



**Automated Meter Reading (AMR) Project
Utilizing the
State Water Implementation Fund for Texas (SWIFT)**

Background

In the Summer of 2009, the City of Bedford researched a turnkey solution for the City's water metering system utilizing an AMI product.

The turnkey solution would:

Replace all the meters in the system with AMR ready meters (including all auxiliary equipment).

Fit each meter with a radio transmitter.

Interface the meter reading software and network with current billing system.

Meter Test

Conducted random small meter tests. $\frac{3}{4}$ " meters
Large meter testing. 1" – 6" meters

Tested (96) $\frac{3}{4}$ " meters	97.8%
Tested (11) 1" meters	96.6%
Tested (15) 2" meters	97.2%
Tested (1) 3" meter	82.7%
Tested (2) 3"C meters	81.6%
Tested (5) 4" meters	87.7%
Tested (1) 6" meter	13.3%

Actions Taken from Meter Tests

Analyze the cost for full meter replacement at that time, the cost was prohibited.

Replaced some meters that were previously tested.

Namely the 3", 4" and 6" Meters that tested below 90% accuracy.

State Water Implementation Fund for Texas Becomes Available

City of Bedford contracts with King Engineering in November 2014 to assist in the application for SWIFT loan.

January 2015 the city filed application for SWIFT loan using the methodology of water conservation to replace 90% of the aging city's water main infrastructure that is 40 plus years old and to replace all water meters under an AMR meter reading system.

SWIFT Loan Approval



In July 2015 the City of Bedford was awarded \$90 million in SWIFT Funding.

Bedford received funds of the first installment on December 3, 2015 for \$30 million.

Bedford can take installments of \$20 million in 2017, 2019 and 2021 if needed up to the \$90 million awarded.

Funds can be used for the replacement of the water infrastructure and to automate meter reading (AMR). Bedford has up to 10 years to use the funds for water line replacements.

Automated Meter Reading



AMR Project



In February 2016 the city contracted with King Engineering to help write the AMR bid contracts.

Help with searching meter companies.

Look at radio read vs cell transmittal end points.

AMR Project



City opened bids in February 2017.

Bid from Badger meter was accepted utilizing the E-Series Ultra Sonic meters $\frac{3}{4}$ " through 2" and compound meters 3" through 6".

City went with cell phone end points instead of the radio transmit end points.

AMR Project

City is currently waiting final approval from the Texas Water Development Board to begin project.

Meter replacement still scheduled to begin in June 2017.

Questions