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BEFORE THE ARIZONA CORPORATION COMMISSION

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AZ CORP COMMISSION
DOCKET CONTROL

IN THE MATTER OF THE APPLICATION OF
VALENCIA WATER COMPANY – TOWN DIVISION
FOR THE ESTABLISHMENT OF JUST AND
REASONABLE RATES AND CHARGES FOR UTILITY
SERVICE DESIGNED TO REALIZE A REASONABLE
RATE OF RETURN ON THE FAIR VALUE OF ITS
PROPERTY THROUGHOUT THE STATE OF ARIZONA

Docket No. W-01212A-12-0309

IN THE MATTER OF THE APPLICATION OF
GLOBAL WATER – PALO VERDE UTILITIES
COMPANY FOR THE ESTABLISHMENT OF JUST AND
REASONABLE RATES AND CHARGES FOR UTILITY
SERVICE DESIGNED TO REALIZE A REASONABLE
RATE OF RETURN ON THE FAIR VALUE OF ITS
PROPERTY THROUGHOUT THE STATE OF ARIZONA

DOCKET NO. SW-20445A-12-0310

IN THE MATTER OF THE APPLICATION OF WATER
UTILITY OF NORTHERN SCOTTSDALE, INC. FOR A
RATE INCREASE

Docket Nos. W-03720A-12-0311

IN THE MATTER OF THE APPLICATION OF
WATER UTILITY OF GREATER TONOPAH FOR
THE ESTABLISHMENT OF JUST AND REASONABLE
RATES AND CHARGES FOR UTILITY SERVICE
DESIGNED TO REALIZE A REASONABLE RATE OF
RETURN ON THE FAIR VALUE OF ITS PROPERTY
THROUGHOUT THE STATE OF ARIZONA

DOCKET NO. W-02450A-12-0312

IN THE MATTER OF THE APPLICATION OF
VALENCIA WATER COMPANY – GREATER
BUCKEYE DIVISION FOR THE ESTABLISHMENT OF
JUST AND REASONABLE RATES AND CHARGES FOR
UTILITY SERVICE DESIGNED TO REALIZE A
REASONABLE RATE OF RETURN ON THE FAIR
VALUE OF ITS PROPERTY THROUGHOUT THE
STATE OF ARIZONA

DOCKET NO. W-02451A-12-0313

**NOTICE OF FILING REVISED
WILLOW VALLEY WATER CO.
SIB ENGINEERING REPORT**

Arizona Corporation Commission
DOCKETED

SEP - 3 2013

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1 IN THE MATTER OF THE APPLICATION OF
2 GLOBAL WATER – SANTA CRUZ WATER COMPANY
3 FOR THE ESTABLISHMENT OF JUST AND
4 REASONABLE RATES AND CHARGES FOR UTILITY
5 SERVICE DESIGNED TO REALIZE A REASONABLE
6 RATE OF RETURN ON THE FAIR VALUE OF ITS
7 PROPERTY THROUGHOUT THE STATE OF ARIZONA

DOCKET NO. W-20446A-12-0314

5 IN THE MATTER OF THE APPLICATION OF
6 WILLOW VALLEY WATER COMPANY FOR THE
7 ESTABLISHMENT OF JUST AND REASONABLE
8 RATES AND CHARGES FOR UTILITY SERVICE
9 DESIGNED TO REALIZE A REASONABLE RATE OF
10 RETURN ON THE FAIR VALUE OF ITS PROPERTY
11 THROUGHOUT THE STATE OF ARIZONA

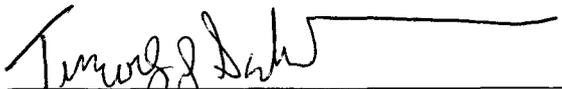
DOCKET NO. W-01732A-12-0315

**NOTICE OF FILING REVISED
WILLOW VALLEY WATER CO.
SIB ENGINEERING REPORT**

10 Global Water – Palo Verde Utilities Company, Global Water – Santa Cruz Water
11 Company, Valencia Water Company – Town Division, Valencia Water Company – Greater
12 Buckeye Division, Water Utility of Greater Tonopah, Willow Valley Water Co. and Water Utility
13 of Northern Scottsdale (collectively, the “Global Utilities”) and Global Water Resources, Inc.,
14 Hassayampa Utility Company, Inc., Global Water – Picacho Cove Utilities Company and Global
15 Water – Picacho Cove Water Company (collectively, the “Global Intervenors”, and with the
16 Global Utilities, “Global”) provide notice of filing the Revised SIB Engineering Report and SIB
17 Tables for Willow Valley Water Company. The report and SIB Tables were revised to
18 incorporate changes requested by Commission Staff.

