with an in-cab hydraulic tilt instead of an electric tilt actuator. We used to utilize the electric actuator, but over time it was confirmed that the electric actuator had a 98% fail rate in the first year of use. We therefore switched to the hydraulic cylinder design and the failure rate dropped to less than 1% in the first year of operation. We consider this to exceed the specification but want to ensure this was considered an equal without being an exception.
   A: Our main goal is to have tilt ability from within the Cab. This would be considered an equal.

3. **Q:** Main Broom Item 78: The Schwarze M6SE CNG is equipped with an ABS plastic main broom cover in lieu of the specified steel cover. The ABS plastic main broom cover will never corrode nor will crack and is flexible eliminating any damage from backing into an immovable object. Since we began using this type of broom cover in 2002, we have never had a failure causing replacement.
   A: ABS plastic will be considered an approved alternative.

4. **Q:** Hooper Item 94: The Schwarze M6SECNG utilizes a 48” dump door in lieu of a side shift. Our competitor utilizes a 22” dump door combined with a 11” side shift to allow dumping into the middle of the dump truck. Our 48” dump door eliminates the need for a side shift and

allows the operator to dump to far side of the dump truck without pulling in mirrors on either the sweeper or dump truck.
A: Item #94 shall be changed to read: Hopper to be designed to efficiently dump into receptacle as necessary in a manner that will allow for even receptacle load distribution.

5. **Q:** Pneumatic System Item 121: The Schwarze M6SECNG is equipped with pneumatic air cylinders on the gutter brooms and main broom. They are not interchangeable as the cylinders the main broom have a much longer stroke to allow the main broom to follow the various undulations on the pavement making for a cleaner sweep in street pans etc.
A: Please remove Item # 121 from the specifications. The City realizes that the requirement to have all cylinders interchangeable is not necessarily achievable considering design, and technology changes.

6. **Q:** Paint Item 144: The Schwarze M6SE utilizes an Axalta Dupont Imron 5000 aircraft quality type paint. This paint is applied over two coats of suitable primer for long and durability. Thickness exceeds the specification.
A: The City is looking for a quality paint product that is resistant to rust, peeling and abrasion under the conditions a street sweeper operates.

7. **Q:** Can you provide a part number for a preferred Air Ride Seat?
A: The City does not have a preferred air ride seat. If one is not offered, please mark the spec sheet as does not meet, and state not offered in the comments.

8. **Q:** Will it be ok for us to bid a Rear Dump also a Side Dump or just a Side Dump only?
A: Rear and side dump are both acceptable as we always welcome alternate bids.

9. **Q:** Are you looking for a belt driven conveyer or squeegee style conveyer? One type is a solid belt while the other style is an independent squeegee that can be replaced individually.
A: Squeegee type conveyor is acceptable.

10. **Q:** Item #42 console shall have left/right primary driver switch (what is this?)
A: This is a safety feature where the switch changes the primary control on a dual steer unit to either right hand, or left-hand drive. It generally disables the throttle on the side that the unit is not being driven from, preventing a passenger sitting on that side from having control of accelerator or brake function.

11. Please use revised Specification/Compliance Form when submitting your bid response.

The original solicitation for the project noted above is amended as noted.

All other conditions of subject remain the same.

Respectfully,

Kassy Hackett, Buyer
City of Grand Junction, Colorado

SECTION 4.3. REVISED SPECIFICATION/COMPLIANCE FORM

MINIMUM SPECIFICATION FOR: One (1), New, CNG Fueled Current Model Year, four- or six-Wheel Broom Street Sweeper with Belt Conveyor. Proposals must be offered as a complete, turn-key unit. All specifications must be met or exceeded or may be considered non-responsive. Incomplete responses will not be considered. Proposer shall note any exceptions to the specifications on the Comment section. Proposer shall list in a separate attachment detail concerning the exception. This sheet shall be labeled "Exception(s) to Conditions and Specifications".

All equipment furnished under this contract shall be new, unused, and the latest model offered by the manufacturer's current production (unless otherwise stated). Accessories not specifically mentioned herein, but necessary to furnish a complete unit ready for use shall also be included.

