

Specification No. 203-A
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CITY OF SACRAMENTO

SACRAMENTO, CALIFORNIA

8 TO 10 YARD DUMP TRUCK, 3 AXLE, 6 X 4

APWA #2928

1.0 SCOPE AND INTRODUCTION:

- 1.1 This specification describes a new, unused, latest model, diesel fueled, three axle, standard cab 6 x 4 truck chassis with an 8 to 10 yard dump body mounted on it. It will be operated in business districts as well as residential areas and will be required to dump in an unimproved land fill site.
- 1.2 Vehicle/unit shall be complete with all equipment and accessories necessary for safe and efficient operation. They are to be delivered as a complete unit, certified and ready for immediate job site operation within the City of Sacramento area.
- 1.3 It is intended that the manufacturer in the selection of components will use material and design practices that are the best available in the industry for the type of operating conditions to which the vehicle/unit will be subjected. Suspension, wheels, tires and other component parts shall be selected to give maximum performance, service life and safety and not merely meet the minimum requirements of this specification. All parts, equipment and accessories shall conform in strength, quality of material and workmanship to recognized industry standards.
- 1.4 The term "heavy duty" as used in these specifications shall mean that the item to which the term is applied shall exceed the usual quantity, quality or capacity supplied with standard production vehicle/unit; and it shall be able to withstand unusual strain, exposure, temperature, wear and use.
- 1.5 If any of the equipment bid varies from the specifications, such variations(s) must be listed in writing and attached as part of the proposal. The City of Sacramento reserves the right to waive minor variation(s) if in the opinion of the Fleet Management Superintendent the basic unit meets the general intent of these specifications.

1.0 SCOPE AND INTRODUCTION: (continued)

- 1.6 The City reserves the right to reject any and all bids or alternate bids as the best interest of the City may require. Consideration will be given in comparing proposals and in awarding a contract, not only to the amount of the proposal, but also the kind and quality of the equipment offered, its suitability for use in the service intended, as well as the lowest ultimate cost to the City. Time required for delivery is important and may influence the award.
- 1.7 Specifications on the following pages are written with intent to meet all applicable documents but the final certification to comply shall rest with the vendor and not the City of Sacramento. Should requirements as specified not comply, the manufacturer is required to refigure and revise the specifications to meet all laws, rules and regulations where it applies to items such as the ratings of axles, tires, rims, brakes, batteries, cooling capacity, etc., and the City of Sacramento is to be notified thereof.

2.0 APPLICABLE DOCUMENTS AND CERTIFICATIONS:

- 2.1 Federal Motor Vehicle Safety Standard, Department of Transportation.
- 2.2 State of California Motor Vehicle Code.
- 2.3 State of California General Industrial Safety Orders.
- 2.4 State of California Health and Safety Code, Motor Vehicle Pollution Control.
- 2.5 California Occupational Safety and Health Act (O.S.H.A.) and the E.P.A.
- 2.6 Society of Automotive Engineering Standards.

3.0 GENERAL:

- 3.1 Whenever in the specifications, any material or process is indicated or specified by patent or proprietary name and/or by name of manufacturer, such specifications shall be deemed to be used for the purpose of facilitating descriptions of the material and/or process desired and shall be deemed to be followed by the words "or equal" or "reference". The Contractor may offer any material or process which shall be equivalent in every respect to that so indicated or specified, provided however, that if the material, process or article offered by the Contractor is not, in the opinion of the City of Sacramento, equal in every respect to that specified, then the Contractor must furnish the material, process or article specified or one that in the opinion of the City of Sacramento is the equal thereof in every respect.

