

AMENDMENT #4



Project Name: UNIVERSAL WATER METERING PROGRAM FOR THE DISTRICT OF SPARWOOD

-Closing Date

The RFP will close at 2:00pm Local Time on Thursday, **June 24, 2010**.

- Notice to Bidders, paragraph 2.
- Section 2.18 Closing, paragraph 1.

-The Timeline has been adjusted as follows:

3.3 Timeline

Milestone	Date
Request for Proposals – Closing:	June 24, 2010
Contract Award:	July 05, 2010
Introductory Meeting with Council:	TBD
Substantial Completion:	TBD –or as per grant requirements (if any)
Contract Complete:	July 31, 2011 or sooner

-Water Basemap with water system expansion areas has been uploaded to BC Bid as a Suppliers Attachment

-Schedule "A-2", Item 8 – **Delete Description:** Installation of Meters 2"
Add Description: Installation of Meters 2" Commercial/Multifamily c/w Bypass

-Delete from Amendment #2 the following sentence: *All water meters must conform to AWWA C700 standard as most recently revised*

-Add the following to Section 3.2.3 Meters:

Please stipulate any variation from these specifications or preferences.

1. Preference may be given to the Proponent with water meter operating specifications and performance that meet or exceed applicable American Water Works Association (AWWA) C-700 **series** standards. (C700, C701, C702, C703, C704, C706, C707, C708, C710, C712, C713, C750)
2. Preference may be given to the Proponent with meters for either Mobile Radio Read or Fixed Area Network that have the transmitter installed on or near the meter or inside the meter box for applicable installations (residential/small commercial). Exterior transmitters requiring wall penetrations are not preferred.
3. All meters and systems shall record and transmit in cubic meters and record flow to 3 decimal places (to the nearest litre)
4. All meters shall have a unique serial number stamped, embossed or permanently affixed on the main case. This serial number, or a corresponding unique ID number, must be included in each transmitted reading.

5. Preference may be given to the Proponent who will furnish a certificate showing that each meter was tested for accuracy and that it complies with the accuracy and capacity requirements of the respective AWWA C-700 series standard.
6. Proponents must supply the output power of the RF transmitter along with reading range for a typical installation.
7. Proponents must supply the full flow range of the meter along with the corresponding accuracy for the entire flow range.
8. Proponents must supply the expected battery life of each RF transmitter. Preference may be given Proponents that provide the longest guaranteed battery life.
9. Preference may be given to the Proponent whose batteries are field replaceable (the replacement shall be demonstrated) and not require the removal of any silicone type insulation.
10. Preference may be given to the Proponent supplying an RF transmitter that does not require reprogramming if the battery discharges or disconnects before it is replaced.
11. Preference may be given to the Proponent with meters that have tampering protection, backflow detection, low flow and leak detection capabilities. Preference may be given to the Proponent with meters that will record time and date in addition to sending an alarm for each of the above mentioned occurrences.
12. Preference may be given to the Proponent with meters that have data logging capabilities. If so, proponents must supply information regarding data logging capacity, capabilities and features.
13. The meter register must be permanently sealed so that it is impervious to dust, dirt and moisture. It must operate underwater.

-Add the following to 3.2.4 Reading System & Software:

Please stipulate any variation from these specifications or preferences.

Mobile Radio Reading System:

1. The proponent shall be responsible to supply and install the Mobile Radio Reading system inside a District of Sparwood vehicle.
2. Preference may be given to the Proponent with a Mobile Radio Reading system that will provide a real time indication of which meters have been read as well as any meters that did not provide readings or have sent alarms notifications.
3. Preference may be given to the Proponent that can provide close proximity wireless transmission from the mobile collection device to the host computer. Otherwise, the mobile collection device must be portable and compact such that it can be transported easily. Preference may be given to the Proponent that supplies a completely portable Mobile Radio Reading system that can easily be transferred to another vehicle.

Fixed Area Network (FAN):

4. The FAN is comprised of transmitters, data collectors, communication system, data repository system and FAN software.

5. The FAN must be capable of reading all meters required in the District.
6. The FAN must be capable of reading in all areas serviced by the Districts water distribution system.
7. The FAN shall be capable of storing and/or recording the time and date when the transmitter reads the meter.
8. Any components of the FAN system exposed to the elements shall be reliable and capable of operating in harsh weather conditions (-40° C to 40° C).
9. In the case where the FAN operates on a licensed frequency bandwidth, the Proponent will include the cost of licensing fee in their submission and assist the District with application for licensing.
10. Preference may be given to the Proponent that supplies a conceptual map or description of the proposed FAN along with the operating range that it would be able to collect readings within the District.
11. Preference may be given to the Proponent who includes provisions for future network expansion and/or collector installation.

