AquaWorks DBO, Inc.
3252 Williams Street
Denver, Colorado 80205

(303) 477-5915
www.aquaworksdbo.com
info@aquaworksdbo.com

Ms. Anna Mauss, P.E.
Colorado Water Conservation Board
1313 Sherman Street, Room 718
Denver, CO 80203

May 23, 2018

Re: Arabian Acres Metropolitan District – Loan Feasibility Study

Dear Ms. Mauss,

On behalf of the Arabian Acres Metropolitan District, I am pleased to submit the attached Loan Feasibility Study to the Colorado Water Conservation Board. This study is intended to support the district's application to the Water Project Loan Program for the implementation of an automatic meter reading system.

The existing manually read water meters within the district have reached the end of their design life; they are antiquated, time consuming to read, and not believed to measure water flow accurately. Further, the locations of the meters do not allow the district to recoup the costs for water losses occurring in the privately owned water laterals. The district is proposing installing new meters upstream of the laterals. The new meters should improve the financial health of the district by increasing the volume of water it sells and decreasing water losses by encouraging homeowners to replace leaking laterals.

The district and AquaWorks DBO look forward to working with you during the loan qualification process. Please let us know if we can provide any additional information to support the application.

Sincerely,
AQUAWORKS DBO, INC.

Adam Sommers, P.E., AICP

cc. Arabian Acres Metropolitan District

Colorado Water Conservation Board
Loan Feasibility Study
Automatic Meter Reading System Implementation
May 2018

AquaWorks DBO, Inc.
3252 Williams Street
Denver, CO 80205
(303) 477-5915

Arabian Acres Metropolitan District
c/o Metropolitan District Management
23005 Whispering Woods
Golden, CO 80401

Unincorporated Teller County, Colorado
PWSID #CO 0160075

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FIGURES

1. EXECUTIVE SUMMARY

The Arabian Acres Metropolitan District provides potable water service to the Arabian Acres subdivision and Trout Haven Estates Filings 1, 3, 4, and portions of Filing 2. The district currently serves 140 residential and 5 commercial taps for a population of approximately 392 people.

The district has faced considerable challenges over the past few years. These difficulties include providing reliable service with an approximately 40-year-old, poorly constructed distribution system that leaks considerably and lacks adequate flow measurement for potable water production and consumption.

The district's financial condition is improving, but it is not in a position where it can implement infrastructure improvements without external funding assistance. The financial condition of the district is impacted by the district not billing for all the water it treats and sells, maintaining affordable water rates it charges the community, the high cost to purchase water hauled from offsite to make up for the water loss, and mismanagement by a previously contracted district manager.

The improvements proposed within this application consist of an automatic meter reading (AMR) system by Sensus, new meter pits, installation hardware, a drive-by meter read base station, and software. The new meters will improve the financial position of the district in two ways. The district will be able to charge for more of the water it produces and reduce the amount of water lost in the distribution system.

The engineer's opinion of probable costs for this project is $398,817. The district is seeking to apply for a loan from the Conservation Board for this amount. The district will also be seeking a DOLA Energy Impact Assistance Fund Grant for 50% of the project cost. The amount of the Conservation Board loan will be reduced by any grant funding it receives from DOLA. Improvements can be completed approximately 150 days from the time funding is available.

2. FEASIBILITY STUDY REQUIREMENTS

2.1 PURPOSE

The Arabian Acres Metropolitan District's original treatment and distribution systems were constructed between 1972 and 1979. Water loss is a constant and persistent issue for the district due to the age of the system, materials used to construct the distribution system, bury depth of the water lines, condition of water laterals, and the unreliable/antiquated manually read water meters. Water loss in the water mains is addressed by the district's operator and is believed to contribute only to a small portion of the overall water loss as the operator proactively monitors the distribution system for leaks. The majority of the water loss is believed to occur in the existing water laterals between the district's water mains and the individual homes. Further, most of the water meters are thought to be unreliable. It is believed that the district is not billing for all the water it is entitled to because of the condition and inaccuracy of the meters.

Installing a new AMR system will improve the health of the district on several fronts:

- Water meters are located inside of the homes. Water laterals are privately owned and the cost for water loss occurring in the laterals should be the responsibility of the individual homeowners. However, the water meters are located downstream of the losses in the laterals. Losses in the laterals are therefore not measured by the water meters. This project will locate the new water meters upstream of the laterals and therefore be able to measure and bill for any losses occurring in the laterals. Homes with significant water consumption will receive higher water bills, which will incentivize homeowners to investigate the cause of the unexpected water loss and to repair their service laterals if necessary.
- Water meters will become less accurate and reliable as they age, meaning the district will be able to bill even less accurately over time.
- New water meters will be installed at each of the district's wells. This will allow the operator to compare the amount of raw water it produces to the amount of water it sells to quantify the water loss through the treatment and distribution systems and locate any unexpected areas where water loss is occurring.
- Manual meters are only read every other month. Significant water loss events, such as a frozen pipe in one of the unoccupied homes or a substantial leak in a lateral, may not be noticed until the meter is read and the amount of consumption is determined. An AMR system will be read more frequently and will alert the operator sooner to a water loss event, including notifying the operator of unusual flow rates through the meter, which is a sign of a plumbing issue inside a home.

Installing an AMR system will therefore increase the amount of water the district sells and decrease the amount of water it loses between the treatment plants and individual homes.

