



August 26, 2014

TO: JD Kehrman, City Manager

From: Shawn Middendorf, Local Manager (Alliance Water Resources)

RE: **CITY CAPITAL PURCHASE**
Water Distribution System
Water Meters; sizes 5/8" – 6" & SS spools

With current water loss estimates averaging approximately 26%, older meters in the system need to be replaced to reduce water loss and recover lost revenues. The next group of meters targeted for replacement was installed in 1988, placing them in the 26 year age range. Mechanical internal meter parts wear over time causing inaccurate registration of water use. A small comparison study of meters that were recently replaced confirmed water loss estimates. A full scale water audit is being developed to better identify problem meters in the system. Also, spool pieces are necessary to compensate for different meter lay lengths. A spool is much more cost effective versus replacing a large meter setter.

Quotations as follows:

	<u>5/8" – 2"</u>	<u>2" – 6" & spools</u>	<u>Total</u>
Blue Springs Winwater	\$10,101.20	\$32,209.40	\$42,310.60
Neptune Technology Group, Inc.	\$13,074.50	No Bid	\$13,074.50
HD Supply Waterworks	\$15,815.60	\$39,796.75	\$55,612.35

At this time, I am requesting approval to purchase one hundred twenty nine water meters ranging in size from 5/8" through 6" and fifteen stainless steel spools from the low bidder, Blue Springs Winwater, for the amount of \$42,310.60. This is a budgeted item to be expensed from City funds budget line item 500-5-4401-234.

If you have any questions, please contact me.

Cc: Gary Johnson, file

Bid Specifications for water meters size five eighths inch (5/8") through two inch (2"): see attached list for sizes and quantities.
Meter shall meet or exceed the following specifications.

May 5, 2014

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
General				
Meters produced from an ISO 9001 manufacturing facility conforming to AWWA C700 latest revision for standard specs for cold water meters	✓			
Nutating disc type positive displacement magnetically driven	✓			
All meters shall contain a removable polypropelene plastic strainer screen located near the maincase inlet port, before the measuring chamber.	✓			
All meters shall be upgradeable to AMR or AMI systems without interruption to customer's service.	✓			

Comments:

6/16/14

Barbara Crust
Blue Springs Wmwater
816-224-5700
Terms: Net 30 days

Delivery - 4-8 weeks ARO
possibly sooner

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
Meter Body				
Size, capacity, & length shall meet AWWA C700 standard latest revision.	✓			
Maximum number of disc nutations shall not exceed AWWA C700 standard latest revision.	✓			
Meter maincases shall be made of a no-lead high copper alloy to meet ANSI/ NSF 61 standard.	✓			
Serial # shall be stamped between the outlet port of the maincase and the register.	✓			
Maincase markings shall be cast raised & indicate size, model, flow direction, & NSF 61 certification.	✓			
No-lead maincases shall be guaranteed free from manufacturing defects in workmanship & material for life of meter	✓			20 years or 2 1/2 million gallon

Comments:

Blue Springs Winwater

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
Measuring Chamber				
Measuring chamber shall be a 2 piece snap joint type with no fasteners.	✓			
Measuring chamber shall be made of a non-hydrolyzing synthetic polymer.	✓			
Control block shall be same material as measuring chamber, located on top of chamber and after the strainer.	✓			
Measuring chamber outlet port shall be sealed to maincase outlet port by means of an "O" ring gasket.	✓			
The flat nutating disc shall be a single piece made from a non-hydrolyzing synthetic polymer.	✓			
Nutating disc shall contain a type 316 stainless steel spindle.	✓			
Nutating disc shall be equipped with a synthetic polymer thrust roller located within the disc slot.	✓			
The thrust roller head shall roll on the buttressed track provided by the diaphragm.	✓			