Data collection System:

12. Preference may be given to the Proponent with a data collection system that will immediately collect and categorize any alarms sent out by any water meters.
13. Preference may be given to the Proponent with a data collection system that will chart or graph consumption, alarm trends and historical data for a desired selection of water meters over a desired amount of time.
14. Preference may be given to the Proponent with a data collection system capable of storing at least 2 years of metering data for all meters within the District. This Data must be able to be exported into a workable digital format for long term record storage and analysis.

-Add the following to 3.2.5 Installations:

Please stipulate any variation from these specifications or preferences.

1. Each meter shall be installed horizontally or to manufacturer's recommendation such that the meter will retain maximum accuracy and efficiency once installed. Installations shall not adversely affect the meters specified accuracy.
2. Installation of meters 1-1/2 inches or less shall include all labour and materials required to complete the installation. Including, but not limited to pipes, fittings, carpentry material, access panels, meter boxes, and meter horns. All meters must be installed in an accessible location and any meter boxes or access panels must be sized such that regular maintenance, meter replacement and battery replacement can be performed within the meter box itself. If there is no interior shut off valve or it is not fully operational, the Proponent shall supply and install a new shut off valve at no extra cost. **Schedule A-2 Items 5-7**
3. The District of Sparwood does not require the metering of flow through fire suppression systems. Proponents shall only meter domestic supply, including any irrigation supply.

4. Meter installations 2 inches or greater that require bypasses shall include the cost of supplying and installing any required bends, fittings or lengths of pipe. Any extraordinary work above and beyond what could be expected for a standard bypass installation shall be considered eligible for extra work. Any extra work must be reviewed, negotiated and approved with the District prior to starting work that will be submitted as an extra. **Schedule A-2 Items 8-11**
5. Proponents shall submit with their RFP a cost to supply and install a prefabricated spool for meters 2" and greater that can quickly and easily be installed in place of the water meter with minimal down time. This would be utilized in the event that a bypass cannot reasonably be installed.
6. Proponents must assume that curb stops or interior shut off valves may not be in place or operational for some residential installations. A fast freeze or similar method of installation may have to be utilized. Mainline shutdowns or curb stop operation is a last resort and will require scheduling with the Districts Public Works staff. Mainline shutdowns will require multiple installations to be completed at once to have minimum impact. The Proponent will be responsible for any damage or delays relating to the operation of any District or privately owned valves.
7. Each Meter installation must be tested to confirm operation and reading transmission. Additionally, each meter installation must be pressurised and checked for leaks prior to completing finishing work and access panel/meter box installation.
8. Copper tube and fittings (i.e. soldered connections, compression unions, threaded unions, etc.) shall be in compliance with the latest edition of the Provincial Building Code. The tube and fittings shall comply with the provincial building code. Other nonferrous, ferrous and non-metallic pipes and fittings shall only be acceptable for transition adapters in cases where the existing piping is not copper tubing and all shall comply with the requirements of the Provincial Building Code.
9. For outside chamber or pit installations involving large diameter meters, the District only requires the supply of these meters. All other supply and installation work will be done by others.

-Delete the following from Section 3.2.7 Deliverables:

- *Record of Installation for each individual meter installed in the format included in this request as Schedule B, in addition to a database format in Excel similar to Schedule C. These records should be submitted as an Access database or PDF file or other format acceptable to the District, with an index complete with hyperlinks. This record should include installer, date installed, address, type and size of pipe, type and size of meter c/w serial number, additional pipe and fittings, installed location of meter and sensor c/w map and photo, record of inspection and testing of meter and fittings and a sign-off by homeowner accepting the meter.*

Replace with the following:

- *Record of Installation for each individual meter installed in a format approved by the District. The records must also be submitted as an Access database, PDF file or other format acceptable to the District, with an index complete with hyperlinks. This record should include installer, date installed, address, type and size of pipe, type and size of meter c/w serial and/or ID number, additional pipe and fittings, installed location of meter and sensor c/w location map and photos, record of inspection and testing of meter and fittings and a sign-off by homeowner accepting the meter.*