	Specification/Description	**As Specified**	**Comments: (If not exactly as specified, explain any Deviation.)**
	Chassis		
1	Chassis shall be cab-forward design. State chassis make, model		Make & Model:
2	Please state wheelbase Please state Turning Radius		Wheelbase: Turning Radius:
3	Chassis shall include front tow hooks		
4	Yield strength of the frame shall be 110,000 PSI minimum		
5	At 3600 psi, fuel tank(s) capacity shall be the diesel equivalent of 50 gallons minimum and shall be easily accessible without raising or shifting any components. A fuel gauge located in cab shall be supplied.		
	Chassis Engine		
6	Truck engine shall be Cummins ISL G electronic in line six cylinder turbocharged CNG, 280 HP @ 2000 RPM, 900 ft-lbs. @ 2200 RPM.		
7	Truck engine shall be equipped with a single left-hand vertical or horizontal exhaust system.		
8	The cooling system shall be protected to -34 degrees F.		
9	Engine shall be equipped with dual stage dry-type air cleaner with safety element, spin-on fuel filter, full flow oil filter, and fuel/water separator.		
10	Radiator fan shall be viscous drive type.		
	Transmission, Axles, Wheels & Brakes		

	Specification/Description	As Specified	Comments: (If not exactly as specified, explain any Deviation.)
11	An Allison 2500 Series (or approved equal) automatic transmission with oil heavy duty oil cooler shall be provided. An external spin on transmission oil filter is to be included with the Allison transmission.		
12	The 12,000 lb. front axle shall be equipped with 12,000 lb. Springs and shock absorbers.		
13	Rear axle shall have a minimum 16,800 lbs. capacity. Rear axle shall be supported by an adequate suspension system for rating.		
14	If rear axle is supported by an airspring system, control of the airspring rear suspension shall be by a single transport/sweep ergonomic switch on the control console.		
15	For safety and to allow the emergency interchange of tires at a job site and front and rear tires and rims shall all be interchangeable.		
16	Tires shall be tubeless radial tires 14 ply 11R22.5 with proper rating.		
17	Rims shall be 10 hole steel hub piloted 22.5”.		
18	Air system shall include a heated air dryer with automatic moisture ejector.		
	CAB		
19	Maximum visibility, forward line of sight from the chassis front bumper to the point on the ground visible to the operator shall not exceed 8 feet for 6-foot-tall operator.		
20	Steering shall be full power with single center or dual operator controls dependent upon cab configuration.		
21	Each steering column shall be fully independent and shall include separate steering gear boxes, separate drag links and separate pitman arms.		
22	Seats shall be air adjustable, covered with cloth for air circulation and include 3 point seat belts		
23	Sweeper shall include two (2) outside west coast type mirrors with lower 8 inch convex lens for easy viewing of the side broom during sweeping.		
24	To maximize operator visibility of the curb and sweeping gear, outside mirrors shall be mounted forward of the front wheels.		
25	Switches shall be illuminated so that they can be readily identified without the use of the cab dome light.		
26	Switches shall be clearly identified by name and symbol.		
27	Cab interior environment shall be fully air-conditioned including a fresh air heater defroster.		
28	Cab shall have full flow through ventilation for optimal temperature control and operator comfort.		

	Specification/Description	As Specified	Comments: (If not exactly as specified, explain any Deviation.)
29	Windshield wiper shall be two speeds with washer.		
30	Wipers shall have intermittent feature.		
31	Interior of cab shall have acoustical insulation for low operating noise, and automotive type trim.		
32	Dash shall be faced with soft molded plastic.		
33	All glass shall be tinted safety glass.		
34	Each operator position shall have adjustable sun visor.		
35	Door shall be keyed locked.		
36	Door windows shall be roll down type.		
37	Cab shall have dual 12 volt power points.		
38	Side windows shall have defogger.		
	Instruments		
39	Chassis left side operator instrument panel shall be chassis OEM, full vision illuminated with tachometer, speedometer, odometer, trip odometer, fuel gauge, water temperature gauge, air pressure gauge, and volt gauge.		
40	Chassis right side operator instrument panel shall be chassis OEM, full vision illuminated with tachometer, speedometer, odometer, trip odometer, fuel gauge, water temperature gauge, air pressure gauge, and volt gauge.		
41	Chassis gauges shall include speedometer, odometer, coolant temperature, tachometer, voltmeter, oil pressure, fuel level and air pressure.		
42	Chassis engine instruments shall include warning light and chime for low coolant level and high coolant temperature to warn the operator of a potential problem before any damage to the engine occurs. Console shall have left/right primary driver switch.		
43	Truck instruments shall include warning lights for battery, and cab latch to make sure the cab is locked in position.		
44	Sweeper engine instruments shall include tachometer, hour meter, oil pressure, fuel, voltage, and coolant temperature for complete information for the operator on the condition of the auxiliary engine.		
45	Instruments shall include an auxiliary engine air intake restriction indicator mounted in the fixed console, for ease of maintenance, and a hopper “full load” indictor to notify the operator the hopper is fully loaded.		