19 RESPECTFULLY SUBMITTED this 3rd day of September, 2013.

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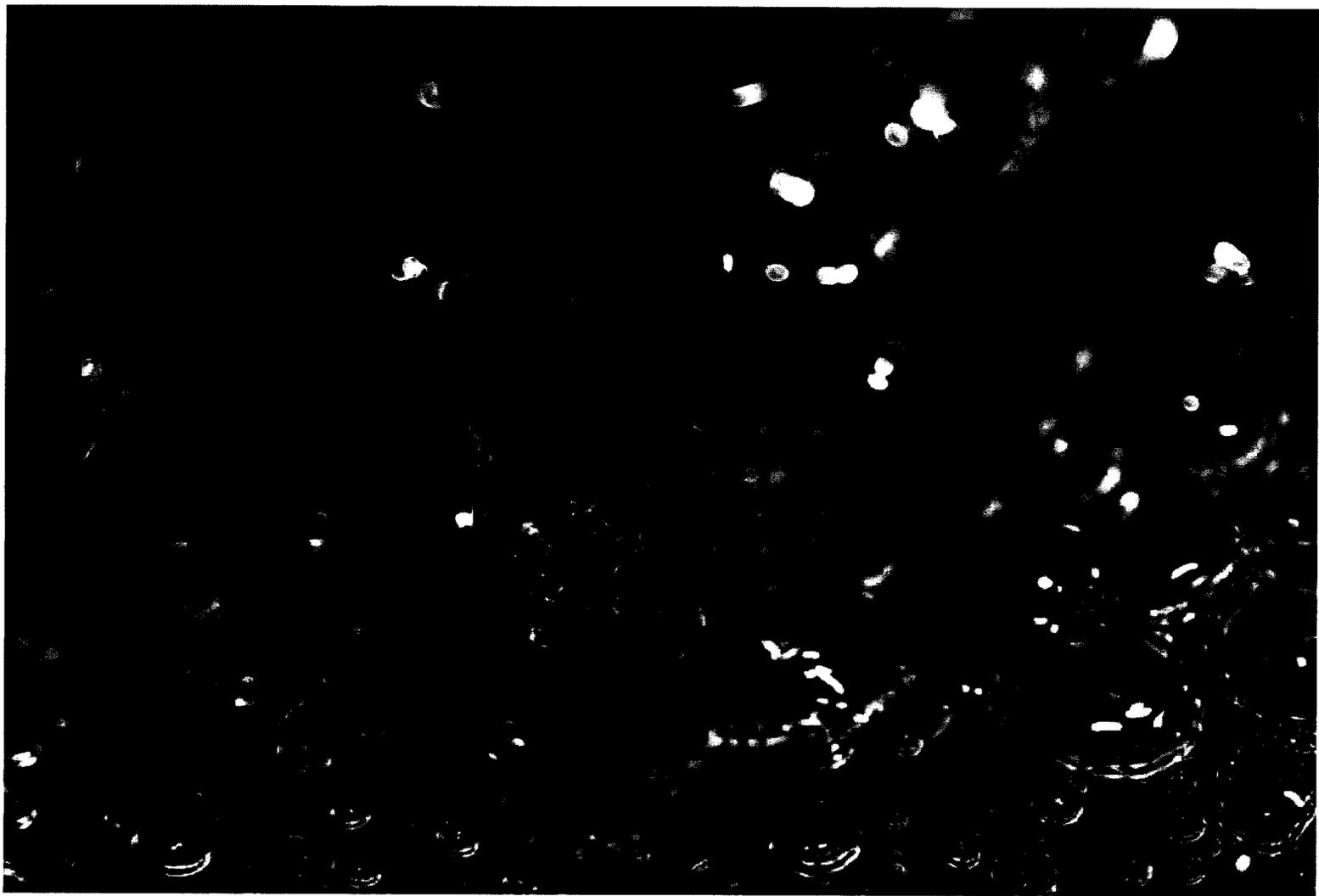
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**Willow Valley Water Company
Water System Engineering Report for
System Improvement Benefit (SIB)**

August 2013



GLOBAL WATER
RELIABLE • RENEWABLE • REUSABLE

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Willow Valley Water Company
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1.0 EXECUTIVE SUMMARY

The analysis performed herein will focus primarily on the existing physical conditions of waterline pipeline infrastructure for the Willow Valley Water Company, and provide the necessary detail and requirements to obtain approval for the System Improvement Benefit (SIB).

The information provided in this analysis includes the following main components:

1. Distribution System Characterization and Assessment

- Distribution System overview
- Distribution System Maps
- Plant material types, size, age,
- Identified System Issues
- Leak, break and repair history, and areas where replacement is most critical
- Water Loss
- Company measures to identify and reduce water losses
- Company meter maintenance program
- Criticality Analysis and Recommendations

2. Five-Year SIB Plan to Replace Aging Infrastructure

- Recommended project description
- Justification for prioritization
- Project preliminary cost estimates
- SIB Project location Map

3. Conclusion

- Conclusion and Recommendations for action

2.0 DISTRIBUTION SYSTEM CHARACTERIZATION AND ASSESSMENT

2.1 Project Location

Willow Valley is located in Mohave County, Arizona. The service area of the Willow Valley Water Company includes water services located within sections 21, 23, 27, and 35 of Township 18N Range 22W. The vicinity map below provides a graphical representation of the location of the service area of the Willow Valley Water Company.

