

SECTION 00010

ADVERTISEMENT FOR BIDS

**PANAMA CITY BEACH – “KNUCKLEBOOM TRASH LOADER AND DUMP BODY”**

This advertisement is for the proposed purchase of one (1) Knuckleboom Trash Loader and Dump Body. The Bidder shall provide all materials, equipment and labor necessary to supply the specified equipment.

**Specifications will be available on 28 July, 2015** and can be obtained via E-mail by contacting Sheryl Woodcock at [swoodcock@pcbgo.com](mailto:swoodcock@pcbgo.com) or may be picked up at the Public Works Office at 110 S. Arnold Road, Panama City Beach, Florida 32413. The bid must conform to Section 287.133(3) Florida Statutes, with respect to Public Entity Crimes.

Bids will be received until **2:00 p.m. Central Time, August 6, 2015** at **City of Panama City Beach, 110 S. Arnold Road, Panama City Beach, Florida** and will be opened and read publicly immediately thereafter. All Bids shall be submitted in an envelope clearly marked “Sealed Bid – **Panama City Beach “Knuckleboom Trash Loader and Dump Body”**” The City of Panama City Beach (“City”) reserves the right to reject any and all Bids. All Bids shall be firm (including all labor and material prices) for a period of 30 days after opening.

The City shall award the purchase order to the lowest responsive and responsible bidder, however, the City reserves the right to award the Contract to a Bidder who is not the lowest responsive and responsible bidder if the City determines in its reasonable discretion that another Bid offers the City a better value based upon the reliability, quality of service, or product of such other Bidder.

Each bidder must comply with all applicable state and local laws concerning licensing, registration, and regulations of contractors doing business in Florida.

Advertisement Dates: 28 July and August 4 , 2015

Notice to Publisher – Please forward the original “Proof of Publication” and the invoice to:

City of Panama City Beach  
110 South Arnold Road  
Panama City Beach, Florida 32413

## SPECIFICATIONS FOR KNUCKLEBOOM TRASH LOADER AND DUMP BODY

### INTENT:

It is the intent of these specifications to describe a hydraulically operated, telescoping knuckleboom trash loader to be used in the collection of oversize trash items such as discarded appliances, furniture, brush, leaves, building materials, etc. In this configuration, the loader is intended to be mounted directly behind the cab of a long wheelbase cab chassis, along with a trash dump body. This arrangement provides a complete, one man operated, turn-key system.

		COMPLIANCE ANSWER	
		YES	NO
<b>VEHICLE:</b>			
1.01	The recommended vehicle for this application has a minimum Gross Vehicle Weight of 33,000 lbs., a cab-to-axle dimension of 168 in, a minimum of 1,500,000 RBM frame rating, a minimum frame thickness of 11/32" and 76 in. of after frame.		
<b>PEDESTAL ASSEMBLY:</b>			
		YES	NO
2.01	Must be an open A-frame type to <u>allow flexing under repeated load shocks</u> . Total height <u>not to exceed</u> 7 ft. from mounting plate to top of pedestal/main boom connection point.		
2.02	Swing post to be single piece high strength <u>solid steel</u> (ASTM 4140) turning in (ASTM-D4020-81) cast nylon bearings. Welded spindle/head assembly is to be stress relieved prior to installation.		
2.03	Boom rotation to be accomplished by a direct drive 270 degree planetary gearbox with geroller hydraulic motor. Model Dinamic Oil RE 1523 / 250, with a maximum torque rating of 251,064 in. lbs. This enclosed gearbox eliminates the metal-to-metal wear found in open, exposed pinion and bull gear design. To prevent spindle bending moments from being transmitted to enclosed gearbox, the gearbox must be mounted by means of a torque arm assembly.		
<b>BOOM CONSTRUCTION:</b>			
		YES	NO
3.01	Main boom must be comprised of two ea., 4 in. x 8 in. x 3/8 in. thick high tensile steel tubes connected to each other only at their center line to allow a shock absorbing flexing action of the boom. <u>Main boom must have a minimum of 1,200 PSI down pressure on the main boom for compacting loads.</u>		
3.02	Tip boom to have an extendible/retractable telescopic section controllable from the operator's platform. Must have mechanical stops to prevent cylinder stress. The inner and outer sleeves of the telescopic section <u>must</u> be separated by replaceable cast nylon wear blocks on all sides to prevent metal-to-metal wear. Hydraulic hoses for the telescopic section must be enclosed in steel box for protection. <u>No exposed tip extension hoses shall be permitted.</u>		
<b>LIFTING CAPACITIES:</b>			
		YES	NO
4.01	Boom radius is measured from the center of rotation to the center of the bucket. Capacities shown must not exceed 85% of vehicle tipping moment, with machine level and outriggers fully extended. Weight of bucket and/or attachments to boom must be subtracted from lift capacities shown. (Bucket should weigh approximately 1,000 lbs.)		

4.02	Boom Radius	Lift Capacity		
4.02-1	10 ft.	7,100 lbs.		
4.02-2	16 ft.	4,400 lbs.		
4.02-3	20 ft.	3,200 lbs.		

**BOOM CONECTION POINTS:**

**YES NO**

5.01	Boom connection points must be equipped with replaceable cast nylon or bronze bushings and a 2 in. bolt with castellated nut to prevent spreading of the connection pivot point.		
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**TRASH BUCKET:**

**YES NO**

6.01	To be a special municipal trash bucket actuated by a <u>single</u> double-acting cylinder. The bucket shall be capable of continuous rotation with no need for physical stops. Bucket rotation to be accomplished by a continuous rotation bucket motor with 5,500 in. lbs. torque rating. <u>Bucket must have the capability to be rolled over on the load without damage to any components. This allows a maximum load and keeps boom height within acceptable limits. Bucket must also have a minimum reach of 9 feet below grade to allow pick up of items over bridges and in ditches.</u>		
6.02	The bucket must incorporate: <ul style="list-style-type: none"> <li>• a 3/16 inch smooth steel clamshell scoop for leaves and sand</li> <li>• a minimum of 5 ribs per side to handle branches, logs and appliances</li> <li>• a trample ram in the center for compressing trash in body</li> </ul>		
6.03	The bucket must be 4 ft. long with an opened width of 5 ft. between pickup blades. These blades must be high impact, tempered steel that form a reverse curve in the closed position to help prevent "scalping" and digging of grass lawns. <u>No hydraulic hoses below bucket rotator will be allowed.</u>		

**POWER SOURCE:**

**YES NO**

7.01	To be a transmission mounted power take off coupled directly to the hydraulic pump (no drive shafts).		
7.02	For vehicles with an automatic transmission, the power source shall be a "Hot Shift" PTO. "Hot Shift" automatically disengages the PTO when the truck is placed in gear, and reengages when the truck is placed back in neutral (ready for hydraulic operation). This eliminates the possibility of damage to the hydraulic components that could result if the operator drives the vehicle with the PTO in gear. Also provides for smooth engagement of PTO with no gnashing or grinding of gears.		
7.03	Must be equipped with overspeed protection (with the exception of a manual transmission). Over-speeding the pump causes the hydraulic fluid to overheat. Overspeed protection prevents damage to engine, hydraulic system, and major system components resulting from over-speeding the engine. <u>All electrical connections are to be chassis manufactures specifications.</u>		

**HYDRAULIC COMPONENTS:**

**YES NO**

8.01	<b>Reservoir:</b> 40 gallon baffled tank with <u>suction</u> and <u>return</u> filters and cutoff valves for easy servicing. Includes a sight gauge with a thermometer and a vent filter.		
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8.02	<b>Cylinders:</b> Double acting with chromed rods and aluminum pistons.		
8.02-1	<b>Main Boom:</b> 5 in. x 32 in. with a 2 ½ in. shaft.		
8.02-2	<b>Tip Boom:</b> 5 in. x 32 in. with a 2 ½ in. shaft.		
8.02-3	<b>Tip Extension:</b> 2 in. x 48 in. with a 1 ¼ in. shaft.		
8.02-4	<b>Bucket:</b> 4 in. x 12 in. with a 2 in. shaft.		
8.03	<b>Control Valves:</b> Gresen stack type with port reliefs		
8.04	<b>Safety Locking Valves:</b> Counter balance valves to be installed on boom and outrigger cylinders and check valves on outrigger cylinders to prevent a leakdown or collapse in case of a hydraulic hose rupture.		
8.05	<b>Pump:</b> Single Commercial Intertech P-20		
8.06	<b>Conductors:</b> Steel tubing and high tensile steel wire braided hoses, 4,000 PSI, 16,000 PSI minimum burst.		
8.07	<b>Pressure:</b> Main relief set at 2,400 PSI maximum.		
<b>ENGINE CONTROL:</b>		<b>YES</b>	<b>NO</b>
9.01	Engine is to be programmed for the proper RPM level and activated by a heavy duty switch at the operators station.		
<b>OPERATOR CONTROLS:</b>		<b>YES</b>	<b>NO</b>
10.01	<b>DUAL CONTROLS:</b> Control platform to be located directly behind cab at the same height as the top of the truck frame to allow operator safe access from the truck cab without ever having to touch the ground. This provides the operator with superior visibility relative to the material being handled. A single bank of control valves to be mounted at the mid-point of loader, with control handles accessible from the operator platform on either side of truck. Control handle pattern must be the same on both sides of the truck. Control handles must be mounted in a fashion so as not to need lubrication. A "Grip Strut" serrated steel walk platform is included.		
<b>OUTRIGGER STABILIZERS:</b>		<b>YES</b>	<b>NO</b>
11.01	Outriggers to be constructed with hydraulically powered telescoping rectangular tubing to prevent side loading and bending of cylinder shafts.		
11.02	Outriggers to be equipped with large steel pads to minimize damage to street. Outriggers must telescope out and down to reach a horizontal distance of 11 ft. 8 in. between outer edges.		
11.03	Outward stabilizer movement of each stabilizer to be powered by a hydraulic cylinder with a bore of 2 in. and a stroke of 20 in. The housing that accomplishes this outward movement must be separated by cast nylon bushings on all four sides to prevent metal-to-metal wear and to allow a greater area for grease.		
11.04	Downward movement to be powered by two hydraulic cylinders with a bore of 3 in. and a stroke of 22 in. These cylinders must be fully enclosed for protection.		
<b>PAINT:</b>		<b>YES</b>	<b>NO</b>
12.01	Loader must receive 1 coat of high-grade primer and 2 coats of high-grade enamel (manufacturers standard red).		
<b>MISCELLANEOUS:</b>		<b>YES</b>	<b>NO</b>
13.01	Includes boom up sensor with indicator light and audible alarm (light in cab with audible alarm warns the driver of excessive boom height), tail pipe extended past operator platform and back-up alarm.		
13.02	Dual strobe mounted on head of boom		
13.03	One safety parts/service manual to be included.		

13.04	One hour training videotape for operators/mechanics must be included.		
13.05	Current model to be bid must have been in production at least fifteen years. No exceptions.		

### 18 FOOT, 24 CUBIC YARD HIGH TENSILE TRASH DUMP BODY

<b>BODY FLOOR:</b>		<b>YES</b>	<b>NO</b>
14.01	Body floor to be a <u>single sheet</u> of 3/16 inch Hardox HX450 steel plate to resist dents. Floor to be 96 inch wide and 18 ft. long, continuously welded to the sides and headboard. <u>Multiple floor panels welded together are not acceptable.</u> Includes 3/16 inch x 10 inch wide steel reinforcement continuously welded between floor and each body side.		
<b>HEADBOARD:</b>		<b>YES</b>	<b>NO</b>
15.01	Headboard to be 10 gauge steel, 46-1/2 inch high, continuously welded to the floor and body sides. Top rail to be a formed 3 inch x 5 inch 1/4 inch steel plate.		
<b>SIDES:</b>		<b>YES</b>	<b>NO</b>
16.01	Sides to be 1/8 inch Hardox HX450 steel sheet to resist dents & reduce side flare out. Front portion to be 46-1/2 inch high by 96" long, angling to 64 inch for remainder of body and rear doors. The two side sheets must be connected with an overlapped joint, a butt joint will not be acceptable. Side construction must incorporate a bend near the base of the side for rigidity. The base of the side must have a 90 degree bend that wraps under the floor sheet. <u>No 90 degree angles on bottom of exterior body sides.</u> Top rail to be a formed 3-1/4 inch x 7 inch 1/8 inch Hardox HX450 steel plate to resist dents & reduce side flare out.		
<b>VERTICAL REINFORMCMENT:</b>		<b>YES</b>	<b>NO</b>
17.01	Side posts are not acceptable; the intent of this specification is to reduce weight, have a cleaner appearance with a smooth side and to allow the high tensile side material to flex and reduce dents.		
17.02	Rear corner post is to extend below the floor plate and connect to a beam that connects both of the corner posts to add rigidity to the back of the body so the door will not jam when the body is fully loaded.		
<b>CROSS MEMBERS:</b>		<b>YES</b>	<b>NO</b>
18.01	No cross members on the floor will be acceptable. The intent of this specification is to reduce weight and have a cleaner appearance. The rear corner posts are to incorporate a beam under the floor that connects the base of the two corner posts to add rigidity to the back of the body so the door will not jam when the body is fully loaded.		
<b>LONGITUDINAL BEAMS:</b>		<b>YES</b>	<b>NO</b>
19.01	Longitudinal beams to be 8 inch structural channel with 1/4 inch plate along the outer length of the beam.		
<b>BARN DOORS:</b>		<b>YES</b>	<b>NO</b>
20.01	Rear doors to be fitted on the rear of the body with a provision to swing completely around to the side and latch open for dumping.		
20.02	Each must have 3 hinges, with each hinge consisting of 3 steel plates, 2 ea. 5/8 inch plate welded on body, 1 each 3/4 inch plate welded on door, all connected with a 3/4 inch steel pin. A positive lock shall be provided at the top and bottom for locking doors closed.		

20.03	Door skins to be fabricated from 1/8 inch Hardox HX450 steel sheet and must have an all-around outside frame with braces in the center of the door.		
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**HYDRAULIC HOIST:**

**YES NO**

21.01	Hoist to be scissor type, dual cylinder with 23 ton capacity. Telescopic dump hoist not acceptable.		
21.02	Hoist must raise the body to a minimum 45 degree dump angle without the rest of the body touching ground.		

**LIGHTS, REFLECTORS, AND MUDFLAPS:**

**YES NO**

22.01	Lights, reflectors, and mud flaps must meet federal standards. There is to be an additional set of brake, stop and turn lights mounted on the upper rear corner post. Clearance lights are to be grommet mounted and shock resistant. There is also to be a set of amber led flashers in upper rear corner post.		
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**TARP**

**YES NO**

23.01	Body shall have a self-winding load cover. The heavy duty mesh tarp shall have a spring loaded roller assembly which requires no manual winding.		
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**PAINT:**

**YES NO**

24.01	Paint outside of body with 1 coat of high-grade primer and 2 coats of high-grade enamel. Inside of body must receive 1 coat of high-grade primer and 1 coat of high-grade enamel (manufactures standard blue).		
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**WARRANTY:**

**YES NO**

25.01	Three year major structural and one year hydraulic for <u>loader and body.</u>		
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**MISCELLANEOUS:**

**YES NO**

26.01	Safety bumper and body prop shall be provided.		
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SECTION 00030

**BID PROPOSAL FORM**

This proposal of \_\_\_\_\_ (hereinafter called "BIDDER"), organized and existing under the laws of the State of \_\_\_\_\_, doing business as \_\_\_\_\_ (a corporation, a partnership or an individual), whose Florida business license number is \_\_\_\_\_ is hereby submitted to the CITY OF PANAMA CITY BEACH (hereinafter called "OWNER").

In compliance with the requirements of the Advertisement for Bids, BIDDER hereby proposes to supply the equipment specified for the **Panama City Beach – Knuckleboom Trash Loader and Dump Body** in strict accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID, each party thereto certifies as to its own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

**BASE BID**

The Undersigned, as Bidder, hereby declares that he has examined the bid specifications and informed himself fully in regard to all conditions pertaining to the equipment to be supplied.

The Bidder proposes and agrees, if this proposal is accepted, to contract with the City of Panama City Beach for the unit prices listed, in full and complete accordance with the shown, noted, described and reasonably intended requirements of the specifications to the full and entire satisfaction of the City of Panama City Beach, Florida, with a definite understanding that no money will be allowed for extra work. Payment in full will be made to the supplier within 30 days of delivery and acceptance. The Bidder further proposes and agrees hereby to supply, and deliver, all specified equipment within 120 consecutive days from issuance of City Purchase Order.

**ADDENDUM ACKNOWLEDGMENT:**

I, the undersigned bidder, hereby acknowledge receipt of the following addenda:

ADDENDUM NO. \_\_\_\_\_ ADDENDUM NO. \_\_\_\_\_

**LUMP SUM BID PRICE:**

Unit price for furnishing **one (1) KNUCKLEBOOM TRASH LOADER AND DUMP BODY** in accordance with the contract Specifications as listed below:

<u>Description</u>	<u>Quantity</u>	<u>Bid Price</u>	<u>*Delivery Time</u>
Knuckleboom Trash Loader and Dump Body	1	_____	_____

\*Delivery time is for number of calendar days after receipt of purchase order.

**NOTE:**

1. BIDS shall exclude Florida sales tax. All other applicable taxes and fees shall be included.
2. BIDS shall be the total compensation to be paid by OWNER for the specified equipment.
3. The OWNER reserves the right to reject any and all bids received.



**BIDDER'S CERTIFICATION**

BIDDER certifies that it has thoroughly familiarized itself with the CONTRACT DOCUMENTS. Bidder certifies that the BID submitted is complete and is sufficient for the Bidder to provide fully operational and working equipment in accordance with the CONTRACT DOCUMENTS. Furthermore, BIDDER certifies its understanding that the OWNER shall not provide any labor, equipment or materials of any kind, which may be required for the supply and delivery of the equipment, unless otherwise specifically directed by OWNER. Likewise, BIDDER certifies that it shall provide all equipment, materials, labor and services necessary to supply the equipment in accordance with the CONTRACT DOCUMENTS whether or not such equipment, material, labor, or service is expressly identified. Such occurrences are deemed subsidiary obligations of the contract for which complete compensation is made under the Lump Sum. The failure or omission of any BIDDER to do any of the foregoing shall in no way relieve any BIDDER from any obligation in respect to its BID.

BIDDER:

\_\_\_\_\_

Name & Title (please print or type)

\_\_\_\_\_

Signature

\_\_\_\_\_

Business Name

\_\_\_\_\_

Address

\_\_\_\_\_

Business License #

\_\_\_\_\_

Phone Number

\_\_\_\_\_

Date

[END OF SECTION 00030]