Comments: _____

Blue Springs Wmwater

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
Encoder Register				
Encoder register shall provide at least a 9-digit registration at the meter.	✓			
Unit shall provide at least an 8-digit meter reading for transmission through a radio MIU.	✓			
Unit shall employ a visual LCD leak indicator.	✓			<i>only on 3G meters only</i>
Unit shall provide remote leak indication through an ASCII format to the data collection device.	✓			
Register shall provide reverse flow detection, days of no consumption, and number of days of leak or reverse flow.	✓			
Manufacturer shall guarantee reading obtained electronically matches LCD odometer reading on the register.	✓			
Register shall display flow rate (GPM) information.	✓			
Register enclosure shall be a roll-sealed glass & copper can design to protect against moisture in pit environment.	✓			
Register shall be attached to meter case by a bayonet attachment. Fastening bolts or nuts shall not be required.	✓			
A tamper proof seal pin shall be used to secure the register to the maincase.	✓			
Register shall be removable from the meter without disassembling meter body.	✓			
Register shall permit field installation and/or removal without taking the meter out of service.	✓			

Comments:

Blue Springs Winwater

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
Performance Criteria				
>95% at 1 gallon per mintue <i>5/8", 3/4", 1"</i>	✓			
>98.5% at 2.5 to 160 gallons per minute	✓			<i>1 1/2" to 2" only meters</i>
Maximum flow: 160 gallons per minute	✓			<i>1 1/2" to 2" only</i>
To ensure accuracy, include factory test tag certifying AWWA C700 latest revision for accuracy testing standards.	✓			

Comments: _____

Blue Springs Winwater

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
Manufacturer Guidelines				
Meters & meter parts shall be manufactured, assembled, & tested in the United States.		✓		Assembled & tested in USA - Registers made in Israel. meter bodies made in Mexico and USA
Manufacturers may be required to provide proof of where and what % of such assembly & testing through vendor.	✓			

Comments: _____

Blue Springs Winwater

Sizes and Quantities List

Size	Quantity	Unit Price	Subtotal
5/8" X 1/2'	100	*49.60	*4960.00
2"	10	*514.12	*5141.20

Plastic Btm

Alternate: CI Btm on 7/8 - *49.80 each

Total Price: *10,101.20
w/Plastic Btm on 7/8

*10,121.20
w/CI Btm on 7/8

Comments: _____

Blue Springs Winwater

Bid Specifications for water meters size two inch (2") through six inch (6"): see attached list for sizes and quantities.

May 5, 2014

Meters shall meet or exceed the following specifications.

Octave

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
General				
Meters shall be micro-processor based electronic capable of displaying total net consumption & flow rate in both forward & reverse flow direction.	✓			
Meters shall have no moving parts to ensure there is no damage from particulate matter.	✓			
Meters shall be suitable for operation from internal batteries that provide a 10 year operating life for meter sizes up to 12".	✓			
Meters shall provide an alarm at least 3 months prior to end of life to alert user of battery status, & shall be visible on the display.	✓			
Once battery is dead, display should still function to show final registered volume.	✓			
Accuracy in the normal flow range shall be compatible to AWWA C701, AWWA C702, AWWA C703, and AWWA C712 in forward & reverse flow direction.	✓			
Meters shall have a turn down ratio of 350:1. Lowest measured flow shall be 350th of max flow and accuracy shall be >95%.	✓			

Comments:

Blue Springs Wmwater

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
General Continued				
An accuracy of +/- 1.50% shall be achieved for normal flows starting at 1% of max flow and up to the stated max flow.	✓			
Meters shall have a sampling rate of at least 500ms and maintain the 10 year battery life at this sampling rate.	✓			
Meters must contain internal grounding rings to ensure electro-static charges that could affect performance is dissipated before entering the flow tube		✓		<i>Not a Mag Meter It is Ultra Sonic - is not required</i>
Meter performance shall have been verified on a fully traceable test facility that is internationally accepted (NAMA, NIMJ, NIST, or equivalent).	✓			
Certifications for above performance testing shall be available upon request.	✓			
Meters shall be suitable for maximum working temperature of 158 degrees Farenheight at pressures up to 230 psi or as limited by the flange rating.		✓		<i>Only meets 122°F</i>
Meter sizes 1.5" to 12" shall conform to lay lengths as specified by AWWA C701 latest revision	✓			
Installation lay lengths may require a spool to make up the difference. Only 316 stainless steel shall be accepted for this purpose.	✓			