2.2 STUDY AREA DESCRIPTION

The district currently services most of Arabian Acres (229 lots) and some of Trout Haven Estates (169 lots). Not all lots are developed and have a tap from the district. The district has 140 residential taps and 5 commercial taps over a service area of approximately 0.85 square miles. It is anticipated that the boundaries of the current service area will remain unchanged for the next 20 years. Growth within the service area over that time is anticipated to be minimal. The district has seen stagnant growth over the past decade. The full development of the total 398 lots is not probable because many homes are located on more than one lot.

Consumers in the district are predominantly single-family residences. Many of the residences are premanufactured or mobile homes. Due to variable availability of water in the fractured granite water source, the potential for water service outages, and the high cost for the district to haul water, the residents have become very efficient water users.

The project is located in unicorporated Teller County. The nearest incorporated town, Woodland Park, is approximatly 11 miles away. The center of the District is located at 38° 55′ 04″N, 105° 13′ 37″W.

Figure 1: Vicinity Map

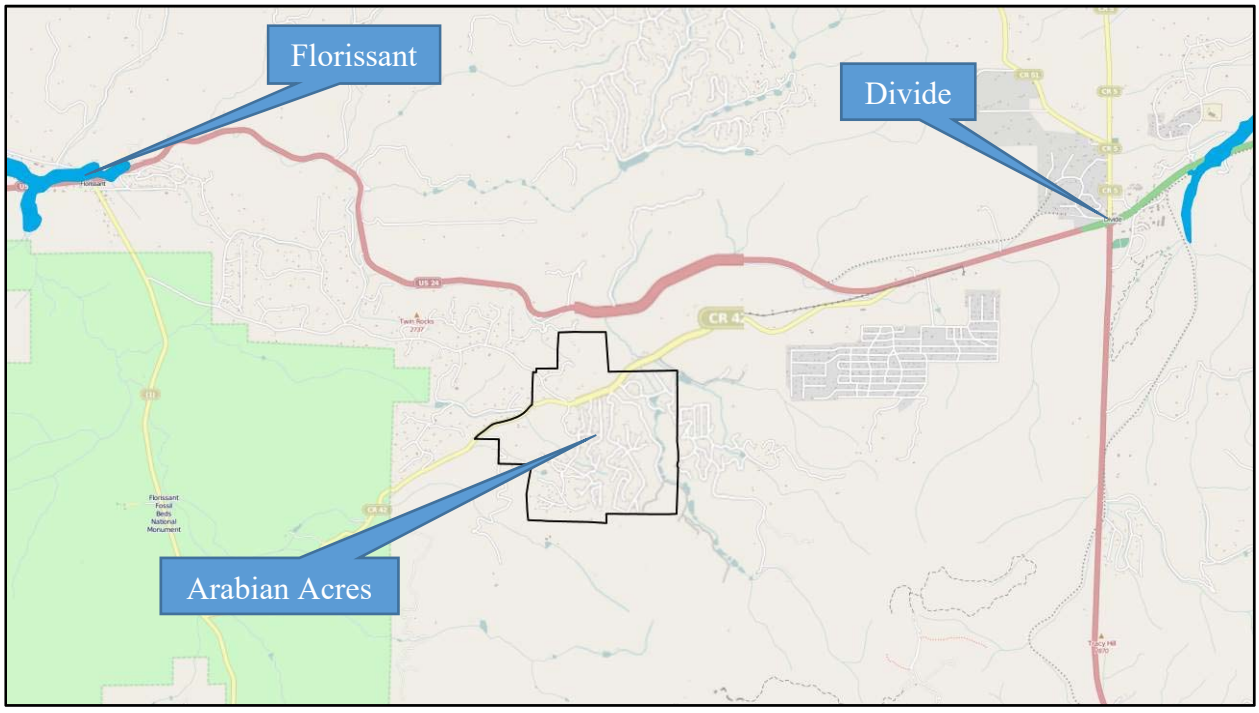
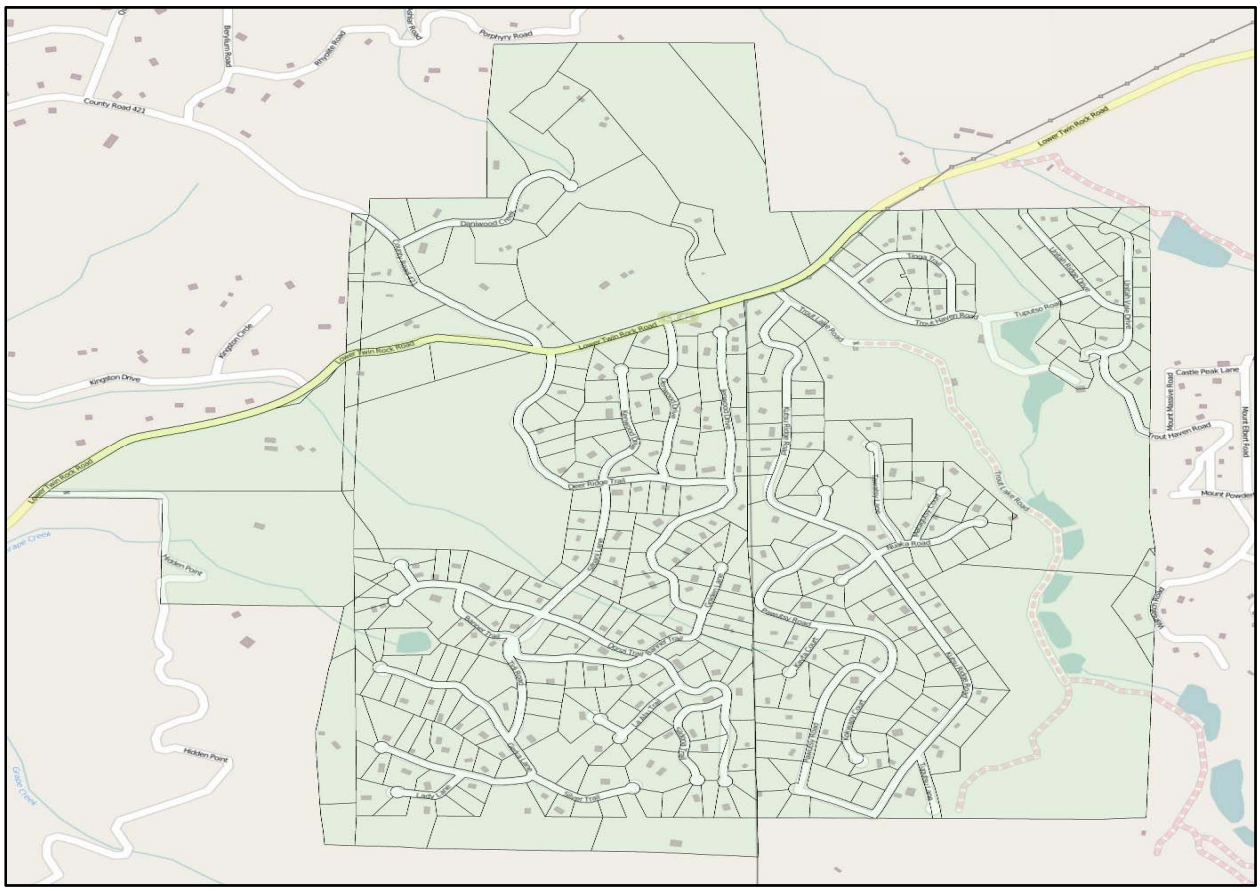