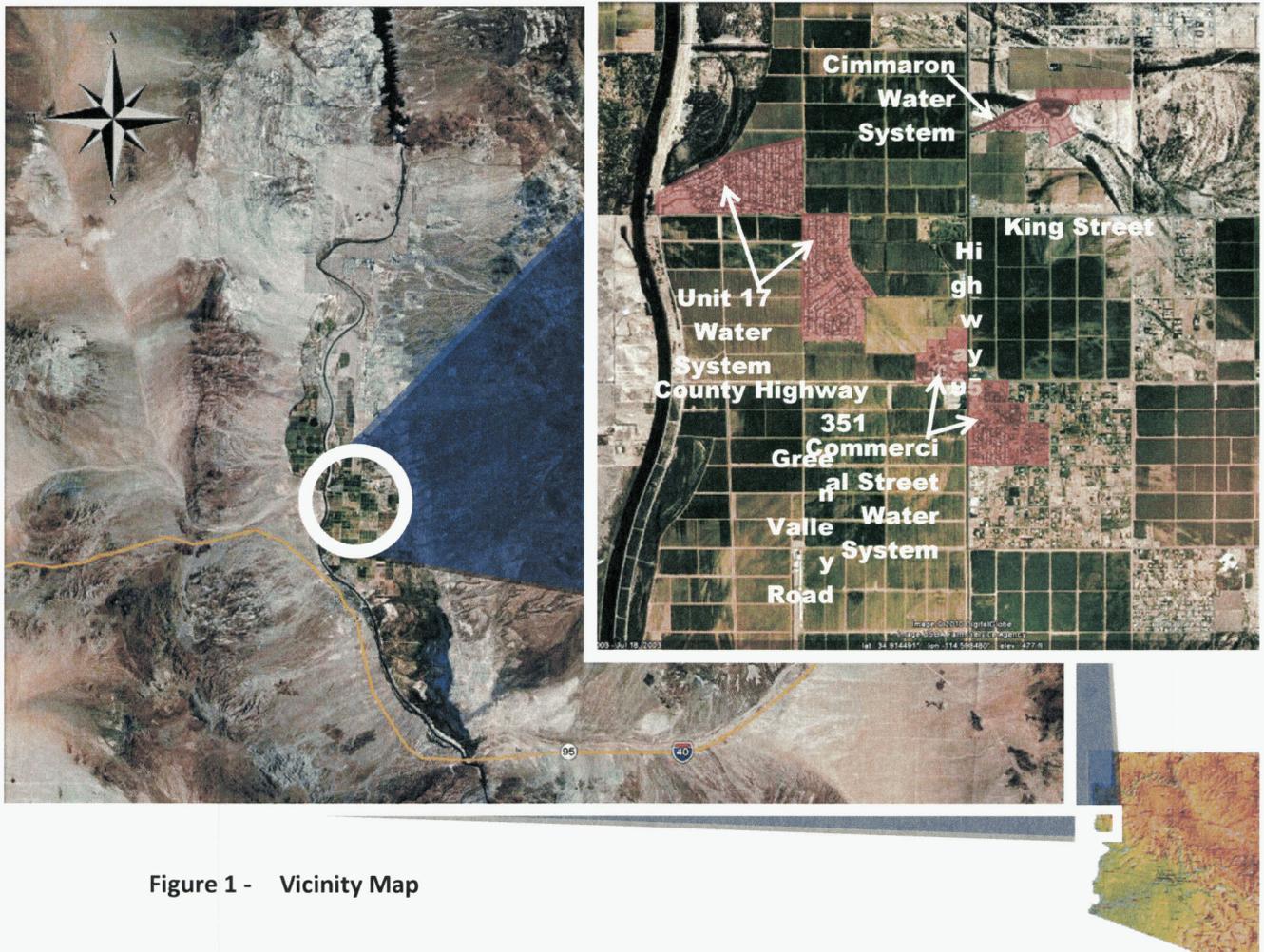


Figure 1 - Vicinity Map

2.2 Water Treatment Distribution Systems:

The service area of the Willow Valley Water Company is comprised of two water systems. These water systems are as follows:

1. Cimarron Water System

Willow Valley Water Company
Water System Engineering Report for System Improvement Benefit (SIB)

2. King Street & Commercial Street Water System (supplied by a production facility known as Unit 17)

These water systems are generally for residential use only, except that the Commercial Street Water System has approximately 23 service connections for commercial/industrial users. The Commercial Street Water system was originally constructed in the early 1960's, though a centralized water supply facility was constructed in the late 1990's. The Commercial Street water system does not currently have an independent water supply, but is provided water from the Unit 17 water system through a 6-inch PVC transmission line installed in approximately 1998.

Development of the King Street Water system also began in the early 1960's, and steadily increased into the early 1980's. Development of one small area at the eastern boundary of this area was begun in recent years, but was not completed, presumably due to economic conditions.

Development of the Cimarron Water system was initiated in 1990. Development has occurred steadily in this area, with improvements as recent as 2007. This service area is built out based on existing planning, though additional capacity in the system exists for potential expansion in the future.

2.3 Population

There are approximately 280 residential service connections in the Cimarron Water System, 1,419 residential service connections in the King Street Water System, and 137 residential service connections for the Commercial Street Water System. The Commercial Street Water System also has approximately 23 non-residential service connections.

2.4 Demand

Demands for residential users in the Cimarron Water System are approximately 131.8 gpd per home. Demands for residential users in the King Street and Commercial water systems are approximately 186.8 gpd. Demands for the commercial users are approximately 554.2 gpd per meter. These demands also include the water losses. As infrastructure is replaced, demands may become less due to a reduction in water loss in the system.

2.5 Service Area

Though the service area for the Willow Valley Water Company is spread out over an area approximately 9 square miles, the elevation only varies from 467 ft amsl to 491 ft amsl, a difference of 24 feet. The service area is comprised primarily of residential users, though there is a small area of commercial/industrial development that is also included.

Potable water system maps have been created to depict the distribution system throughout the Willow Valley water company- please see the following Figure 2:

Willow Valley Water Company
Water System Engineering Report for System Improvement Benefit (SIB)

Figure 2 - Willow Valley Water Distribution Map

2.6 Distribution Waterlines: Material, Age, Size, Conditions:

The distribution waterlines for King Street and Commercial Street water systems vary from 3" to 8" in diameter, and include pipe materials of varying types of iron or black steel, certain types of plastic or PVC, and asbestos cement. In general, the oldest water lines in the system are 4-inch plastic and asbestos cement. The newer pipes (Newer than 1970) have a minimum diameter of 6-inches and are PVC. The majority of the system is comprised of pipes older than 40 years. Field evaluation of the system by the operations staff has revealed that approximately 90% of valves are not operable. The inoperable valves are primarily located within the older pipe network.