Comments: _____

Blue Springs Wwewater

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
General Continued				
Flanged ends for 1.5" to 12" shall conform to ANSI B16.5 Class 125.	✓			
Wetted materials shall comply with the "No lead" rule effective beginning January 2014.	✓			
Electrode material shall be 316 stainless steel.		✓		<i>Ultra Sonic does not require electrode</i>
Meter bodies and display enclosures shall be constructed of durable 304 <u>316</u> stainless steel.			✓	<i>Exceeds</i>
Flow tube liner shall be made of high density polyethylene, so it is not susceptible to mineral buildup.		✓		<i>No liner on Octave meter</i>
Meter & register display shall be rated to IP68 (NEMA 6P) & be suitable for indefinite submergence to a depth up to 33 feet.	✓			
Meter shall be fully IP68 sealed at the factory & not require additional potting material at installation.	✓			
The sensor shall be suitable for installation in underground pipes without the need for a vault or pit.	✓			

Comments: _____

Blue Springs Winwater

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
General Continued				
A remote mounted display suitable for installation up to 200 feet from the sensor must be available & easily retro-fitted in the field for pit applications.	✓			
Remote mounted display must be able to provide pulse output capable of interfacing with external data loggers & AMR/AMI devices.	✓			
The remote display unit shall be protected to IP63 (NEMA 4P) resistant to water spray at a 60 degree angle.	✓			
There shall be independent totalizer displays to give net total and flow rate.	✓			
All volume totalizer values shall be backed up in the intelligent sensor for security.	✓			
In the event of meter failure, the final reading must be able to be retrieved from memory.	✓			
Meters shall be compatible with direct read, hand held scan reading, walk-by, drive-by, and fixed network radio frequency systems.	✓			
The meter output shall be easily changed out in the field without removal of the register. Also there should be no need to remove/replace potting material.	✓			

Comments:

Blue Springs Winwater

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
General Continued				
In the event meter output needs to be replaced, no programming should be necessary.	✓			
Meters shall be designed, manufactured and tested under ISO 9000 series of quality standards.	✓			
Meters must be guaranteed to be free from defects in materials & workmanship for a period of 5 years from the date shipment is received.	✓			
A list of references should be available upon request.	✓			

Comments:

Blue Springs Wastewater

Sizes and Quantities List

Size	Quantity	Unit Price	Subtotal
2" meters	8	\$1210.00	\$9680.00
3" meters	9	\$1520.00	\$13680.00
4" meters	1	\$2606.00	\$2606.00
6" meters	1	\$4279.00	\$4279.00
2" Spools	9	\$137.00	\$1233.00
3" Spools	5	\$115.00	\$575.00
6" Spools	1	\$156.40	\$156.40

10" length
 12" length
 14" length
 18" length
 2" x 7" spacer
 up to 12" length - length would need to be repriced
 up to 12" length - length would need to be repriced

Total Price: \$32,209.40

Comments: Quoting Master Meter -
Octave meter w/
#316 SS Body

Blue Springs Winwater

June 10, 2014

Attn: City Clerk
110 South Ash Street
Nevada, Missouri 64772

Re: Nevada Water Meters

We are pleased to provide the City of Nevada with pricing for your metering requirements. Descriptive literature and warranty information for the above Proposal is enclosed. To date, all Neptune T-10 residential and commercial meters are NSF-61 approved and certified to NSF/ANSI 61 Annex "F" and Annex "G".



All meters furnished under this proposal meet or exceed AWWA Standard Specifications, Latest Revision. Our terms are net 30 days. Delivery will be 30 days ARO.

Thank you for your interest in Neptune products. If you have any questions, please contact your local sales representative, Pat Prasifka, at 334-391-6128, or our Bid Department at 334-283-6555.

Sincerely,

Lawrence M. Russo
VP, Finance

LMR/jsk

Bid Specifications for water meters size five eighths inch (5/8") through two inch (2"): see attached list for sizes and quantities.

May 5, 2014

Meter shall meet or exceed the following specifications.