Figure 2: System Map



2.3 PREVIOUS STUDIES

The following is a list of previously completed studies reviewed by AquaWorks DBO during the development of this Loan Feasibility Study:

- Arabian Acres Water Company Water System Appraisal (2002)
- Arabian Acres Metropolitan District Service Plan (2002 & Amended 2009)
- Water System Evaluation and Master Plan (September 2002)
- Capital Improvement Plan for Fire Flow System
- Water System Improvements Preliminary Engineering Report (2011)
- Arabian Acres Rules & Regulations with Design Standards (2013)
- Distribution System Improvement Project Preliminary Engineering Report (2014)

2.4 SPONSOR

The sponsor for this project will be the Arabian Acres Metropolitan District. The district is a quasi-municipal governmental entity formed in 2002 and governed by a five-member board of directors operating under the authority of Title 32 of the Colorado Revised Statutes. Day-to-day activities are performed by a contracted district manager, Judy Bertrand of Metropolitan District Management. The system's Operator in Responsible Charge is Lynn Willow.

2.5 WATER DEMANDS & WATER RIGHTS

The proposed project will not increase the water consumed by the district or increase demand. As such, no adverse impact to the district's existing water rights is anticipated. Details of the water rights decree are included in Case No. 94CW281. AquaWorks DBO has records for retail delivery of water for the following years:
2017 (first half of year): 2,201,225 gallons/6.8 acre-ft
2016: 3,208,520 gallons/9.8 acre-ft
Records for 2011-2015 are not reliable
2010: 4,657,000 gallons/14.3 acre-ft
2009: 4,560,500 gallons/14.0 acre-ft
2008: 4,919,400 gallons/15.1 acre-ft
2007: 4,787,600 gallons/14.7 acre-ft
2006: 4,939,900 gallons/15.2 acre-ft

2.6 ANALYSIS OF ALTERNATIVES & SELECTED ALTERNATIVE

A Primary Engineering Report completed in 2014 by AquaWorks DBO analyzed 1) replacing the meters with new manually read water meters in combination with the district replacing the

homeowners' water laterals where needed and 2) installing a new AMR system with either drive-by data or networked data acquisition. Cell service is limited within the district boundaries, making networked data acquisition not a feasible option.

The selected alternative identified in the Primary Engineering Report as well as a subsequent capital improvement plan by AquaWorks DBO recommends the implementation of the AMR system with drive-by data collection because it will result in the most desirable cost/benefit outcome for the district. Details of the proposed equipment are included in the data sheets found in the Appendix.

2.7 COST ESTIMATE:

Table 1 shows an engineer's opinion of probable costs to install one hundred forty-five 3/4" and seven 1" water meters with pits:

Table 1: Cost Estimate

Install New Smart Water Meters			**Cost:**	**$**	**389,817**
Based on 145 Meters			**Cost per Meter:**	**$**	**2,688**
(AMR) Hardware, Software, 145 Meters (138 × 3/4" + 7 × 1")	1	Each	$ 56,753	$	56,753
Meter Pits	145	Pits	$ 800	$	116,000
Annual Support (After First Year)	1	Year	$ 2,200		
Excavation Cost Per Pit	145	Unit	$ 700	$	101,500
Installation Cost Per Meter	145	Unit	$ 100	$	14,500
Contractor Overhead & Profit	*10%*			*$*	*28,875*
Design Engineering & Permitting	*10%*			*$*	*28,875*
Bidding, Grant Administration, & Construction Engineering Consulting	*5%*			*$*	*14,438*
Contingency	*10%*			*$*	*28,875*

Costs to operate and maintain the meters will decrease once the improvements are operational. Currently, the operator must manually read each meter. The new system will allow him to gather the same information by driving the roads within the district.