The distribution water lines for Cimmaron water system vary from 6" to 10" in diameter, and are all PVC. In general, the oldest water lines in the system are 4-inch PVC and asbestos. The majority of the system, including the wells and WDC were installed between 1990 and 1996. Two small developments to the north of Cimmaron Boulevard were added to the system from 2004 to 2007.

During the line breaks that have occurred over the last several years, Willow Valley Operations Staff conducted a series of inspections of interior and exterior conditions of the existing infrastructure. The inspections have concluded that the infrastructure is fragile, severely corroded, and sub standard in specifications. Even repairing the line when it breaks is a very difficult task because the existing infrastructure is so fragile in nature.

2.7 Distribution Waterlines: Known Systematic Issues:

It has been identified that the potable water distribution systems do not currently provide proper looping capabilities as to adequately support an alternative method to supply customer's water during the event of a line break, and also result in water quality and water aesthetic issues. Several locations currently reside within the distribution system that creates a dead end point; therefore these customers are subject to frequent uncontrollable service interruptions when a line needs to be shut down during the event of a line break.

It has also been identified that the water distribution lines for the residential properties in the King Street Water System are installed in the back yards of the property. Beyond the accessibility issues that often results in greater costs and time required to complete repairs to this infrastructure, this presents a potential public health situation in the event of a line break, as this is also where the septic fields are located for the residential properties. Given this exact condition which exists on the Gordon Street waterline, this waterline has been identified as the top priority project to be executed in year 1 of the 5 year SIB program.

A critical system issue also noted is the age of the water distribution system valves, and their inability to operate. Inoperable valves and/or lack of valves leaves large segments of the system exposed in the event of a water main break or other service shut down. Due to the age and condition of the system, the areas of primary concern are within the older parts of the King Street and Commercial Street systems. In these areas, few of the valves installed are operable. It is recommended that replacement of these valves be initiated within the 5 year SIB program to minimize the number of services impacted by shutdowns in the system.

Willow Valley Water Company
Water System Engineering Report for System Improvement Benefit (SIB)

Another known system defect is the lack of fire hydrants in the system, as well as the sub standard installation and outdated models of the existing fire hydrants. The SIB plan takes into consideration the full replacement and installation of all new fire hydrants.

2.8 Leak, Break and Repair History:

A total of 21 line breaks have been documented and recorded with the Unit 17 water distribution system since 2010. These leaks are contributed directly from the aging infrastructure and their composition of substandard industrial materials. The information below describes how many line breaks have occurred each year since 2010:

Year	# Line Breaks:
2010	5
2011	4
2012	9
2013	3
Total	21

Two figures have been created to depict the locations of line breaks that have been recorded since 2010, as well as indicate the years the line breaks occurred. The King Street water distribution system has been split into two sections- the East side and the West side as to provide enhanced details of the schematic. This system represents the areas in the system where most leaks (line breaks) have been recorded, and the area has been identified as the top priority for the 5 year SIB replacement program. In the exhibit you will also notice the identification of the five year SIB plan, and specifically detailing the sections of line to be replaced in priority:

Willow Valley Water Company
Water System Engineering Report for System Improvement Benefit (SIB)

Figure 3 - Leak Identification Map- West Side of King Street

Willow Valley Water Company
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Figure 4 - Leak Identification Map- East Side of King Street

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Water System Engineering Report for System Improvement Benefit (SIB)

2.9 Water Loss:

Water loss has been documented in the annual ACC report, and is represented by the following tables per each water distribution system for the previous five years:

Company Name: Willow Valley Water Company Inc
Name of System: King Street and Commercial Street

Year	Total Gallon Sold	Total Gallon Pumped	System Water Leakage
2008	91,995	115,312	20.2%
2009	101,495	121,812	16.7%
2010	83,227	104,209	20.1%
2011	68,712	89,824	23.5%
2012	66,696	87,516	23.8%

Source: 2008-2012 Willow Valley Water Company Annual Report

Company Name: Willow Valley Water Company Inc
Name of System: Lake Cimmaron

Year	Total Gallon Sold	Total Gallon Pumped	System Water Leakage
2008	10,379	13,543	23.4%
2009	10,244	11,917	14.0%
2010	10,559	12,306	14.2%
2011	8,301	10,806	23.2%
2012	8,204	9,941	17.5%

Source: 2008-2012 Willow Valley Water Company Annual Report

Comparing water consumption to water production reveals a large disparity. The average total water loss for the Unit 17 for the previous five years is in excess of 20%, and the average total water loss for the Cimarron system is 18.5% for the previous five years. It is expected that these losses are largely due to leakage and line breaks in an aging water system.

Global Water has established a set of design criteria for water systems to ensure that adequate pressures and flows are available to consumers without causing excessive wear in the system. These criteria are summarized below.

Willow Valley Water Company
Water System Engineering Report for System Improvement Benefit (SIB)

Table 1 - Global Water Design Criteria

Parameter	Value
Minimum System Pressure (Peak Hour Demand)	40 psi
Maximum System Pressure¹ (Static)	80 psi
Minimum System Pressure (Max Day Plus Fire Flow Demand)	20 psi
Maximum Pipe Velocity (Max Day Demand)	5 fps
Maximum Pipe Head Loss Gradient (Max Day Demand)	6 ft/1,000 ft
Maximum Pipe Velocity (Peak Hour Demand)	6 fps
Maximum Pipe Head Loss Gradient (Peak Hour Demand)	8 ft/1,000 ft
Maximum Pipe Velocity (Max Day Plus Fire Flow Demand)	8 fps

1. Static pressures in excess of 80 psi may be permitted if individual PRVs are installed on all homes that may experience these pressures.

