Date: January 11, 2012

Water & Gas Valve Box Parts
#12-0044
Simplified Bid

Please provide the City of Duluth quotes for Water & Gas Valve Box Parts per the attached specifications, description and/or list. Please mark your quote with the bid number and description. Quotes can be mailed to Purchasing, Room 100, City Hall, 411 West 1st Street, Duluth, MN 55802 or faxed to (218) 730-5922.

Quotes are to be received by 2 PM, Thursday, January 26, 2012. The City of Duluth reserves the right to split the award if beneficial to do so.

Do not include tax in your quote.
All quotes must be signed by the authorized company representative.

<table>
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<tr>
<th>Item No.</th>
<th>Qty</th>
<th>U/OM</th>
<th>Description</th>
<th>Unit Price</th>
<th>Total Price</th>
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<tr>
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<td>Valve Box Parts Per attached specs (See Next Page)</td>
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Vendor E-mail Address ___________________________ Freight Charges N/A

Name ___________________________
Addr ___________________________
_______________________________

By: ____________________________ (print title)

(signature) (tele#)
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<th>Item No</th>
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<tbody>
<tr>
<td>01</td>
<td>100</td>
<td>ea</td>
<td>Valve Box-C.I. #6 Coup (base)</td>
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<tr>
<td>02</td>
<td>100</td>
<td>ea</td>
<td>Valve Box C.I. 16” top section</td>
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<td>03</td>
<td>100</td>
<td>ea</td>
<td>Valve Box-C.I. 26” top section</td>
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<td>04</td>
<td>50</td>
<td>ea</td>
<td>Valve Box-C.I. Screw Type Extension 24” or 26”</td>
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<td>05</td>
<td>60</td>
<td>ea</td>
<td>Valve Box C.I. bottom section screw type 36” Will lock into #6 base</td>
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<tr>
<td>06</td>
<td>24</td>
<td>ea</td>
<td>Valve Box C.I. 14” Screw Type Extension</td>
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(See attached specs)

Note: All valve box parts shall be 5 ¼” cast iron screw type, US made.

Send all literature if bidding other than specified.

(initials)
9) Design of hydrant shall allow for removal of the main and waste valve seats without excavating or disturbing the ground.

10) Portions of the hydrant above the ground line shall be primed and painted chrome yellow. Coating below the ground line shall be according to standards.

11) A traffic flange and operating rod coupling shall be located not more than 2 inches above the ground line and be designed so that in the event of an accident or breaking of the hydrant above the ground line, the main valve will remain closed.

12) Lower flange on the nozzle section shall be the swivel type.

13) Hydrants shall be provided with outlets for drainage in the base or barrel, or between the base and barrel, unless the Special Provisions require that drain outlets be omitted or plugged.

14) Bolts and nuts below grade shall be stainless steel.

D) Valves
Valve sizes six inches (6") and smaller may be furnished in either gate or butterfly type. Valves eight inches (8") and larger shall be butterfly type exclusively.

1) Gate Valves (6" and smaller only)
Gate valves shall be manufactured and furnished in accordance with an approved pattern and shall conform to the requirements of AWWA C509 for resilient seated gate valves, and all gate valves must meet such supplementary requirements as may be stipulated in the Plans or Special Provisions and the provisions hereof. Unless otherwise specified, the valves furnished shall comply with the following supplementary requirements.

a) Gate valves shall be solid disc with resilient seating.

b) All valves shall be furnished with O-Ring stem seals.

c) Valves shall have a two inch square operating nut opening counter-clockwise.

d) All valves shall be of the non-rising stem type.

e) Each valve shall have mechanical joint ends complete with gasket, gland, and bolts. Bolts or valve flange shall be provided with means for preventing the bolt from slipping in the slotted holes.

f) The exterior of the valve shall be supplied with an epoxy coating. Zinc anode caps conforming to ASTM B-418 shall be installed on the bolts on all mechanical joint fittings. The anode size shall be regular.