	Specification/Description	As Specified	Comments: (If not exactly as specified, explain any Deviation.)
46	Dash, all console switches including transmission controls and all gauges shall be illuminated.		
47	Batteries should be located in an enclosed accessible environment for long life and ease of service.		
48	Chassis shall have two (2) maintenance free batteries rated at not less than 1300 CCA, 12 volt.		
49	Chassis engine shall have a 145 amp. Alternator.		
50	Chassis lighting shall include sealed multi-beam halogen head-lights, stop lights, tail lights, backup lights, license plate lights, clearance lights, signal lights, illuminated gauges and instrument panel, and directional lights with hazard switch.		
	Other Chassis Accessories		
51	Two 7” x 16” stainless steel mirrors that are heated and controlled using 2 dash mounted switches shall be supplied and are in lieu of the standard mirrors.		
52	Tool box		
53	AM/FM Radio		
	Sweeper Engine		
54	Single engine unit preferred that utilizes chassis engine to power sweeper components. If Auxiliary engine is used, CNG engine that has been in production for a minimum of two (2) years shall be minimum 4 cylinders, Turbocharged.		
55	Horsepower rating shall be not less than 49 HP @ 2800 RPM, torque 127lb-ft @1680 RPM		
56	Engine shall be equipped with a full flow oil filter, heavy duty two stage dry element air cleaner with safety element, fuel filter, and fuel/water separator.		
57	Engine shall be protected by a 70/30 mixture anti-freeze/water for cold weather storage and or operation to -30 degrees F (-34C).		
58	Engine, radiator, and all auxiliary engine driven devices shall be isolation mounted through a dedicated engine frame.		

	Specification/Description	As Specified	Comments: (If not exactly as specified, explain any Deviation.)
59	Engine shall be equipped with a cab mounted filter restriction indicator. A rear engine compartment cover shall be supplied to minimize vandalism and buildup of litter in engine compartment. Doors accessing engine compartment shall be lockable and cover cannot be opened until door is unlocked. The cover shall be constructed of aluminum with hinged sections that can be completely folded over to allow easy access to components. An automatic auxiliary engine shutdown shall be included which protects against damage when high coolant temperature, low oil pressure or low hydraulic oil level occurs.		
	Side Brooms		
60	Each side broom shall be driven by a hydraulic motor. They shall be the vertical digger type, trailing arm design.		
61	Side brooms shall be 42-inch diameter minimum.		
62	Broom pattern must be constant regardless of up and down motion.		
63	Broom down pressure shall be adjustable by the operator from the cab while moving or stationary		
64	Broom shall consist of five (5) plastic segments, filled with 26 inch long tempered steel wire		
65	To provide flexibility for varying sweeping conditions, broom speed shall be variable and equipped with in cab variable speed controls allowing brooms to rotate at a speed independent of any other function and engine RPM. The use of engine RPM to vary gutter broom speed is unacceptable.		
66	Each gutter broom shall be retractable for a maximum travel width of 8 feet.		
67	Each broom shall have an LED work-light for night operation		
68	Sweeping path using both gutter brooms shall be no less than 125 inches.		
69	Tilting of right-side broom shall be variable from the cab. An electrically controlled linear actuator shall allow the operator to tilt the side broom inward and outward from the cab, while sweeping. Tilting of left side broom shall be variable from the cab. An electrically controlled linear actuator shall allow the operator to tilt the side broom inward and outward from the cab, while sweeping.		