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- 3.2 Complete specification, published literature and photos or illustrations of item proposed, e.g., blue prints, drawings, name of manufacturer and model number, type of warranty, etc., shall be furnished with bid.
- 3.3 All equipment and components listed as standard by the manufacturer for model quoted shall be furnished whether or not such items are detailed herein, e.g., special wrenches, tool kits, jacks, stands, etc. Optional equipment as necessary to meet the following requirements of this specification shall also be supplied.
- 3.4 Successful contractor shall, at time of delivery, supply to the Fleet Management Division a completed equipment parts card and predelivery check sheet. (Fleet Management Division will supply both forms to the successful contractor.)
- 3.5 Noise level shall be in conformance with standards established by Local, State and Federal Agencies. Each unit delivered may be tested by City personnel for noise level and must meet noise requirements before the unit is accepted.
- 3.6 Equipment Manual(s) to be supplied at time of delivery:
- a. One (1) truck operator's manual for each unit.
 - b. One (1) parts and repair (service) manual for truck and engine.
 - c. One (1) electrical wiring schematic for truck.
- 3.7 Two (2) complete sets of keys shall be provided for each vehicle/unit.
- 4.0 DELIVERY:
- 4.1 "Caravan" or "drive-away" delivery from points of manufacture or assembly will not be accepted. (Exception: within radius of 150 miles.)
- 4.2 Delivery shall be made to the City of Sacramento Corporation Yard, 5730 - 24th Street, Sacramento, California, serviced and operable with min. 1/4 tank fuel.
- 4.3 The original dealer's Report of Sale or certificate of origin, smog certificate (original copy) and certified weight certificate, any or all of which, if required, to obtain tax exempt license shall be furnished to the consignee at time of delivery of the vehicle(s) before payment can be made.

5.0 INSPECTION:

Vehicle/unit will be inspected before acceptance by an authorized representative of the City of Sacramento for workmanship, appearance, proper functioning of all equipment and systems and conformance to all other requirements of this specification. If deficiencies are found, it shall be the responsibility of the dealer to pick up the vehicle/unit, make necessary correction and redeliver the vehicle/unit for reinspection and acceptance. Payment and/or commencement of a discount period (if applicable) will not be made until corrective action has been made.

6.0 GUARANTEE:

The manufacturer and/or dealer delivering vehicle/unit against this specification shall guarantee that they meet the minimum requirements set forth herein. If it is found that the equipment delivered does not meet the minimum requirements of this specification, the manufacturer and/or dealer will be required to correct the same at his expense.

7.0 WARRANTY:

7.1 Vehicle/unit shall be guaranteed under standard factory and/or dealer warranty and a copy of the warranty policy shall be delivered with each vehicle/unit.

7.2 Vehicle/unit manufacturer and/or dealer shall provide a new warranty F.O.B. Sacramento regardless of the method of delivery for each equipment. Warranty time to start when vehicle/unit is placed in operation, not delivered.

7.3 The body manufacturer and/or dealer, whenever applicable, shall guarantee for a period of one year after delivery and acceptance of the entire unit that the body and appurtenance shall be free from workmanship and material defects. He shall agree to repair or replace all such defective material(s) for workmanship at no cost to the City. The contracting vendor must have service facilities and an adequate supply of service parts available at a distance from Sacramento no greater than that to the San Francisco Bay Area.

7.4 If the City of Sacramento is required to deliver a unit outside of the immediate Sacramento area for warranty work, vendor shall reimburse City of Sacramento at the rate of \$40.00 per hour (including travel time) and all expenses (meals, lodging, and cost of transportation). City of Sacramento shall be furnished, no-charge, invoice for all work performed under warranty indicating type of work performed and parts replaced.

7.5 Bidders must list the nearest factory authorized service representative(s) who will be responsible for servicing the complete unit or any part thereof under warranty if and when required after delivery of unit.

8.0 PAINT FINISH:

- a. Cab - yellow, equal to Dietzler #DAR82523 acrylic enamel over suitable primer. Catalyst equal to Dietzler #DXR80. Must be lead free.
- b. Frame and wheels - factory standard.
- c. Body - same as cab.