2.10 Meter Replacement Program

As to attempt to mitigate water loss in the system, Willow Valley Water Company embarked on a complete water meter replacement program for all water meter connections in the Willow Valley Water system. The replacement program consisted of the installation of a brand new water meters outfitted with an electronic endpoint at each service location and implemented into an automated meter reading system. The replacement program was completed in 2010, so the entire meter population is sufficiently new as to not require a current ongoing replacement program. The Company will begin testing and as necessary maintaining, the few larger diameter meters in the coming year, and return the utility to a standard meter replacement program in the future..

2.11 Criticality Analysis and Recommendations

Major system deficiencies have been identified in this analysis, as well as proof supporting the substantial amount of line breaks that have occurred and contributed to the hefty water losses that have been recorded over the past 5 years. In preparing the 5 year SIB plan to replace the pipelines, the critical projects have been identified on the basis of this analysis.

The next section outlines the details in the 5 year SIB plan, and we make the full recommendation that the utility initiate the first project beginning 2014.

3.0 5-YEAR SIB PLAN

3.1 Project Description and Justification for Prioritization

The main goal of the 5-year System Improvement Benefit (SIB) will be to replace the aging infrastructure within the King Street system. This will consist primarily of replacing all of 4-inch and 6-inch water mains as well as some service lines. A phasing plan will be developed to address repairs of the system identified with the highest criticality. Due to the size of the King Street area, it will be divided into two projects. Because of the age of the system, and the large

Willow Valley Water Company
Water System Engineering Report for System Improvement Benefit (SIB)

number of services affected, the King Street areas will be completed according to the 5-year SIB followed by the Commercial Street area, and finally the Unit 17 area in subsequent years.

- **Year 1 (2014) - Gordon Drive Line Replacement**- Constructed in the 1960s, this line replacement project was identified based on four critical criteria. First, the site accessibility to the water lines runs through the backyards of residential homes and at times under private property, which complicates accessibility for maintenance of equipment and emergency repair services (See Figure –E1). Secondly, sections of this main are known to be made of asbestos materials. As have other utilities, Global Water has strived to phase out asbestos-cement (ACP) from all its utilities due to lack of availability of repair parts and health concerns. Third, this main has experienced seven line breaks in the past two years, making this line a costly asset to maintain, while increasing disruption of service to customers served. And lastly, this line is known to be in contact vicinity of existing septic systems located in the back yards of homes served. Coupled with the extreme number of line breaks over the past two years, the inherent risk of cross contamination with septic systems in the vicinity has elevated the urgency of this project to the highest priority, and therefore will be completed in year one. The cost estimate for this line replacement is estimated at \$211,491 and is detailed in Figure 5.

Figure 5 - Gordon Drive Detailed Engineering Plan

Willow Valley Water Company
Water System Engineering Report for System Improvement Benefit (SIB)

- **Year 2 (2015) - Clearwater Drive Line Replacement-** Constructed in 1960s, this line replacement project was identified based on three critical criteria. First, the site accessibility to the water lines runs through the backyards of residential homes and at times under private property, which complicates accessibility for maintenance of equipment and emergency repair services and exposes a higher risk of property damage comparable to the other projects due to the fact that this water line services two rows of homes (See Figure -E1). Secondly, sections of this main are known to be made of asbestos materials. As have other utilities, Global Water has strived to phase out ACP from all its utilities due to lack of availability of repair parts and safety concerns. Third, this main has been subject to a recent line break this year. Making this line a costly asset to maintain, while increasing disruption of service to customers served. The cost estimate for this line replacement is estimated at \$171,022 and is detailed in Figure 6.

Figure 6 - Clearwater Drive Detailed Engineering Plan

Willow Valley Water Company
Water System Engineering Report for System Improvement Benefit (SIB)

- **Year 3 (2016) - A-Street Line Replacement-** Constructed in 1960s, this line replacement project was identified based on three critical criteria. First, the site accessibility to the water lines runs through the backyards of residential homes and at times under private property, which complicates accessibly for maintenance of equipment and emergency repair services and exposes a higher risk of property damage comparable to the other projects due to the fact that this water line services two rows of homes (See Figure –E1). Second, this main has been subject to three line breaks over the past two years. Making this line a costly asset to maintain, while increasing disruption of service to customers serve. The cost estimate for this line replacement is estimated at \$145,040 and is detailed in Figure 7.

Figure 7 - A Street Detailed Engineering Plan

Willow Valley Water Company
Water System Engineering Report for System Improvement Benefit (SIB)

- **Year 4 (2017) - Wells Street Line Replacement-** Constructed in 1960s, this line replacement project was identified based on three critical criteria. First, the site accessibility to the water lines runs through the backyards of residential homes and at times under private property, which complicates accessibility for maintenance of equipment and emergency repair services and exposes a higher risk of property damage comparable to the other projects due to the fact that this water line services two rows of homes (See Figure –E1). Second, this main has been subject to three line breaks over the past three years. Making this line a costly asset to maintain, while increasing disruption of service to customers served. The cost estimate for this line replacement is estimated at \$133,701 and is detailed in Figure 8.

Figure 8 - Wells Street Detailed Engineering Plan

Willow Valley Water Company
Water System Engineering Report for System Improvement Benefit (SIB)

- **Year 5 (2018) - Kingsway/Lark Lane/Border Lane Line Replacement-** Constructed in 1960s, this line replacement project was identified based on four critical criteria. First, the site accessibility to the water lines runs through the backyards of residential homes and at times under private property, which complicates accessibly for maintenance of equipment and emergency repair services and exposes a higher risk of property damage comparable to the other projects due to the fact that this water line services two rows of homes (See Figure –E1). Secondly, sections of this main are known to be made of a combination of ACP and PVC materials. As have other utilities, Global Water has strived to phase out asbestos piping from all its utilities due to lack of availability of repair parts and safety concerns. Third, this main has been subject to one line brake over the past three years. The cost estimate for this line replacement is estimated at \$214,979 and is detailed in Figure 9.