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
General				
Meters produced from an ISO 9001 manufacturing facility conforming to AWWA C700 latest revision for standard specs for cold water meters	X			
Nutating disc type positive displacement magnetically driven	X			
All meters shall contain a removable polypropelene plastic strainer screen located near the maincase inlet port, before the measuring chamber.	X			
All meters shall be upgradeable to AMR or AMI systems without interruption to customer's service.	X			

Comments:

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
Meter Body				
Size, capacity, & length shall meet AWWA C700 standard latest revision.	X			
Maximum number of disc nutations shall not exceed AWWA C700 standard latest revision.	X			
Meter maincases shall be made of a no-lead high copper alloy to meet ANSI/NSF 61 standard.	X			
Serial # shall be stamped between the outlet port of the maincase and the register.	X			
Maincase markings shall be cast raised & indicate size, model, flow direction, & NSF 61 certification.	X			
No-lead maincases shall be guaranteed free from manufacturing defects in workmanship & material for life of meter	X			

Comments: _____

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
Measuring Chamber				
Measuring chamber shall be a 2 piece snap joint type with no fasteners.	X			
Measuring chamber shall be made of a non-hydrolyzing synthetic polymer.	X			
Control block shall be same material as measuring chamber, located on top of chamber and after the strainer.	X			
Measuring chamber outlet port shall be sealed to maincase outlet port by means of an "O" ring gasket.	X			
The flat nutating disc shall be a single piece made from a non-hydrolyzing synthetic polymer.	X			
Nutating disc shall contain a type 316 stainless steel spindle.	X			
Nutating disc shall be equipped with a synthetic polymer thrust roller located within the disc slot.	X			
The thrust roller head shall roll on the buttressed track provided by the diaphragm.	X			

Comments: _____

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
Encoder Register				
Encoder register shall provide at least a 9-digit registration at the meter.	X			
Unit shall provide at least and 8-digit meter reading for transmission through a radio MIU.	X			
Unit shall employ a visual LCD leak indicator.	X			
Unit shall provide remote leak indication through an ASCII format to the data collection device.	X			
Register shall provide reverse flow detection, days of no consumption, and number of days of leak or reverse flow.	X			
Manufacturer shall guarantee reading obtained electronically matches LCD odometer reading on the register.	X			
Register shall display flow rate (GPM) information.	X			
Register enclosure shall be a roll-sealed glass & copper can design to protect against moisture in pit environment.	X			
Register shall be attached to meter case by a bayonet attachment. Fastening bolts or nuts shall not be required.	X			
A tamper proof seal pin shall be used to secure the register to the maincase.	X			
Register shall be removable from the meter without disassembling meter body.	X			
Register shall permit field installation and/or removal without taking the meter out of service.	X			

Comments: _____

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
Performance Criteria				
>95% at 1 gallon per mintue	X			
>98.5% at 2.5 to 160 gallons per minute	X			
Maximum flow: 160 gallons per minute	X			
To ensure accuracy, include factory test tag certifying AWWA C700 latest revision for accuracy testing standards.	X			

Comments: _____

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
Manufacturer Guidelines				
Meters & meter parts shall be manufactured, assembled, & tested in the United States.	X			
Manufacturers may be required to provide proof of where and what % of such assembly & testing through vendor.	X			

Comments: _____

Sizes and Quantities List

Size	Quantity	Unit Price	Subtotal
5/8" X 1/2"	100	\$93.95	\$9,395.00
2"	10	\$367.95	\$3,679.50

Total Price: \$13,074.50

Comments: _____

Bid Specifications for water meters size two inch (2") through six inch (6"): see attached list for sizes and quantities.

May 5, 2014

Meters shall meet or exceed the following specifications.

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
General				
Meters shall be micro-processor based electronic capable of displaying total net consumption & flow rate in both forward & reverse flow direction.				No bid
Meters shall have no moving parts to ensure there is no damage from particulate matter.				No bid
Meters shall be suitable for operation from internal batteries that provide a 10 year operating life for meter sizes up to 12".				No bid
Meters shall provide an alarm at least 3 months prior to end of life to alert user of battery status, & shall be visible on the display.				No bid
Once battery is dead, display should still function to show final registered volume.				No bid
Accuracy in the normal flow range shall be compatible to AWWA C701, AWWA C702, AWWA C703, and AWWA C712 in forward & reverse flow direction.				No bid
Meters shall have a turn down ratio of 350:1. Lowest measured flow shall be 350th of max flow and accuracy shall be >95%.				No bid