2.8 IMPLEMENTATION SCHEDULE:

The project could be implemented within 150 days of receiving funding commitments. The project can proceed immediately to bidding and construction once funding is received as regulatory approvals are not needed for the water meters. Time will be needed to advertise the project, follow

bidding procedures, sign the agreement with the contractor, order/procure the equipment, and install the system.

2.9 IMPACTS

Unwanted impacts associated with the proposed project are thought to be minimal. The majority of the work involves installing new meter pits outside of the road's traveled way. New meters will then be installed inside of the meter pits. Traffic may be minimally affected during the installation of the meter pits.

2.10 INSTUTIONAL FEASIBILITY

Implementation of this project should be well received by the community and practicable to install. The community is aware that in the long term enough revenue needs to be generated to operate and maintain the system. Reducing water loss while increasing the volume of water sold will be the most palatable way to reduce costs while fairly assessing water use costs. The permitting for this project is minimal as work will not be completed in wetlands or a floodplain, nor will it require Colorado Department of Public Health and Environment design approval.

2.11 FINANCIAL PLAN

The district is faced with a series of challenges with respect to maintaining its existing treatment and distribution systems. The ability to self-fund the recommended improvements based on the number of taps, geographic size of the district, linear feet of existing line, and condition of the existing infrastructure, as well as the ability to assume additional debt without funding assistance, is not realistic.

The improvement that will result in the most favorable cost-benefit ratio to the district will be the installation of the new smart water meters. The engineer's opinion of probable cost for this work is $389,817. The cost of this work, when compared to the overall cost of the recommended improvements in the capital improvement plan, is manageable. Because this work will result in two benefits, increased water billings and decreased water loss, the payback for the costs will be favorable to the district.

The district will be applying for a DOLA Energy Impact Assistance Fund grant concurrent with making this loan application. In the event an EIAF grant is obtained, the DNR loan would be reduced by the amount of the EIAF grant award.

2.12 CONCLUSIONS AND RECOMMENDATION

It is recommended that the district pursue implementing an AMR drive-by meter system consistent with the findings of the capital improvement plan. Funding assistance for the improvements should be sought with the Water Conservation Board Loan. The loan amount could potentially be reduced if a Department of Local Affairs grant is obtained for the project.

APPENDIX – SUPPLEMENTAL INFORMATION

- Loan Application Form
- Sensus Data Sheets
- 24" × 36" System Map
- 2015 District Audit
- 2016 District Audit
- Statement of Net Position 2014 & 2015
- Statement of Net Position 2015 & 2016
- Statement of Net Position 2016 & 2017

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Water Project Loan Program

Application Type

☐ Prequalification *(Attach 3 years of financial statements)* ☑ Loan Approval *(Attach Loan Feasibility Study)*

Agency/Company Information

Company / Borrower Name: Arabian Acres Metropolitan District

Authorized Agent &Title: President, Board of Directors

Address: 23005 Whispering Woods, Golden, CO 80401

Phone: ( ) | Email:

Organization Type: ☐ Ditch Co, ☑ District, ☐ Municipality ☐ other: _____ | Incorporated? ☐ YES ☐ NO

County: Teller | Number of Shares/Taps: 145

Water District: Arabian Acres | Avg. Water Diverted/Yr 6.906 acre-feet

Number of Shareholders/Customers Served: 392 | Current Assessment per Share $_____ (Ditch Co)

Federal ID Number: | Average monthly water bill $ 180 (Municipality)

Contact Information

Project Representative: Judy Bertrand, District Manager

Phone: (303) 704-9438 | Email: judy@metro-district.com

Engineer: Adam Sommers, P.E. c/o AquaWorks DBO, Inc.

Phone: (303) 477-5915 | Email: adam@aquaworksdbo.com

Attorney:

Phone: ( ) | Email:

Project Information

Project Name: Potable Water Automatic Meter Read System Implementation

Brief Description of Project: (Attach separate sheets if needed)

Implementation of a drive-by automatic meter read system consisting of Sensus water meters, new meter pits, installation hardware, meter read base station, and software. Other costs below include equipment costs and project contingency.

General Location: (Attach Map of Area)

See Loan Feasibility Study

Estimated Engineering Costs: $43,313 | Estimated Construction Costs: $144,875

Other Costs (Describe Above): $201,629 | Estimated Total Project Costs: $398,817

Requested Loan Amount: $398,817 | Requested Loan Term (10, 20, or 30 years): 10 Years

Project Start Date(s) Design: _____ Construction: _____

Signature

Jennifer J Waller - President 5/16/18

Signature / Title Date

Return to: Finance Section Attn: Anna Mauss
1313 Sherman St #718
Denver, CO 80203
Ph. 303/866.3449
e-mail: anna.mauss@state.co.us

iPERL™ Water Management System

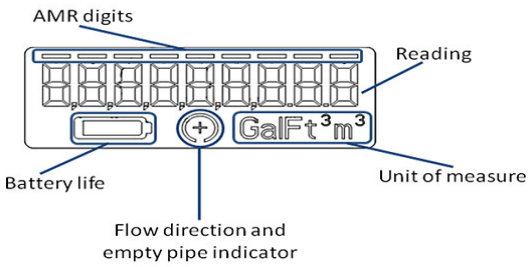
Electromagnetic Flow Measurement System

Description

5/8” (DN 15mm), 3/4” (DN 20mm) and 1” (DN 25mm) Sizes

With no moving parts, the Sensus iPERL water management system is based on innovative electromagnetic flow measurement technology. The iPERL system family has an operating range of 0.03 gpm (0.007 m^3/hr) @ 95% minimum to 55 gpm (12.5 m^3/hr) @ 100% ± 1.5% registration of actual throughput.

Electronic Register LCD Display



Features

CONFORMANCE TO STANDARDS

The iPERL system far exceeds the most recent revision of ANSI/AWWA Standard C-700 and C-710 for accuracy and pressure loss requirements. All iPERL systems are NSF/ANSI Standard 61 Annex F and G compliant and tested to AWWA standards.

PERFORMANCE

The patented measurement technology of the iPERL system allows enhanced accuracy ranges at both low and high flows and perpetual accuracy over the life of the product over the full measurement range when installed horizontal, vertical or diagonal.

CONSTRUCTION

The iPERL system is an integrated unit that incorporates an electronic register and measuring device encased in an external housing. The measuring device is comprised of a composite alloy flowtube with externally-threaded spud ends. Embedded in the flowtube are magnetic flow sensors. The all electronic, programmable register is hermetically sealed with a tempered glass cover. The iPERL system has a 20 year life cycle, along with a 20 year battery life guarantee.

ELECTRONIC REGISTER

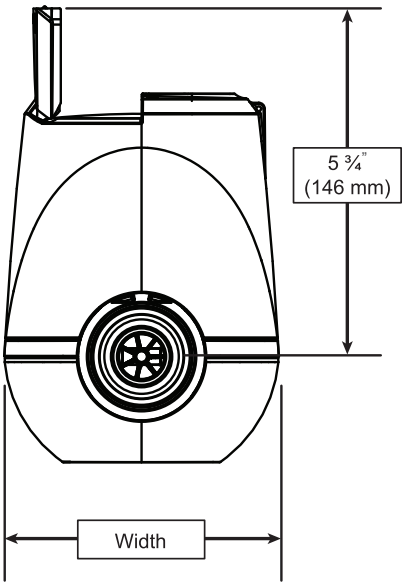
The high resolution 9-digit hermetically sealed electronic register with LCD display was designed to eliminate dirt, lens fogging issues and moisture contamination in pit settings with built in tamper protection. The tempered glass register cover displays readings with the AMR digits highlighted. Direction of flow and units of measure are also easily readable on the register display. The iPERL register features; AMR resolution and unit of measure that are fully programmable, integral customer data logging compatible with UniPro software tools. The large, easy to read display also includes battery life, empty pipe and forward/reverse flow indicators.

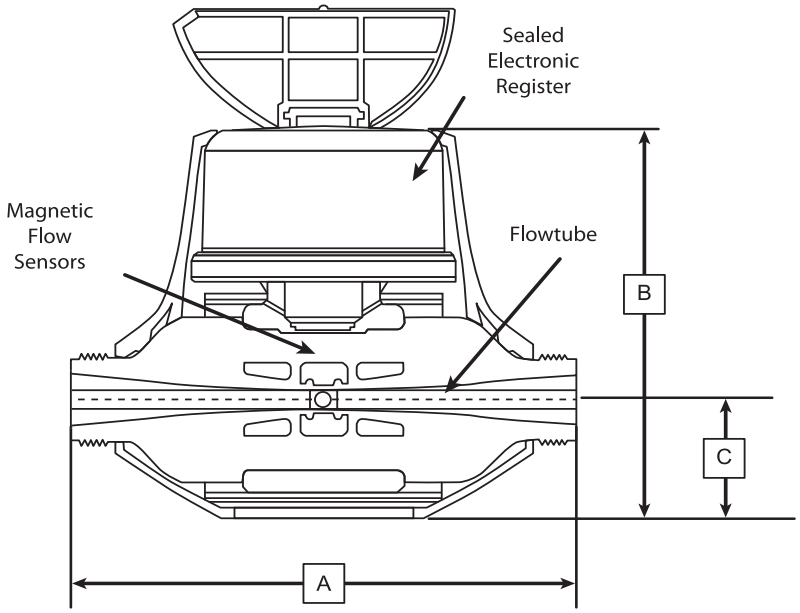
TAMPERPROOF FEATURES

The integrated construction of the iPERL system prevents removal of the register to obtain free water. The magnetic tamper and low field alarms will both indicate any attempt to tamper with the magnetic field of the iPERL system.

AMR / AMI SYSTEMS

iPERL systems are compatible with current Sensus AMR/AMI systems.





DIMENSIONS AND NET WEIGHTS

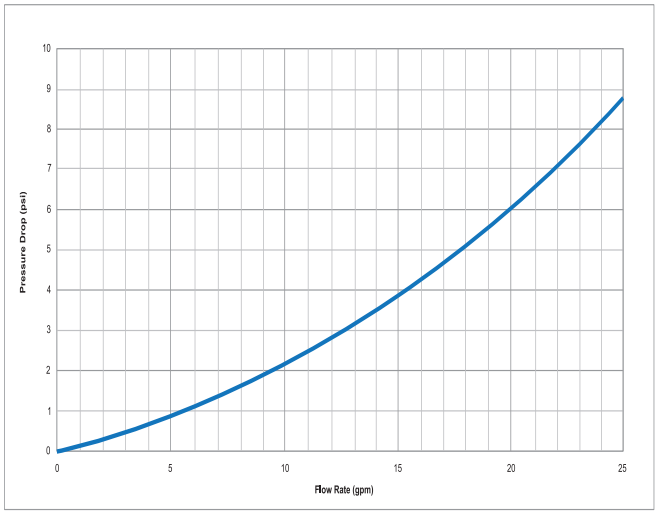
Size	A (lay length)	B	C	Spud Ends	NPSM Thread Size	Width	Net Weight
5/8" (DN 15 mm)	7-1/2" (190 mm)	6-1/10" (155 mm)	1-3/4" (44 mm)	5/8" (15 mm)	3/4" (19 mm)	4-1/2" (114 mm)	3.1 lb. (1.4 kg)
3/4"S (5/8" x 3/4") (DN 20 mm)	7-1/2" (190 mm)	6-1/10" (155 mm)	1-3/4" (44 mm)	3/4" (20 mm)	1" (25 mm)	4-1/2" (114 mm)	3.1 lb. (1.4 kg)
3/4" (DN 20 mm)	9" (229 mm)	6-1/10" (155 mm)	1-3/4" (44 mm)	3/4" (20 mm)	1" (25 mm)	4-1/2" (114 mm)	3.2 lb. (1.5 kg)
1" (DN 25 mm)	10-3/4" (273 mm)	6-1/10" (155 mm)	1-3/4" (44 mm)	1" (25 mm)	1-1/4" (32 mm)	4-1/2" (114 mm)	3.3 lb. (1.6 kg)

SPECIFICATIONS

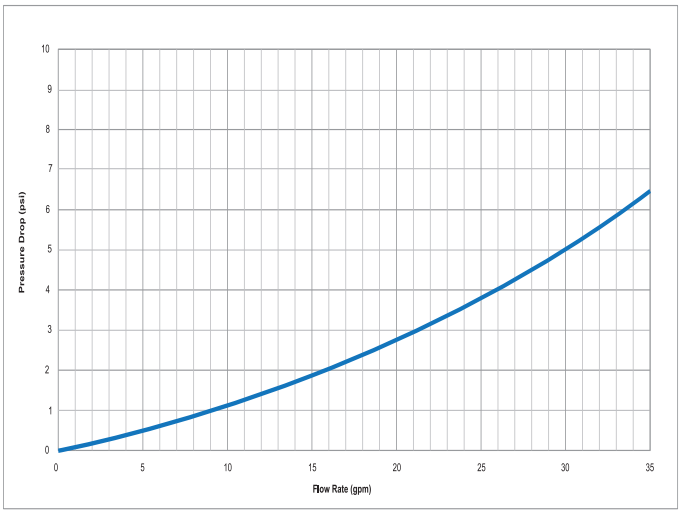
SERVICE	Measurement of potable and reclaim water. Operating temperature range of 33 °F (0.56 °C) - 150 °F (65.6 °C)
NORMAL OPERATING FLOW RANGE (100%±1.5%)	5/8" (DN 15mm) size: 0.11 to 25 gpm (0.02 to 5.7 m^3/hr) 3/4" (DN 20mm) size: 0.11 to 35 gpm (0.02 to 8.0 m^3/hr) 1" (DN 25mm) size: 0.4 to 55 gpm (0.09 to 12.5 m^3/hr)
LOW FLOW REGISTRATION (95% - 101.5%)	5/8" (DN 15mm) size: 0.03 gpm (0.007 m^3h) 3/4" (DN 20mm) size: 0.03 gpm (0.007 m^3h) 1" (DN 25mm) size: 0.11 gpm (0.025 m^3h)
MAXIMUM PRESSURE LOSS	5/8" (DN 15mm) size: 4 psi at 15 gpm (0.3 bar at 3.4 m^3h) 3/4" (DN 20mm) size: 2 psi at 15 gpm (0.1 bar at 3.4 m^3h) 1" (DN 25mm) size: 2 psi at 25 gpm (0.1 bar at 5.7 m^3h)
MAXIMUM OPERATING PRESSURE	200 psi (13.8 bar)
MEASUREMENT TECHNOLOGY	Solid state electromagnetic flow

REGISTER	Hermetically sealed, 9-digit programmable electronic register AMR/AMI compatible iPERL system register programmable using the UniPro programming package
MATERIALS	External housing – Thermal plastic Flowtube – Polyphenylene sulfide alloy Electrode – Silver/silver chloride Register cover – Tempered glass
ALARM DEFAULTS	Alarm Duration – 90 days Leak Duration – 24 hours Datalog Interval – 1 hour Alarm Mask – All alarms reported History Mask – All event types reported

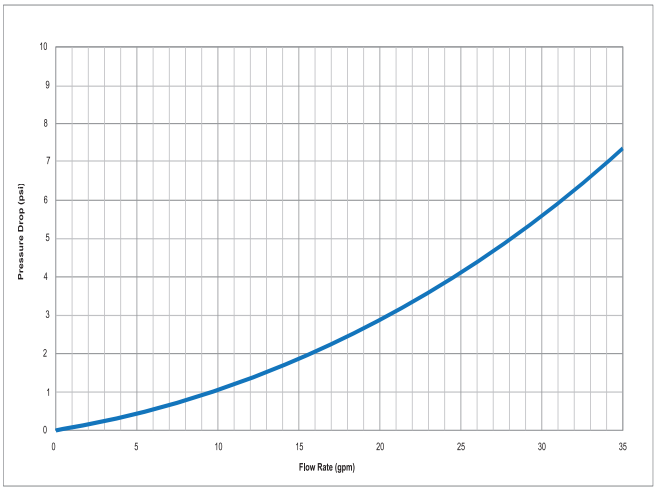
HEADLOSS CURVES



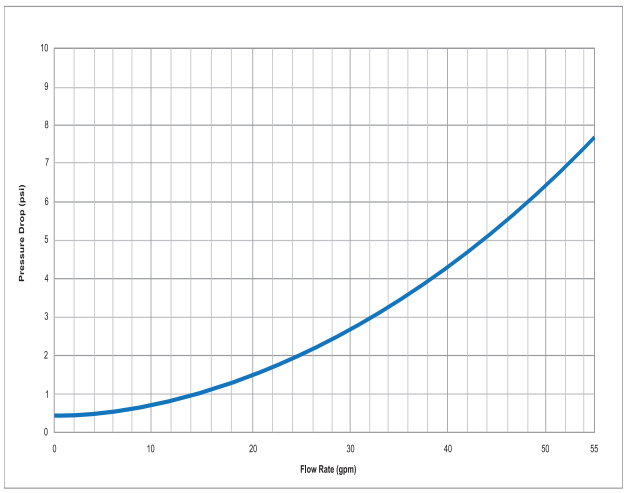
5/8” Headloss Curve



3/4” Short Headloss Curve



3/4” Headloss Curve



1” Headloss Curve

8601 Six Forks Road, Suite 700
Raleigh, NC 27615
1-800-638-3748
www.sensus.com/water

FlexNet

Vehicle Gateway Basestation VGB Model 4600

APPLICATION

The Sensus FlexNet Vehicle Gateway Basestation (VGB) is a portable radio-based device used for the acquisition of data from utility meters and other field-based diagnostic instuments. The VGB is compact and portable, allowing it to be used in any vehicle providing 12-volt DC power. The operator simply places the unit in the vehicle cabin, loads the desired meter reading route into the laptop computer and drives along the prescribed route. Meter data is collected as the vehicle travels within proximity to the selected meters.

FLEXNET AND RADIOREAD COMPATIBILITY

One of the prime features of the VGB model 4600 is that it provides the ability to read both Sensus RadioRead and FlexNet drive-by technologies. By combining both technologies, this solution allows the utility to maintain and utilize their existing RadioRead technology and reading equipment as they transition to FlexNet. Dual reading capability allows the utility to transition to the latest FlexNet technology and positions themselves to migrate to a fixed base platform in the future. (1)

OPERATION

The VGB sends an alert signal to the meter SmartPoint or ancillary device. Upon receipt of the alert, the SmartPoint responds by transmitting its most recent reading. Once received, the SmartPoint returns to a low-power listening mode. The operator has the option of directing the VGB to signal all endpoints within range (blind reading mode), or to select endpoints (geographic reading mode).

SPECIFICATIONS

SERVICE	Radio-based mobile utility meter reading system
PHYSICAL CHARACTERISTICS	VGB in metal case with folding handle: Length: 18.5" x Width: 11.25" x Height: 4.5". Includes Laptop computer, USB cables, magnetic-mount antenna and hard shell carrying case.
WEIGHT	19 lbs.
POWER	12-volt DCDC adapter through VGB (with battery back-up; computer only)
COMMUNICATIONS	900-950 Mhz.
MEMORY	Non-Volatile
APPROVALS	Licensed Operation
US:	FCC CFR 47, Part 24D, Part 101C, Part 15
CANADA:	Industry Canada (IC) RSS-134, RSS-210
SOFTWARE:	AutoVu (3.0 or higher)

Vehicle Gateway Basestation (VGB)

(1) A Vehicle Transciever Unit (VXU) is required for dual reading capability.

SYSTEM RELIABILITY

FlexNet and RadioRead+ utilize primary-use radio frequencies to communicate with SmartPoints. The combination of FCC-protected frequencies and shear transmission power of the SmartPoints ensure reliable communication from meters and ancillary devices. What's more, SmartPoint M2 and RadioRead+ SmartPoints provide infrastructure detail by monitoring their operating conditions and reporting meter tamper, continuous flow, leak detection (when equipped), high or low consumption and low battery alarms.

PORTABILITY

Through the use of advanced design, the radio electronics of the VGB are contained in a portable enclosure about the size of a small briefcase. With the addition of a laptop computer, connecting cables and antenna, the complete VGB package can be set up in any vehicle within minutes. The portable VGB instantly turns almost any vehicle – even a compact car – into a meter reading machine.

USER FRIENDLY SOFTWARE

The VGB utilizes AutoVu, a software program especially designed for operating Sensus drive-by meter reading equipment. AutoVu features a convenient, user-friendly pull-down menu system for directing the meter reading process. Operators are also able to input information, such as route notes, manually via the PC's keyboard. The operator can also easily edit route data configurations when necessary. Back at the office, Sensus AutoRead processes the information gathered by AutoVu and provides the utility's billing software with a simple plug-and-play interface, no matter what Sensus reading system is utilized.

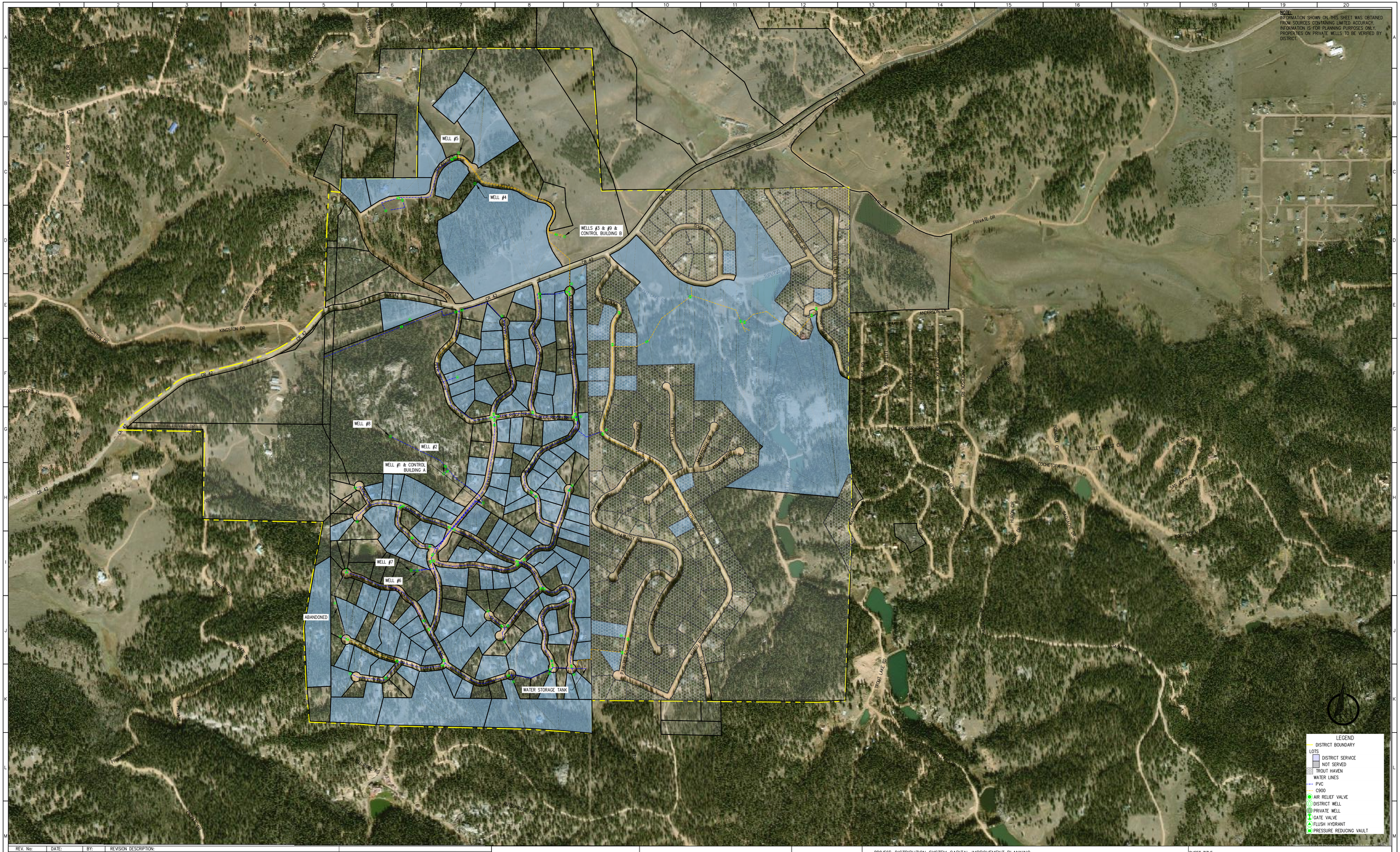
SENSUS SYSTEMS MAKE READING UTILITY METERS FAST, EASY AND RELIABLE

Our user-focused equipment and software provides utilities with tremendous meter reading efficiency, with fewer limitations compared to other types of radio-based meter reading systems. And because our software platforms operate with all of our reading packages, utilities can transition systems without downtime for operator training.

AUTHORIZED SENSUS DISTRIBUTOR

SENSUS

P.O. Box 487 | 450 North Gallatin Avenue
Uniontown, PA 15401 USA
T: 1-800-638-3748
F: 1-800-888-2403
www.sensus.com/water
h2oinfo@sensus.com



REV. No:	DATE:	BY:	REVISION DESCRIPTION:

DRAWN BY: ADAM SOMMERS
DESIGNED BY: ADAM SOMMERS
FILE PRINTED ON: 5/14/2018 9:56:30 AM

0 1" IF THIS BAR DOES NOT READ 1" DRAWING IS NOT LABELED TO SCALE

AquaWorks DBO INC
DESIGN BUILD OPERATE

PROJECT: DISTRIBUTION SYSTEM CAPITAL IMPROVEMENT PLANNING

CLIENT: ARABIAN ACRES METROPOLITAN DISTRICT
UNINCORPORATED TELLER COUNTY, COLORADO

ENGINEER: AQUAWORKS DBO, INC.
3252 WILLIAMS STREET
DENVER, COLORADO
80205(303) 477-5915

SHEET TITLE:
DISTRIBUTION SYSTEM IMPROVEMENT PLAN

PROJECT NUMBER: #1744

SCALE : 1" = 400'

SHEET: MAP #1