Figure 9 - Kingsway/Lark/Border Lane Detailed Engineering Plan

3.2 Detailed Cost Estimates and Summary

The cost estimates were obtained using an accredited industry standard estimating source (RS Means) with an appropriate inflation factor to bring the costs to current value. Also, the fees for Contingency and internal staff's time was adjusted as per the discussion on 20 August 2013. We believe these numbers are conservative, but hold an accurate value for what should be estimated for each particular project.

Multiple contractors were contacted and provided budgetary numbers for the projects identified in the 5 year SIB plan, and all costs were in excess of 15%-25% higher than the costs projected in our original cost estimates. We can add the contractor's cost to our estimates if preferred.

Please see the attached Figure 10 for the detailed cost estimates for the 5 year SIB project, and see Figure 11 for the summary table.

Willow Valley Water Company
Water System Engineering Report for System Improvement Benefit (SIB)

Figure 10- 5 Year SIB Detailed Cost Estimate

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Water System Engineering Report for System Improvement Benefit (SIB)

Figure 11- 5 Year SIB Cost Summary Table

3.3 SIB Water Main Replacement Map

Please see Figure 12 as it is defined on the map for the locations specified within the 5 Year SIB Plan:

Willow Valley Water Company
Water System Engineering Report for System Improvement Benefit (SIB)

Figure 12- SIB Project Location Map

3.4 SIB Water Loss Tables

Historically there has been a recorded water loss for the King Street system that is greater than 20% over the last five years. A major contributor to this water loss is the substantial amount of main line breaks that have occurred over the past five years. The SIB plan seeks the most vulnerable and prone to failure area first, in great expectations to significantly reduce the amount of main breaks, and substantially reduce the amount of water loss for the system.

The objective for the Willow Valley Water Company is to reduce the reported water loss in the King Street System to 7%. We calculated the benefits that will be gained from replacing the gaining infrastructure that has failed so many times previously, and proved to be the main contributor to the water loss recorded for the system. We have provided a table that shows the recorded water loss for the previous five years, and gives an estimated water loss reduction based upon completion of each SIB project. Please see figure 13.

Figure 13- Water Loss Table

3.5 5 Year Historical Costs

The following table provides the five year historical costs for all maintenance and capital costs that have been incurred. These costs include installing main line infrastructure, repairing main breaks, exercising valves, hydrant maintenance, field inspections, and all activities and programs necessary to appropriately and accurately maintain the distribution system. See Figure 14 for the cost breakdowns.

Willow Valley Water Company
Water System Engineering Report for System Improvement Benefit (SIB)

Figure 14- Five Year Historical Costs

4.0 SIB- PLANT TABLE 1 FIVE YEAR SIB PROGRAM

4.1 SIB- Plant Table 1 for Gordon Dr (2014)

See Figure 15

Willow Valley Water Company
Water System Engineering Report for System Improvement Benefit (SIB)

Figure 15- SIB Plant Table 1- Gordon Dr (2014)

4.2 SIB- Plant Table 1 for Clearview Drive (2015)

See Figure 16

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Water System Engineering Report for System Improvement Benefit (SIB)

Figure 16- SIB Plant Table 1- Clearview Drive (2015)

4.3 SIB- Plant Table 1 for A Street (2016)

See Figure 17

Willow Valley Water Company
Water System Engineering Report for System Improvement Benefit (SIB)

Figure 17- SIB Plant Table 1- A Street (2016)

4.4 SIB- Plant Table 1 for Well Street (2017)

See Figure 18

Willow Valley Water Company
Water System Engineering Report for System Improvement Benefit (SIB)

Figure 18- SIB Plant Table 1- Well Street (2017)

4.5 SIB- Plant Table 1 for King/Border/Lark Lane (2018)

See Figure 19

Willow Valley Water Company
Water System Engineering Report for System Improvement Benefit (SIB)