Comments: _____

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
General Continued				
An accuracy of +/- 1.50% shall be achieved for normal flows starting at 1% of max flow and up to the stated max flow.				No bid
Meters shall have a sampling rate of at least 500ms and maintain the 10 year battery life at this sampling rate.				No bid
Meters must contain internal grounding rings to ensure electro-static charges that could affect performance is dissipated before entering the flow tube				No bid
Meter performance shall have been verified on a fully traceable test facility that is internationally accepted (NAMA, NIMJ, NIST, or equivalent).				No bid
Certifications for above performance testing shall be available upon request.				No bid
Meters shall be suitable for maximum working temperature of 158 degrees Farenheight at pressures up to 230 psi or as limited by the flange rating.				No bid
Meter sizes 1.5" to 12" shall conform to lay lengths as specified by AWWA C701 latest revision				No bid
Installation lay lengths may require a spool to make up the difference. Only 316 stainless steel shall be accepted for this purpose.				No bid

Comments: _____

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
General Continued				
Flanged ends for 1.5" to 12" shall conform to ANSI B16.5 Class 125.				No bid
Wetted materials shall comply with the "No lead" rule effective beginning January 2014.				No bid
Electrode material shall be 316 stainless steel.				No bid
Meter bodies and display enclosures shall be constructed of durable 304 stainless steel.				No bid
Flow tube liner shall be made of high density polyethylene, so it is not susceptible to mineral buildup.				No bid
Meter & register display shall be rated to IP68 (NEMA 6P) & be suitable for indefinite submergence to a depth up to 33 feet.				No bid
Meter shall be fully IP68 sealed at the factory & not require additional potting material at installation.				No bid
The sensor shall be suitable for installation in underground pipes without the need for a vault or pit.				No bid

Comments:

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
General Continued				
A remote mounted display suitable for installation up to 200 feet from the sensor must be available & easily retro-fitted in the field for pit applications.				No bid
Remote mounted display must be able to provide pulse output capable of interfacing with external data loggers & AMR/AMI devices.				No bid
The remote display unit shall be protected to IP63 (NEMA 4P) resistant to water spray at a 60 degree angle.				No bid
There shall be independent totalizer displays to give net total and flow rate.				No bid
All volume totalizer values shall be backed up in the intelligent sensor for security.				No bid
In the event of meter failure, the final reading must be able to be retrieved from memory.				No bid
Meters shall be compatible with direct read, hand held scan reading, walk-by, drive-by, and fixed network radio frequency systems.				No bid
The meter output shall be easily changed out in the field without removal of the register. Also there should be no need to remove/replace potting material.				No bid

Comments: _____

Sizes and Quantities List

Size	Quantity	Unit Price	Subtotal
2" meters	8		No bid
3" meters	9		No bid
4" meters	1		No bid
6" meters	1		No bid
2" Spools	9		No bid
3" Spools	5		No bid
6" Spools	1		No bid

Total Price: _____ No Bid _____

Comments: _____

Bid Specifications for water meters size five eighths inch (5/8") through two inch (2"): see attached list for sizes and quantities.
 Meter shall meet or exceed the following specifications.

May 5, 2014

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
General				
Meters produced from an ISO 9001 manufacturing facility conforming to AWWA C700 latest revision for standard specs for cold water meters	X			
Nutating disc type positive displacement magnetically driven		X		OSCILLATING PISTON INSTEAD OF NUTATING DISC SEE SPEC SHEETS
All meters shall contain a removable polypropelene plastic strainer screen located near the maincase inlet port, before the measuring chamber.	X			
All meters shall be upgradeable to AMR or AMI systems without interruption to customer's service.	X			

Comments: SENSUS METER

HD Supply Waterworks, Ltd.

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
Meter Body				
Size, capacity, & length shall meet AWWA C700 standard latest revision.	X			
Maximum number of disc nutations shall not exceed AWWA C700 standard latest revision.				SEE SPEC SHEETS
Meter maincases shall be made of a no-lead high copper alloy to meet ANSI/NSF 61 standard.	X			
Serial # shall be stamped between the outlet port of the maincase and the register.	X			
Maincase markings shall be cast raised & indicate size, model, flow direction, & NSF 61 certification.	X			
No-lead maincases shall be guaranteed free from manufacturing defects in workmanship & material for life of meter	X			