9.0 REQUIREMENTS CAB AND CHASSIS:

- 9.1 Cab - standard model with tilt hood.
- 9.2 GVWR - 46,000 lbs. minimum.
- 9.3 GAWR (front) 12,000 lbs. minimum (excluding tires).
- 9.4 GAWR (rear) - 34,000 lbs. minimum, (excluding tires) dual axle with interlock, and interlock indicator light located in cab.
- 9.5 C/A - 102" to 108".
- 9.6 Wheelbase - compatible with make and size of body mounted to provide the correct load distribution for maximum legal payload.
- 9.7 Springs:
 - a. Front - sufficient to meet or exceed GVWR specified.
 - b. Rear - multi-leaf heavy duty type, provided with sufficient reserve capacity to position the chassis frame, level, or parallel to ground when loaded to its maximum GVWR on both front and rear axle.
 - c. Multi-leaf auxiliary spring shall be required to provide maximum stability and safety under overload condition; however, if alternate springs or methods are available to provide equal or greater stability and safety as the multi-leaf type, please quote the alternate with its specification and prices, as an option.
 - d. Rear crossmember - when loaded to maximum capacity, shall maintain minimum 27" clearance between the crossmember area and ground to permit City owned "Layton" asphalt spreader to interface under the truck chassis.

9.0 REQUIREMENTS - CAB AND CHASSIS (continued):

9.8 Shock absorbers -

- a. Front - required.
- b. Rear - not required.

9.9 Engine -

- a. Number of cylinders - "8" V type or inline "6".
- b. Net horsepower at governed RPM - 194 minimum.
- c. Net torque - 485 lbs. minimum at 1800 RPM maximum.
- d. Fuel - diesel.
- e. Heavy Duty Air Filter - replaceable element (dry) type with "Dial" type vacuum gauge restriction indicator mounted in the cab at a readily visible location from driver's seat.
- f. Governor - manufacturer's standard.
- g. Engine auxiliary oil filter - Lubrifiner Model #750, 14 qt. capacity, mounted at an easily accessible location for service.

9.10 Cooling system:

- a. Manufacturer's heaviest available option for the engine furnished; adequate to maintain engine at proper temperature under all operating conditions in the City of Sacramento area.
- b. Heavy duty radiator provided with adequate capacity to meet above requirements.
- c. Antifreeze - (glycol) protected to minus 20 below freezing.

9.11 Transmission -

- a. Automatic - 5 speed, Allison MT-653 with modulator lockup.
- b. P.T.O. opening flange to frame clearance shall be adequate for removing and installing Spicer "Hotshift" P.T.O.
- c. Auxiliary oil cooler - Hayden Model No. K1290 located 1-1/2" away and in front of engine radiator, or equal.
- d. Transmission shift linkage shall have minimum number of bends and be so routed as to not become overheated by exhaust system.

9.0 CHASSIS REQUIREMENTS: (continued)

9.11 Transmission - (continued)

- e. Oil filter (auxiliary) shall be AC 5576446 or approved equal with 5/8" I.D. connecting hoses. Filter element shall be a PF 132 or equal. Filter shall be so located to permit easy access for element replacement.

9.12 Axle ratio - approximately 55 to 60 mph road speed.

9.13 Frame -

- a. Reinforced, from between front spring hangers to end of frame at the rear, alloy steel, with RBM of 2,000,000 PSI minimum. If heat treated frame is provided, it shall not be heated or welded.
- b. Frame shall have sufficient number of crossmembers to provide torsional rigidity and to support the frame rails where fuel tanks and rear suspension assemblies will be mounted. A crossmember shall be provided at or near the extreme rear end of frame.

9.14 Steering - power assisted factory standard.

9.15 Wheels and tires -

- a. Wheels: Ten (1) steel disc (flat center) "Budd type, 20" x 8" LW, 10 hole with 11-1/4" bolt circle.

NOTE: Firestone RH-5° lock rings will not be acceptable.

- b. Tires: Ten (10) tube type, 11.00 R x 20, 14 ply, steel radial, all position hi-way tread design.

9.16 Brakes -

- a. Compressor - 12 CFM minimum,.
- b. Spring type emergency brake on #2 and #3 axle.
- c. Front brake size - 15" x 4" minimum, cam actuated.
- d. Rear brake size - 16-1/2" x 7" minimum, cam actuated.
- e. Quantity and capacity of air reservoir tank to meet D.O.T. 121 certification. They shall be equipped with automatic pull cable type valve equal to Weatherhead #1421 on all tanks with control cables located for operator to bleed the system while in stand up position. Each cable shall be encased in conduits or routed in such a manner to prevent accidental activation, be separately anchored minimum 8 inches apart, and all shall be activated from the driver's side of the body.