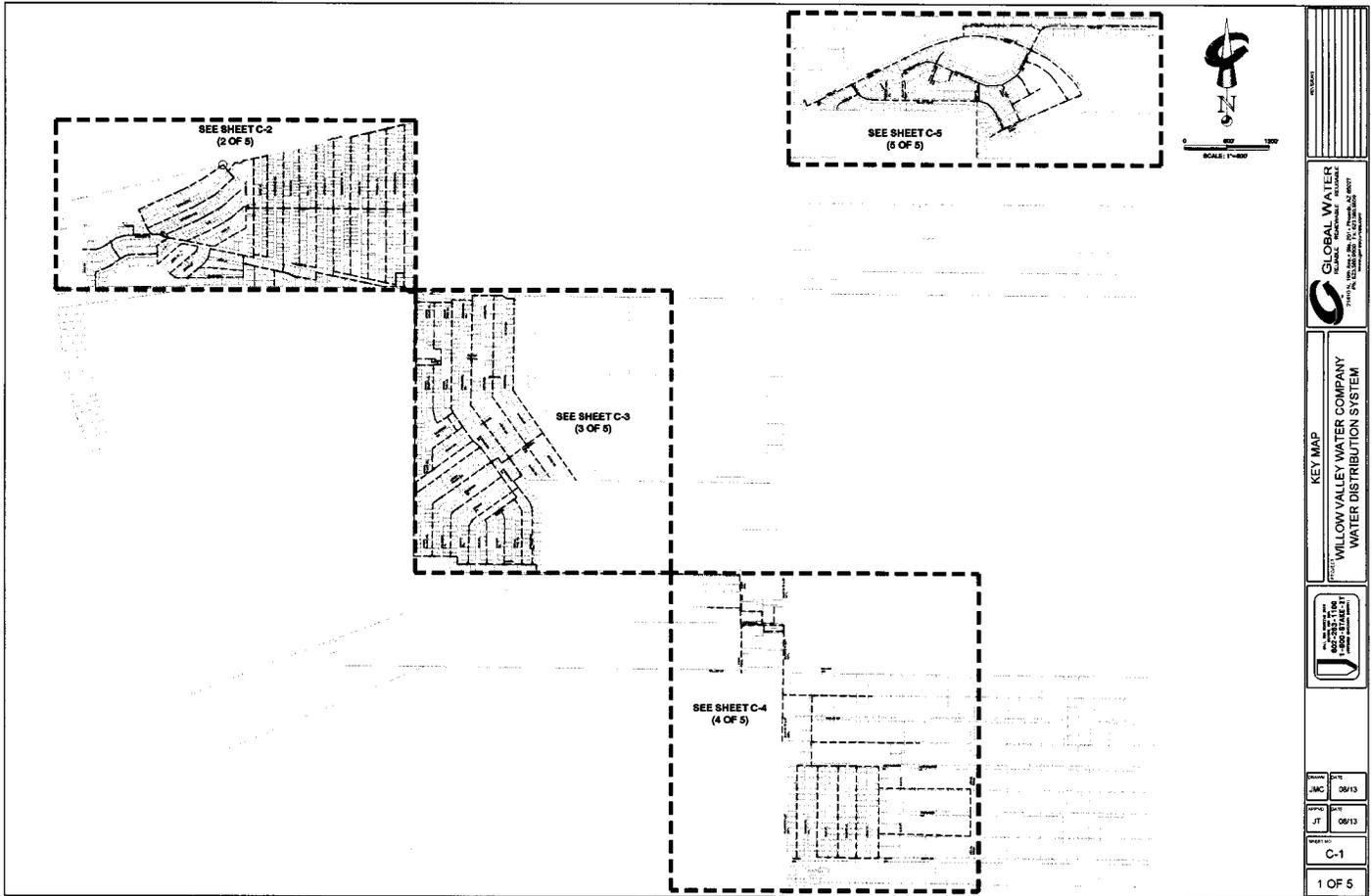
Figure 19- SIB Plant Table 1- King/Border/Lark Lane (2018)

5.0 CONCLUSION

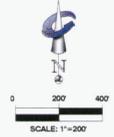
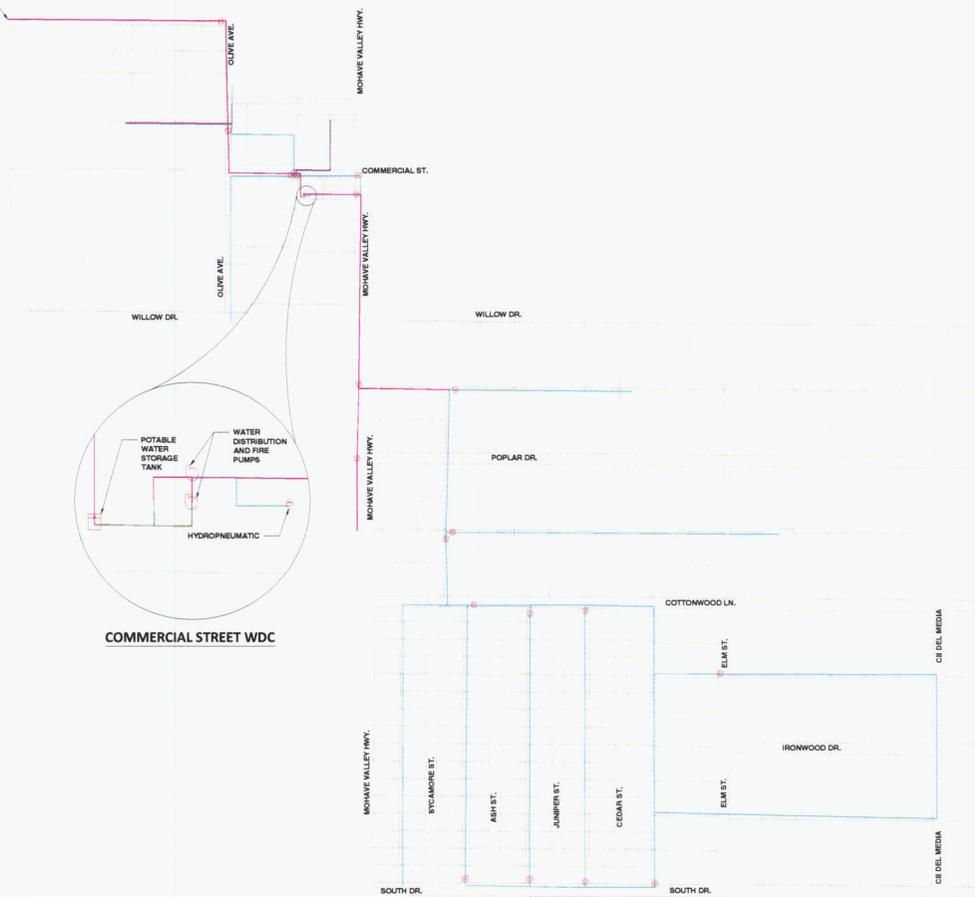
The analysis performed herein provided an audit of the existing system infrastructure. The audit revealed that the existing water production and treatment facilities constructed by Global in prior years, currently offer a compliant and high level of service. The service and water quality issues that remain are specific to the pipeline infrastructure, as it also revealed that much of the system piping is in poor condition due to system age and substandard material. The condition of the piping is resulting in frequent line breaks and unacceptable water loss. Additionally, valve failures throughout the system result in wide impact to customers when line breaks occur. Further, these deficiencies are all magnified based on the location of the waterlines in customer's backyards and proximity to septic systems.