	Specification/Description	As Specified	Comments: (If not exactly as specified, explain any Deviation.)
70	A center deflector shall be provided to direct debris thrown by the gutter brooms into the path of the main broom. The deflector shall be positioned under the sweeper in between the gutter brooms consist of easily replaced wear strips. Deflector shall raise and lower with the main broom.		
	Main Broom		
71	The main broom shall not be less than 58 inches long and not less than 32 inches in diameter.		
72	Main broom drive shall be direct hydraulic.		
73	To provide flexibility for varying sweeping conditions, broom speed shall be variable operated by in cab variable speed controls allowing brooms to rotate at a speed independent of any other function and engine RPM. The use of engine RPM to vary the main broom speed is unacceptable.		
74	Main broom shall be raised and lowered by a single in cab dash mounted rocker switch. Broom height shall be adjustable while sweeper is moving.		
75	Main broom shall be prefab disposable type.		
76	Main broom shall be double wrapped at both ends		
77	For safety, main broom shall automatically stop and raise when transmission is placed in reverse.		
78	Unit shall be equipped with a steel main broom hood to only prevent materials from being overthrown into following traffic and also be capable of channeling over throw back into the dirt chamber		
79	Main broom shall have two work lights.		
80	Main broom shall be self-adjusting or dual main broom regulators shall be provided in the cab. These regulators will be used to adjust the main broom down pressure side to side.		
	Elevator		
81	Elevator shall have a minimum of 11 flights with replaceable corded rubber squeegee tips.		
82	Preferred elevator drive shall be direct hydraulic.		
83	Elevator sprockets shall have hardened teeth for longevity.		
84	Elevator shall be variable speed, and rotation direction shall be reversible, with both functions controlled from within the cab.		
85	Elevator variable speed shall be operated by in cab controls allowing elevator to rotate at a speed independent of any other function and engine RPM. The use of engine RPM to vary elevator speed is unacceptable.		

	Specification/Description	As Specified	Comments: (If not exactly as specified, explain any Deviation.)
	Hopper		
86	Hopper shall be constructed of minimum 7 gauge steel floor and minimum 11 gauge steel door, top and sides.		
87	Hopper volumetric capacity shall be not less than 4.5 cubic yards. Useable capacity not less than 4 cubic yards.		
88	Hopper shall dump from a minimum height of 114 inches as measured at the lowest point under the open hopper chute.		
89	Hopper shall be able to tilt (dump) to an angle to ensure complete removal of all debris.		
90	Lift mechanism may be a scissor lift system. Scissor lift systems shall be double stage, utilizing two hydraulic cylinders with a bore of not less than 3.5 inches.		
91	Lift capacity shall be not less than 12,000 lbs.		
92	Hopper dump mechanism shall utilize two hydraulic cylinders with a bore of not less than 3.5 inches.		
93	Maximum time for full length lift and dump cycle shall not exceed 70 seconds.		
94	Hopper to be designed to efficiently dump into receptacle as necessary in a manner that will allow for even receptacle load distribution.		
95	Hopper load shall be visible at all times from the cab through a front facing hopper window.		
96	To prevent over-loading beyond Manufacturer's GVW rating, cab shall have a full load warning indicator light activated by hopper weight.		
97	To extend wear life, all scissors lift joints shall be self-lubricating bronze bearings.		
98	Apparatus shall have an interlock to prevent dumping hopper without engaging the park brake.		
99	A seal shall be provided between the hopper and the elevator to prevent dirt and dust emission and loss of debris.		
	Water System		
100	Tank capacity shall be minimum 250 U.S. gallons.		
101	Tank shall be constructed of non-rusting material.		
102	Pump shall be centrifugal type capable of running dry indefinitely without damage.		
103	Pump shall be aluminum. Pump shall not contain ferrous parts in contact with water.		

	Specification/Description	As Specified	Comments: (If not exactly as specified, explain any Deviation.)
104	Water system shall be equipped with a minimum of 5 spray nozzles on the front bumper, 3 spray nozzles on each side broom, 5 spray nozzles on the main broom spray bar. Rear spray bars shall be constructed of non-ferrous components to prevent contamination.		
105	Water to each area, side broom left and right, front and rear spray bar shall be controlled in the cab by electrical activation switches. Water flow control valves shall be non-ferrous heavy-duty type.		
106	A low water indicator light shall be located within the cab.		
107	The water system shall incorporate an air purge system for flushing water lines and pump during freezing conditions.		
108	Water fill hose shall be not less than 16 feet in length, equipped with a hydrant coupler.		
109	An in-line water filter shall be provided with the fill hose to prevent contaminants from entering the water tanks.		
110	The water supply, tank shall be equipped with an anti-siphon device Compliant to American National Standard Air gaps in plumbing systems ASME A112.12-1991.		
	Hydraulic System		
111	Reservoir capacity shall not be less than 21 gallons without side level indicator.		
112	Pump shall be three section, directly driven.		
113	The reservoir vent shall be equipped with 10 micron, spin on filter.		
114	Return lines for drive shall have a 10-micron full flow filter with bypass. Cab mounted restriction indicator shall light before bypass begins.		
115	When adding hydraulic fluid, all the oil added must pass through a 10 micron filter located within the fill spout.		
116	All circuits shall have quick-disconnect check ports.		
117	All high pressure fittings shall be flat-face “O” ring type. Other systems shall not be acceptable.		
	Pneumatic System		
118	The pneumatic system shall have DOT fittings.		
119	There shall be a PR4 type pressure protector for the chassis air system to protect the chassis air system.		
120	A separate air tank for all sweeper air components shall be provided.		
~~121~~	~~All pneumatic cylinders shall be interchangeable.~~		