9.0 CHASSIS REQUIREMENTS: (continued)

9.17 Electrical system:

- a. Alternator - 12 volt, 60 amp minimum.
- b. Battery - 12 volt heavy duty; quantity as required.
- c. Lights - minimum lighting equipment including but not limited to: tail, stop, license, head - multiple beam with indicator, all instruments, directional signal of the self cancelling type including hazard switch, back up, dome and clearance lights.
- d. All wiring must be color coded or numbered. All exterior wires, wire harnesses, terminals or connectors subject to road grime, dirt, moisture and rock throw, shall be adequately protected and hermetically sealed. Whenever possible, individual wires shall be grouped into harnesses and properly supported on rigid members to prevent abrasion and flexural failure.

9.18 Dash instruments include but shall not be limited to: fuel, coolant temperature, oil pressure, ammeter and speedometer-odometer combination, automatic transmission oil temperature and vacuum reservoir tank. All shall be gauges. Vacuum gauges will require a warning light to operate in conjunction with it.

9.19 Miscellaneous truck equipment:

- a. Mirrors - both sides, Westcoast standard 7" x 16".
- b. Grab handles - outside cab on left and right sides.
- c. Arm rest - both left and right, mounted on cab doors.
- d. Front bumper - shall be of adequate strength and construction that vehicle may be picked up by same front bumper and towed to City of Sacramento repair facility under a fully loaded condition.
- e. Rear bumper - not required.
- f. Tow hooks - two (2) attached to front frame suitable for towing fully loaded vehicle.
- g. Backup indicator - an audible device which can be heard above 83 dba of background noise when transmission is placed in reverse gear. Bullard Bell-Alarm Model #MPA-2 or Pollak #41-720 for standardization.
- h. Seats - bench type, adjustable, foam padded, heavy duty construction, upholstered with vinyl material and color keyed to exterior paint.

9.0 CHASSIS REQUIREMENTS: (continued)

9.20 Miscellaneous truck equipment: (continued)

- i. Seat belts - required, 3 sets per unit shall be securely mounted and positioned to meet all certification.
- j. Floor mats.
- k. Horn - electric.
- l. Sunvisor - dual
- m. Windshield wiper - two (2) or more speed with washer.
- n. Cigarette lighter and ash tray.
- o. Glove box.
- p. Rear license mounting bracket.
- q. Ignition switch to have accessory position.
- r. Door locks - both doors.
- s. A rechargeable fire extinguisher and bracket - 5# BC dry chemical with metal valves (not plastic) located to be readily accesible to driver.

9.21 Fuel tank -

Minimum capacity - 45 gallons. Its fill spout area shall be protected from winter mud accumulation to prevent contamination of fuel when refueling and the tank shall be prominently labeled - "DIESEL FUEL ONLY" in minimum 2" letters.

9.22 Before delivery to the City of Sacramento and before acceptance by the City - all spring "U" bolts, PTO mounting bolts, rear differential mounting bolts, rear axle flange bolts, etc., shall be re-torqued to factory specification by hand using torque wrench. (Impact wrench - not acceptable.)

9.23 Cab and chassis questionnaire:

Complete all applicable items and return with bid proposal.

9.24 Optional quotes required on following items:

- a. Boot type seatbelt retractor for outside belts only.

9.0 CHASSIS REQUIREMENTS: (continued)

9.24 Optional quotes required on following items: (continued)

- b. Air brake system to have service air and emergency air glad hand connectors installed at the left front portion of the truck cab at or near the bumper area. These glad hands shall be integrally connected with the air braking system to facilitate towing by our in-house tow truck which is also air brake equipped. Glad hand connectors shall be adequately protected and shielded. Location of the "service brake coupling" shall be on the left side (driver's side) in relation to the "emergency brake coupling" for standardization with other City owned units. 150

10.0 BODY REQUIREMENTS:

10.1 General -

- a. Body shall be all steel hi-tensile, 50,000 PSI yield (except for floor, which will be as stipulated in Item No. 10.3.a.)
- b. Capacity - 8 yard water level, 10 yard ends, provided with clear grade wood extension.
- c. Dimension (inside) - 13' long by 7' wide by 29" high (7.98 cu. yd. water level).
- d. All welds shall be continuous.