Comments: _____

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
Measuring Chamber				
Measuring chamber shall be a 2 piece snap joint type with no fasteners.		X		SEE SPEC SHEET
Measuring chamber shall be made of a non-hydrolyzing synthetic polymer.	X			
Control block shall be same material as measuring chamber, located on top of chamber and after the strainer.				
Measuring chamber outlet port shall be sealed to maincase outlet port by means of an "O" ring gasket.	X			
The flat nutating disc shall be a single piece made from a non-hydrolyzing synthetic polymer.		X		
Nutating disc shall contain a type 316 stainless steel spindle.				SEE SPEC SHEET
Nutating disc shall be equipped with a synthetic polymer thrust roller located within the disc slot.		X		SEE SPEC SHEET
The thrust roller head shall roll on the buttressed track provided by the diaphragm.		X		SEE SPEC SHEET

Comments: _____

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
Encoder Register				
Encoder register shall provide at least a 9-digit registration at the meter.	X			
Unit shall provide at least and 8-digit meter reading for transmission through a radio MIU.	X			
Unit shall employ a visual LCD leak indicator.		X		SEE SPEC SHEET
Unit shall provide remote leak indication through an ASCII format to the data collection device.	X			
Register shall provide reverse flow detection, days of no consumption, and number of days of leak or reverse flow.	X			
Manufacturer shall guarantee reading obtained electronically matches LCD odometer reading on the register.		X		
Register shall display flow rate (GPM) information.	X			
Register enclosure shall be a roll-sealed glass & copper can design to protect against moisture in pit environment.	X			
Register shall be attached to meter case by a bayonet attachment. Fastening bolts or nuts shall not be required.	X			
A tamper proof seal pin shall be used to secure the register to the maincase.	X			
Register shall be removable from the meter without disassembling meter body.	X			
Register shall permit field installation and/or removal without taking the meter out of service.	X			

Comments: _____

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
Performance Criteria				
>95% at 1 gallon per minute	X			
>98.5% at 2.5 to 160 gallons per minute	X			
Maximum flow: 160 gallons per minute	X			
To ensure accuracy, include factory test tag certifying AWWA C700 latest revision for accuracy testing standards.	X			

Comments: _____

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
Manufacturer Guidelines				
Meters & meter parts shall be manufactured, assembled, & tested in the United States.	X			
Manufacturers may be required to provide proof of where and what % of such assembly & testing through vendor.	X			

Comments: _____

Sizes and Quantities List

Size	Quantity	Unit Price	Subtotal
5/8" X 1/2"	100	106.51	10651.00
2"	10	516.46	5164.60

Total Price: 15815.60

Comments: _____ PLEASE SEE SPEC SHEETS

ALLIANCE WATER RESOURCES
 NEVADA
 16517 S 1338 RD
 NEVADA MO 64772
 Telephone: 417-448-2761

HARRISONVILLE MO
 3001 Cantrell Rd
 Harrisonville MO 64701
 Telephone: 816-884-3525
 Fax: 816-884-4076

Attention: FOXIE

6/11/14 Bid ID: 3857240 METERS

Page 1

Line	Quantity	Sell Per	Description	Net Price	Extended Price
10	100	EA	SR11 5/8X1/2 ECR/WP 100G PBNT	106.51	10,651.00
20	10	EA	OMNI 2" R2 METER 100 GAL 17"LL W/STRNR, 4-WHEEL, TOTAL MODE	516.46	5,164.60
Subtotal:					15,815.60
Tax:					1,241.52
Bid Total:					17,057.12

Bid Specifications for water meters size two inch (2") through six inch (6"): see attached list for sizes and quantities.

May 5, 2014

Meters shall meet or exceed the following specifications.

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
General				
Meters shall be micro-processor based electronic capable of displaying total net consumption & flow rate in both forward & reverse flow direction.	X			
Meters shall have no moving parts to ensure there is no damage from particulate matter.	X			
Meters shall be suitable for operation from internal batteries that provide a 10 year operating life for meter sizes up to 12".	X			
Meters shall provide an alarm at least 3 months prior to end of life to alert user of battery status, & shall be visible on the display.	X			
Once battery is dead, display should still function to show final registered volume.	X			
Accuracy in the normal flow range shall be compatible to AWWA C701, AWWA C702, AWWA C703, and AWWA C712 in forward & reverse flow direction.	X			
Meters shall have a turn down ratio of 350:1. Lowest measured flow shall be 350th of max flow and accuracy shall be >95%.	X			

Comments:

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
General Continued				
An accuracy of +/- 1.50% shall be achieved for normal flows starting at 1% of max flow and up to the stated max flow.	X			
Meters shall have a sampling rate of at least 500ms and maintain the 10 year battery life at this sampling rate.	X			
Meters must contain internal grounding rings to ensure electro-static charges that could affect performance is dissipated before entering the flow tube	X			
Meter performance shall have been verified on a fully traceable test facility that is internationally accepted (NAMA, NIMJ, NIST, or equivalent).	X			
Certifications for above performance testing shall be available upon request.	X			
Meters shall be suitable for maximum working temperature of 158 degrees Farenheight at pressures up to 230 psi or as limited by the flange rating.	X			
Meter sizes 1.5" to 12" shall conform to lay lengths as specified by AWWA C701 latest revision	X			
Installation lay lengths may require a spool to make up the difference. Only 316 stainless steel shall be accepted for this purpose.	X			

Comments: _____

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
General Continued				
Flanged ends for 1.5" to 12" shall conform to ANSI B16.5 Class 125.	X			
Wetted materials shall comply with the "No lead" rule effective beginning January 2014.	X			
Electrode material shall be 316 stainless steel.	X			
Meter bodies and display enclosures shall be constructed of durable 304 stainless steel.	X			
Flow tube liner shall be made of high density polyethylene, so it is not susceptible to mineral buildup.	X			
Meter & register display shall be rated to IP68 (NEMA 6P) & be suitable for indefinite submergence to a depth up to 33 feet.	X			
Meter shall be fully IP68 sealed at the factory & not require additional potting material at installation.	X			
The sensor shall be suitable for installation in underground pipes without the need for a vault or pit.	X			

Comments:

	MEET	DOES NOT MEET	EXCEED	EXPLAIN DEVIATION
General Continued				
A remote mounted display suitable for installation up to 200 feet from the sensor must be available & easily retro-fitted in the field for pit applications.	X			
Remote mounted display must be able to provide pulse output capable of interfacing with external data loggers & AMR/AMI devices.	X			
The remote display unit shall be protected to IP63 (NEMA 4P) resistant to water spray at a 60 degree angle.	X			
There shall be independent totalizer displays to give net total and flow rate.	X			
All volume totalizer values shall be backed up in the intelligent sensor for security.	X			
In the event of meter failure, the final reading must be able to be retrieved from memory.	X			
Meters shall be compatible with direct read, hand held scan reading, walk-by, drive-by, and fixed network radio frequency systems.	X			
The meter output shall be easily changed out in the field without removal of the register. Also there should be no need to remove/replace potting material.	X			

Comments: _____

Sizes and Quantities List

Size	Quantity	Unit Price	Subtotal
2" meters	8	1477.75	11822.00
3" meters	9	2070.00	18630.00
4" meters	1	2318.85	2318.85
6" meters	1	3730.00	3730.00
2" Spools	9	178.00	1602.00
3" Spools	5	258.50	1292.50
6" Spools	1	401.40	401.40

Total Price 39796.75

Comments: _____

ALLIANCE WATER RESOURCES
 NEVADA
 16517 S 1338 RD
 NEVADA MO 64772
 Telephone: 417-448-2761

HARRISONVILLE MO
 3001 Cantrell Rd
 Harrisonville MO 64701
 Telephone: 816-884-3525
 Fax: 816-884-4076

Attention: FOXIE

6/11/14 Bid ID: 3857286 EVO

Page 1

Line	Quantity	Sell Per	Description	Net Price	Extended Price
10	8	EA	2'' EVOQ4 17'' USG MAG METER W / MODULE W/25' ILC	1,477.75	11,822.00
20	9	EA	3" EVOQ4 ENCODER USG METER W/ REP BATTERY & ITRON ILC 25'	2,070.00	18,630.00
30	1	EA	4 EVOQ4 MAG METER USG W/30' EN C CABLE	2,318.85	2,318.85
40	1	EA	EVOQ4 AMCO 6" ELECTROMAGNETIC METER USG W/ENCODER OUTPUT CABLE 25'	3,730.00	3,730.00
60	9	EA	2 SS SPOOL	178.00	1,602.00
70	5	EA	3 SS SPOOL	258.50	1,292.50
80	1	EA	6 SS SPOOL	401.40	401.40

Subtotal: 39,796.75

Tax: 3,124.04

Bid Total: 42,920.79