2) Butterfly Valves (all sizes)
Butterfly valves shall conform to the requirements of AWWA C504, Class 150B unless otherwise specified, with manual actuator equipped with standard 2-inch square operating nut, split V type or O-ring stem seal and enclosed in a lubricating gear box. For buried installations, valves shall be equipped with a side-mounted actuator designed to accept a valve box. Valve disc shall be cast iron conforming to ASTM 125, Class B or ASTM A48, Class 40, alloy cast iron conforming to ASTM A436 or A439, or ductile iron conforming to ASTM A536. The exterior of the valve shall be supplied with an epoxy coating. They shall be furnished with mechanical joint ends and open counter-clockwise. Zinc anode caps conforming to ASTM B-418 shall be installed on the bolts on all mechanical joint fittings. The anode size shall be regular.

3) Valve Box
Valve Box shall be 5 1/4" cast iron screw-type, consisting of the following parts:
City of Duluth, Minnesota Public Works & Utilities Department - Engineering Division

<table>
<thead>
<tr>
<th>Cover</th>
<th>Stay-cut type, &quot;WATER&quot; cast thereon, with solid edges (no grooves or flutes on edge)</th>
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</thead>
<tbody>
<tr>
<td>Top Section</td>
<td>26&quot; length</td>
</tr>
<tr>
<td>Extension Section</td>
<td>30&quot; length</td>
</tr>
<tr>
<td>Bottom Section</td>
<td>30&quot; length</td>
</tr>
<tr>
<td>Base</td>
<td>#6 Round Base</td>
</tr>
</tbody>
</table>

All parts must be interchangeable with Bingham and Taylor #4906 and Tyler #5860. Valve box assemblies shall be manufactured in the United States or preapproved by the Engineer.

E) Water Service Pipe and Fittings

1) Branch Service Pipe of 3 inches or larger nominal diameter shall conform to the requirements for Water Pipe Materials and Fittings as set forth under the provisions of Section S-46.1.B of these specifications. Valves shall conform to the same requirements as water main valves. Tapping tee shall be included as required.

2) Tap Service Pipe less than 3 inches nominal diameter shall conform to the requirements of ASTM B88 for Seamless Copper Water Tube, Type K, Soft Annealed temper or High Density Polyethylene (HDPE) Water Pipe conforming to the requirements for Water Pipe Materials and Fittings as set forth under the provisions of Section S-46.1.B of these specifications.

3) Fittings for Copper Tubing shall be cast brass, having uniformity in wall thickness and strength, and shall be free of defects affecting serviceability. All threads for underground service line fittings shall conform to the requirements of AWWA C800. Unless specified, the fittings furnished shall comply with the following requirements:

a) Quarter (90°) bend corporation stop couplings and eighth (45°) bend corporation stop couplings shall be Mueller H-15068 and H-15063 respectively, or an approved equal. Couplings shall be provided with an inside copper service flare thread on one end and a copper tube flare nut on the other end.

b) Three-part union couplings for connecting copper tubing to copper tubing shall be Mueller H-15400 or an approved equal. Couplings shall be provided with copper tube flare nuts on both ends.

c) Pack joint straight couplings for connecting copper tubing to copper tubing if specified, shall be Ford C44-XX (as appropriate for the required size) or an approved equal. Both ends of couplings shall be pack joints, with split clamp joint nuts with stainless steel set screws.

d) Lead pack couplings for connecting extra strong lead pipe (excess) to flared copper tubing shall be Ford Q22-XX (as appropriate for the required size) or an approved equal. Couplings shall be provided with a split clamp joint nut with a stainless steel set screw on one end and a copper tube flare nut on the other end.

4) Corporation Stops shall be Mueller H-15000 or an approved equal. Inlet connection shall be a male tap end and shall have Mueller (cc) tapered threads conforming to AWWA Standard. Outlet connection shall be a copper service thread straight coupling connection suitable for use with ASTM B88 Type K copper service tubing and shall be provided with a copper tube flare nut.

5) Electrofusion Corp Saddles and Tapping Tees with Electrofusion Saddle shall be manufactured by Central Plastics Company or equal and shall conform to the requirements for Water Pipe Materials and Fittings as set forth under the provisions of Section S-46.1.B of these specifications.