	Specification/Description	As Specified	Comments: (If not exactly as specified, explain any Deviation.)
122	All pneumatic cylinders must be rated to 150 PSI and have a separate rod seal and wiper to prevent contamination entering the cylinder.		
	Electrical System		
123	Sweeper electrical system shall be independent from the chassis electrical system.		
124	Sweeper shall have an electronic smart back-up alarm for additional warning and safety when chassis is in reverse.		
125	Sweeper wiring harnesses shall be color-coded and hot stamped with appropriate word designation labeled every four inches, i.e. “Ignition,” side broom on each wire.		
126	All electrical circuits must be protected by circuit breakers or fuses.		
127	Sweeper engine shall have one (1) 925 CCA, 12 volt battery		
128	Sweeper engine shall have a 120 amp. Alternator.		
129	Sweeper lighting shall include rear identification lights, side broom and main broom spot lights and rear clearance lights.		
130	Sweeper warning lights shall include hydraulic filter restriction, air filter restriction, low spray water, hopper up, hopper full load and voltage.		
131	All sweeping components shall automatically raise when transmission is put into reverse.		
132	All electrical circuits must be protected by circuit breakers or fuses.		
133	A multi-light LED 42 inch directional light bar shall be mounted on rear of sweeper for safety reasons. Lights are to be controlled by in-cab switch to indicate left, right or both directions of travel.		
134	Rear brake, turn, and tail lamps shall be LED. Sealed beam lamps are not acceptable.		
135	Cab mounted LED strobe light with tree limb guard for protection.		
	Controls		
136	All sweeper controls shall be mounted on a fixed central console located between the left and right operators position.		
137	The controls shall include all sweep, hopper, elevator, and lighting functions and shall be located on the fixed operator control console or dashboard.		
138	The controls for sweep, spray water, and lighting functions shall be conventional rocker switched. “Membrane” or touch pad switches are not acceptable.		
	Sweeper Instruments		

	Specification/Description	As Specified	Comments: (If not exactly as specified, explain any Deviation.)
139	Sweeper engine instruments shall include tachometer, hour meter, oil pressure gauge and lamp, low coolant level lamp, air filter restriction for complete information for the operator on the condition of the auxiliary engine.		
140	Sweeper instruments shall include a hopper full indicator, main broom down pressure, hydraulic filter restriction indicator, sweeper out of level indicator, no spray water indicator, a “raised” hopper indicator and a “full” hopper indicator to notify the operator of hopper conditions.		
141	Two (2) in-cab sweeper console mounted gauges that indicate the air pressure being used to hold the side brooms in its down position and one gauge for each side broom.		
142	In-cab dash mounted gauge to monitor hydraulic oil temperature shall be supplied.		
	Paint		
144	All visible exterior metallic surfaces shall be coated prior to assembly with polyester powder coat. The paint must be a minimum of 2 mils thick. The uses of acrylic enamels and/or polyurethanes are not acceptable.		
145	Color shall be manufacture’s standard color of “White.”		
146	Vehicle shall have an accent color of Grey on the lower portions of the unit.		
147	Operator’s manual		
148	Service Manual (CD format preferred). Quote separately		
	Warranty		
149	Indicate Manufacturer’s warranty for entire sweeper. Include warranty literature in proposal.		
150	Indicate Manufacturer’s warranty for chassis engine, including all parts and labor.		
	Service and Training		
151	A qualified technician shall provide complete training to City of Grand fleet services personnel. Training shall include safety, operation, maintenance and service.		

	Specification/Description	As Specified	Comments: (If not exactly as specified, explain any Deviation.)
152	Proposer shall supply documentation of warranties on all equipment stated in these specifications upon delivery of unit. ALL WARRANTY WORK SHALL BE PERFORMED LOCALLY BY AN AUTHORIZED DEALERSHIP Truck Chassis manufacturer shall maintain OEM licensed dealership and authorized service center within (50) fifty miles of the working location of the machines offered. This facility must be staffed with qualified servicemen and have provisions for storing a representative supply of parts for machine's offered as well as provisions for securing parts from the manufacturer within a reasonable length of time (48 hours max). State name and contact person of authorized dealership.		Name and contact person of authorized dealership: