



# DEPARTMENT OF PURCHASING AND CONTRACT COMPLIANCE

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National Purchasing Institute



Jerome Noble, Director

## ADDENDUM NO. 1 Request for Proposal – 07ITB55568-YC Manhole Covers, Frames and Grates Fulton County, Georgia

April 17, 2007

Dear Vendors:

This addendum is in reference to the ITB – 07ITB55568-YC  
Manhole Covers, Frames and Grates

1. **Section 6**, Scope of Work and Technical Specifications and **Section 7**, Pricing Form has been revised and attached.

For additional information regarding this addendum contact Malcolm Tyson, Assistant Purchasing Agent at (404) 730-5811.

The undersigned propose acknowledges receipt of this addendum by returning one (1) copy with their bid. Failure to return a signed copy of this addendum with your bid may render your bid to be non-responsive.

Except as provided herein, all terms and conditions in the bid referenced above remain unchanged and in full force and effect.

Sincerely,

  
Malcolm Tyson  
Assistant Purchasing Agent

### ACKNOWLEDGEMENT OF ADDENDUM

COMPANY NAME: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

**SECTION 6****Manhole bases, sections, cone, rings, frames, covers, risers, etc.**

Fulton County is soliciting bids from qualified vendors to provide sewer/manhole products on a contractual as, if and/or when required basis for a 12 month period effective from date of award with an option to renew for two (2) additional one year contracts, (2008/2009).

Products requested include manholes, manhole covers, frames, grade rings and extensions rings, base, riser and cone sections.

Quantities shown are estimates, by giving these quantities as estimates, Fulton County does not obligate itself to purchase any quantity whatsoever. Vendor agrees to sell to the county at the unit price bid regardless of actual quantity ordered. Unless otherwise specified, any reference to brand names, trade names, model numbers or other descriptions peculiar to specific brand name products is made to establish a required level of quality and functional capabilities. It is not intended to exclude other products of equal performance.

Comparable products of other manufacturers will be considered; however, in your offer of an "or equal" product you should clearly shown how the "or equal" product specifications satisfy the example requirements in our cited make and model number. It shall be the responsibility of the bidders to indicate the brand name and model or series number of the product offered and to furnish with their bid such specifications, catalog pages, brochures or other data that will provide an adequate basis for determining the quality and functional capabilities of the product offered.

The county reserves the right to request samples from any and all bidders prior to award. Failure to provide this data may be considered valid justification for rejection of bid.

Any and all substitutes bid must meet or exceed the following specifications.

**General Specifications**

All products must meet the requirements of State of Georgia, Department of Transportation (GDOT) standard specifications, latest edition and/or American Society of Testing and Materials (ASTM), American Association of State Highway and Transportation, Occupational Safety and Health Administration (OSHA), American Water Works Association or any combination, as specified by the County.

The supplier shall replace, free of charge, any product part that should become unserviceable under normal use for a period of one year from date of installation, provided such installation was properly made according to recommended procedure.

Bidder must be able to provide manufactured-to-fit pre-cast inverts in base sections

### **Steel, Iron & Ductile Products:**

Standard frames and covers - For paved areas, cast iron manhole frames and covers shall meet the requirements of ASTM A 48 for Class 30 gray iron and all applicable local standards. All castings shall be tough, close grained, smooth and free from blow holes, blisters, shrinkage, strains, cracks, cold shots and other imperfections. No casting will be accepted which weighs less than 95 percent of the design weight. Shop drawings must indicate the design weight and provide sufficient dimensions to permit checking.

For unpaved areas, manhole cover and frame shall be manufactured from ductile iron in accordance with ISO 1083. Covers and frames shall be hinged and incorporate a 90 degree blocking system to prevent accidental closure. The hinge box shall include a self-cleaning, dual wiper infiltration plug. Covers shall be one man operable using standard tools and shall be capable of withstanding a test load of 120,000 lbs. Frames shall be circular with a 24" clear opening and shall include a 360° mechanically attached, C-shaped elastomer seating gasket for infiltration control and traffic shock. Covers and frames must have at least five years of successful history in a minimum of five thousand installations. The frame depth shall not exceed 4 inches, and the flange shall incorporate bedding slots, bolt holes and lifting eyes. All components shall be black coated. Frame weight: 73 lbs. Cover weight: 122 lbs. Total weight 195 lbs.

All frames and covers shall have machined horizontal bearing surfaces. All manholes shall have standard frames and covers. Only solid manhole covers shall be accepted.

Flood zone frames & covers - Watertight frame & covers shall be equal to Pamrex or pre-approved alternate. Frames and covers shall a single unit consisting of frame with hinged cover and shall be manufactured form ductile iron in accordance with ISO 1083. Total weight shall not exceed 200 pounds for 24" and 250 pounds for 28". The cover shall open a minimum of 130° and incorporate a hinge blocking mechanism at 90° to prevent accidental closure. To prevent infiltration to the wastewater system, the frame and cover shall incorporate a "C" shaped gasket to seal between the frame and cover. The hinge box shall incorporate a plug to prevent infiltration through the hinge box opening. Lifting eyes shall be integral to the design to allow safe and efficient lifting and placement of frame and cover. A locking mechanism shall be available as an option to prevent the lid from opening in surcharging conditions and also as deterrence to vandalism. Bolt-down type covers shall not be considered equal due to their relative difficulty required to open and seal cover.

Steps: Manhole steps shall be polypropylene molded around a steel rod as detailed on the Drawings and shall be equal to products of M.A. Industries.

Manhole extension rings shall be fabricated of domestic A-36 steel with a minimum thickness of 3/4" for the inner ring and minimum of 1/2" for the outer ring. The riser system shall use three, 1/2" cone head set screws to anchor to the manhole frame. The manhole

adjustment ring shall fit the existing casting without interference and the manhole lid shall have a bearing on the entire surface of the inner ring to prevent rocking.

The lid shall be removable without binding. The inner and outer rings shall have a full circumferential weld to prevent differential movement between the inner and outer rings under traffic loads. The inner and outer ring shall be fabricated to +/- 1/16" concentricity.

The outer ring shall have an inside diameter no greater than 3/16" larger than the outside diameter of the manhole lid. All materials shall be bituminous asphalt coated. Riser rings shall be fabricated on a slope as required to conform to road contour. All welding shall be performed in accordance with AWS D1.5 Bridge Code b certified welders. Manhole extension rings shall be equal to East Jordan Ironworks.

### **Manholes and Precast Products**

All manhole components, i.e., base sections, riser sections, conical sections and transition sections (spacers) shall be pre-cast concrete.

Pre-cast reinforced concrete manholes shall be manufactured in accordance with ASTM C-478 and ASTM C-76, Latest Revision Class II, Wall B, Type II Portland Cement, 4,000 psi. Reinforcing steel shall conform to ASTM A-185. Walls shall be 8 inches minimum or as shown on the Drawings.

Manhole table shall have a flow channel made to conform in shape and carrying capacity to that of the sewers.

Pre-cast manholes shall have a minimum 28 day cure time before delivery to the County.

The minimum inside diameter of manholes shall be 48 inches with an opening of 24 inches at the top of the cone.

Transition slabs or cones which convert bases larger than four feet in diameter to four foot diameter risers shall be designed by the manhole manufacturer to carry the live and dead loads exerted on the slab.

Precast tops shall be of the following three types:

- a) Concentric cone
- b) Eccentric cone
- c) Flat slab top

Precast base sections shall be of the following two types:

- a) Base riser section and separate base slab

b) Base riser section with integral floor

The minimum wall thickness shall be one twelfth of the internal diameter of the riser or largest cone diameter.

The circumferential reinforcement in base sections, risers and conical top sections may consist of either one or two lines of steel, the total area per vertical foot of which shall be not less than 0.0025 times the inside diameter in inches. Flat slab tops shall have a minimum thickness of 6 inches for risers up to and including 48 inches in diameter and 8 inches for larger diameters. Slabs shall be reinforced with a layer of steel a minimum area of 0.12 in<sup>2</sup> per linear foot in both directions. Openings in flat slabs shall be additionally reinforced with a minimum of the equivalent of 0.20 in<sup>2</sup> of steel at 90 degrees. Straight rods used to reinforce openings shall have a minimum length equal to the diameter of the openings plus 2 inches.

The circumferential reinforcement in grade rings shall have an equivalent area of not less than 0.07 in<sup>2</sup> per vertical foot but not less than 0.024 in<sup>2</sup> in any one grade ring.

Base slabs or floors shall have a minimum length equal to the diameter of the opening plus 2 inches. Base slabs or floors shall be reinforced with a layer of steel with a minimum area of 0.12 in<sup>2</sup> per linear foot in both directions.

Supplier must be able to supply monolithic pre-cast invert systems for eight (8) inch pipe, when requested.

Placement of reinforcement: Where one line of circular reinforcement is used, it shall be placed in the center third of the wall. Where two lines of circular reinforcement are used, each line shall be so placed that the protective covering over the circumferential reinforcement in the wall of the section shall be 1 inch. Either the tongue or groove of the joint shall contain circumferential reinforcement equal in area to that of a single line within the wall of the section. The location of the reinforcement shall be subject, however, to the permissible variations in dimensions listed below.

In flat slab tops, the layers of reinforcement shall be placed near the bottom surface so that the protective cover over the reinforcement shall be 1 inch. Flat slab tops manufactured without a joint or other indication of the top or bottom of the slab shall be manufactured with two layers of steel reinforcement, one located near the bottom surface and one near the top surface so that the protective cover over each layer is 1 inch. The exposure of the ends of the reinforcement shall not be a cause for rejection.

In base slabs or floors, the layer of reinforcement shall be placed above the mid-point, and the minimum protective cover over the reinforcement shall be 1 inch.

Reinforcement of a given total steel area may be composed of two layers if the layers are not separated by more than the thickness of one cross member plus 1/4 inch. The two layers shall be tied together to form a single rigid cage. All other specification requirements such as laps, welds and tolerances of placement in the wall of the manhole, risers and tops, etc. shall apply to this method of fabricating a line of reinforcement.

**Longitudinal:** Each line of circumferential reinforcement shall be assembled into a cage that shall contain sufficient longitudinal bars or members, extending through the wall of the manhole bases, risers and conical tops, to maintain the reinforcement rigidly in shape and correct position within the form. The exposure of the ends of stirrups or spacers that have been used to position the cages during the placement of the concrete shall not be a cause for rejection.

**Laps, welds and spacing:** If the splices are not welded, the reinforcement shall be lapped not less than 20 diameters for deformed bars, and 40 diameters for plain bars and cold-drawn wire. The spacing center to center of adjacent rings of circumferential reinforcement in a cage shall not exceed 6 inches for manhole risers and conical tops. The continuity of the circumferential reinforcing steel shall not be destroyed during the manufacture of the manhole risers and tops.

**Joints:** The reinforced concrete manhole base and riser sections, excepting grade rings, shall be formed with male and female ends so that when the manhole, compatible with the tolerances given under "permissible variations". The joints shall be of such design as will permit placement without appreciable irregularities in the interior wall surface of the manhole.

The bidder shall list on a separate sheet of paper any variations from, or exceptions to, the conditions and specifications of this bid. This sheet shall be labeled "exceptions to bid conditions", and shall be attached to bid.

**Bid awarded will be made to the lowest responsible and responsive bidder. The quality of the articles to be supplied, conformity with the specifications, the suitability to requirements, delivery terms, conditions and any guarantee clauses shall be taken into consideration. Vendor shall provide material data sheets describing product in detail.**

Fulton County will have a minimum of ninety (90) days to process an award at the prices quoted. Issuance of a purchase order will bind the bid prices for the stated duration of the award.

## Manholes Covers, Frames and Gates – 07ITB55568-YC

## Bid Pricing Form

## SECTION 7

## PRICING FORM

Item #	Item Description	Manf. & model #.	Delivery (days)	Est. Qty.	Unit Price	Extended Price (qty. x price)
1.	Precast catch basin, per vertical foot			10		
2.	4" manhole grade ring, reinforced concrete, ea.			10		
3.	6" manhole grade ring, reinforced concrete, ea.			10		
4.	12" concrete riser (48" diameter) ea.			25		
5.	18" concrete riser (48" diameter) ea.			25		
6.	24" concrete riser (48" diameter) ea.			25		
7.	30" concrete riser (48" diameter) ea.			5		
8.	36" concrete riser (48" diameter) ea.			5		
9.	42" concrete riser (48" diameter) ea.			5		
10.	48" concrete riser (48" diameter) ea.			5		
11.	24" eccentric cone section, ea.			15		
12.	36" eccentric cone section, ea.			30		
13.	Base section, 48" diameter by 12" vertical			5		
14.	Base section, 48" diameter by 24" vertical			5		
15.	Base section, 48" diameter by 36" vertical			5		
16.	Base section, 48" diameter by 48" vertical			5		
17.	Steps per ASTM standard, per vertical ft.			10		
18.	24" manhole frame & cover, 450#			70		
19.	24" manhole cover, solid			5		
20.	24" Pamrex or equal, manhole frame & cover, 200# max for flood hazard areas			100		

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## Bid Pricing Form

21.	28" Pamrex or equal, manhole frame & cover, 250# max for flood hazard areas			5		
22.	Penta locking kit for 24" & 28" frame & cover			20		
23.	Handling key for locking kit			10		
24.	1" steel ring for adjusting manholes			200		
25.	1 ½" steel ring for adjusting manholes			200		
26.	2" steel ring for adjusting manholes			200		
27.	2 ½" steel ring for adjusting manholes			200		
28.	3" steel ring for adjusting manholes			200		
Total for items 1-28						