10.2 Understructure -

- a. Cross-members - 4" structural steel, 15" centers.
- b. Long-beams - 6" minimum.

10.3 Floor -

- a. Constructed of 3/16" T-1 steel, 100,000 lbs. yield.

10.4 Tailgate -

- a. Constructed of 10 gauge steel, double-acting type with horizontal reinforcements. Inner surface of the tailgate shall be level with the floor and have minimal gap when the tailgate is in the horizontal position. Tailgate release lever shall have safety chain.

10.0 BODY REQUIREMENTS: (continued)

10.5 Sides -

- a. Constructed of 10 gauge steel with full box top rails and sloped running boards.
- b. Floor to body sides shall be designed for easy clean-out with 2" radius curve.
- c. Side top rails will have clips in the center to give support to middle of side board extension.
- d. Body sides to have one (1) non-skid (grip strut) step located between front of body and first verticle brace on each side.
- e. Body sides to have one (1) stirrup type step (2 rung) adequately reinforced, located under body near front corner.
- f. Sides to be reinforced with at least four (4) five inch verticle box section braces.
- g. Pockets for side extentions shall be provided at front and rear of body sides.

10.6 Body ends -

- a. Constructed of 10 gauge steel.
- b. Incorporate full depth rear corner posts.
- c. Half cab shield installed with 6", plus or minus 1", clearance above cab.
- d. Headboard shall be reinforced to preclude bulging out. (Consult City for details.)
- e. Tail lights shall be recessed in or under the rear corner post for protection against damage as well as to keep lens clean; and also to be visible from the rear when towing trailers.

10.7 Dump body hoist -

- a. Pedestal mounted control levers (Ref. "Felstad" Control).
- b. Underbody hoist with sub-frame - Class 70, twin 7" cylinder, 2" diameter hard chrome plated piston rods (Ref. Hell Model #2724).
- c. All hoist wear points shall be designed for lubrication.
- d. Dump mechanism shall include a positive means to stop over travel while dumping, which may cause damage to the unit.

10.0 BODY REQUIREMENTS:

10.8 Hydraulic system -

- a. Hot shift PTO - Chelsea Series 27 - wired to operate in neutral and first gear only.
- b. Control levers for PTO and dump operation shall be designed and located for maximum operator convenience and efficiency.

10.9 Mounting -

- a. The hinge point of the bed and overhang are to be in accordance with operational needs. The party responsible for mounting the bed shall contact the Fleet Management Division prior to doing the work. (Phone (916) 4490-5241.)

10.10 Miscellaneous body equipment -

- a. Safety leg, plus indicator light when body is in up position installed to meet OSHA standards.

10.10 Miscellaneous body equipment - (continued)

- b. Trailer hitch - furnish and install a medium-duty type Pintle Hook, "A" frame reinforced, minimum 30,000 lbs. capacity, (Ref. Holland Model #PH-T-60AL-8) on one unit only. Hook shall be securely mounted on minimum 1/2" plate to rear of truck frame, adequately reinforced with bolt and positioned 30" to 34" above ground level; however, the lowest part of the hook assembly shall not be below the bottom of the main truck frame so as not to interfere with the City owned asphalt spreader.
- c. A "D" ring of adequate size and strength to accept a 1/2" safety chain and 1/2" chain grab hook.

11.00 OPTIONAL QUOTE REQUIRED ON FOLLOWING ITEM:

- a. Rigid type Pintle Hook with air operated plunger, 18,000 lbs. maximum vertical load, 66,000 lbs. maximum gross trailer weight. (Ref. Holland model T-650-0). 142