The 5 Year SIB plan was developed to provide for strategic replacement of certain failing distribution infrastructure. Ultimately, this will be expanded to a 20 year program to replace all pipelines as determined necessary. Water modeling was also performed. The water modeling showed that the system is capable of delivering adequate pressures and flows to the system. It also demonstrates that water ages within the system are within a reasonable level.

FIGURE 2



SEE SHEET C-3
FOR CONTINUATION



COLOR CODING LEGEND
PIPE DIAMETER (IN)

Blue line	3.0
Light blue line	4.0
Medium blue line	6.0
Dark blue line	8.0
Very dark blue line	10.0
Black line	12.0

ISOLATION VALVE
POTABLE WATER STORAGE TANK
WELL PUMP
WATER DISTRIBUTION & FIRE PUMP
WELL
HYDROPNEUMATIC
PRESSURE SUSTAINING VALVE (PSV)

GLOBAL WATER
WILLOW VALLEY WATER COMPANY
WATER DISTRIBUTION SYSTEM

COMMERCIAL WATER MAP
WILLOW VALLEY WATER COMPANY
WATER DISTRIBUTION SYSTEM

DATE: 05/13
DRAWN BY: JMC
CHECKED BY: JT

C-4
4 OF 5

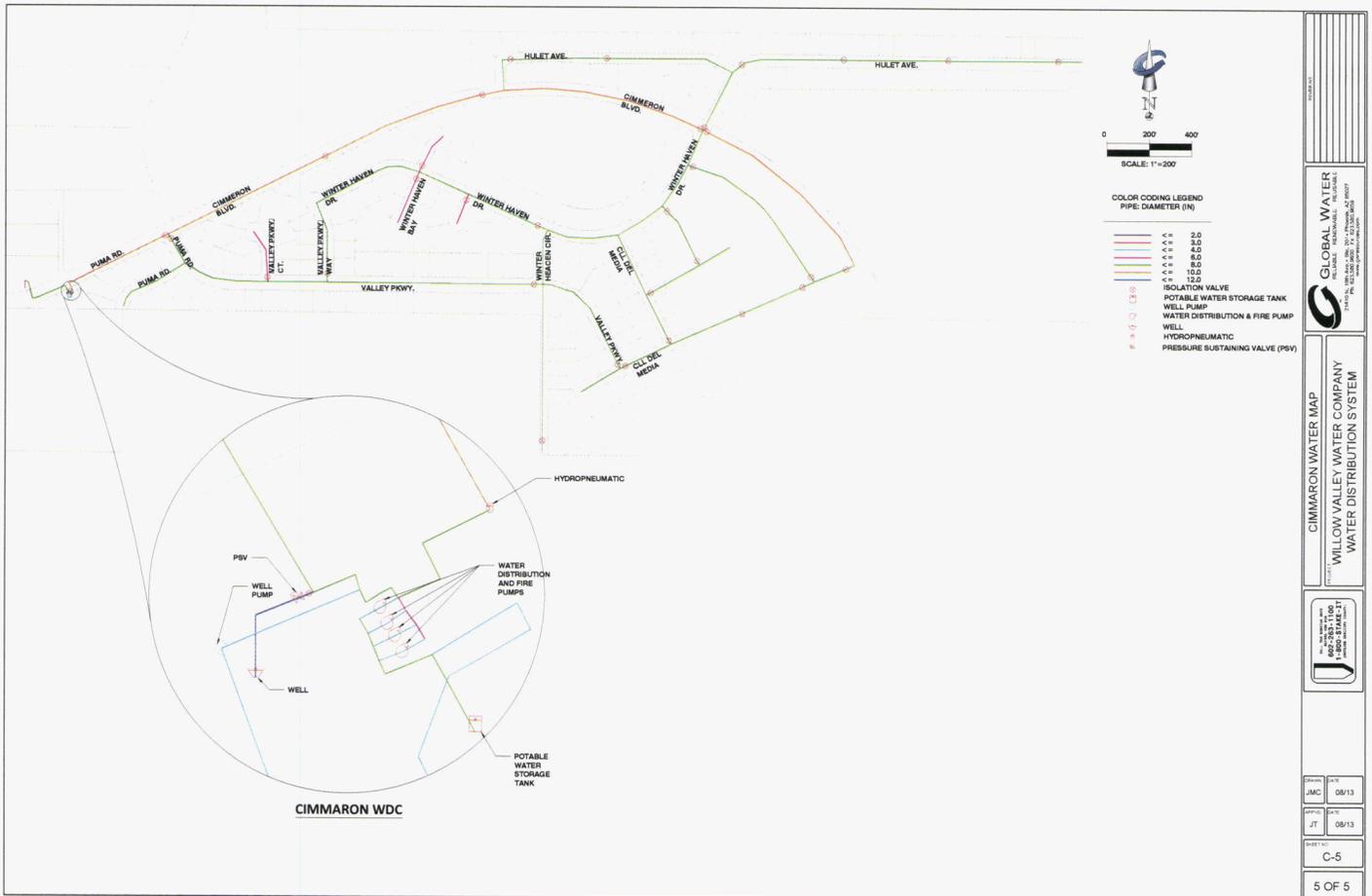
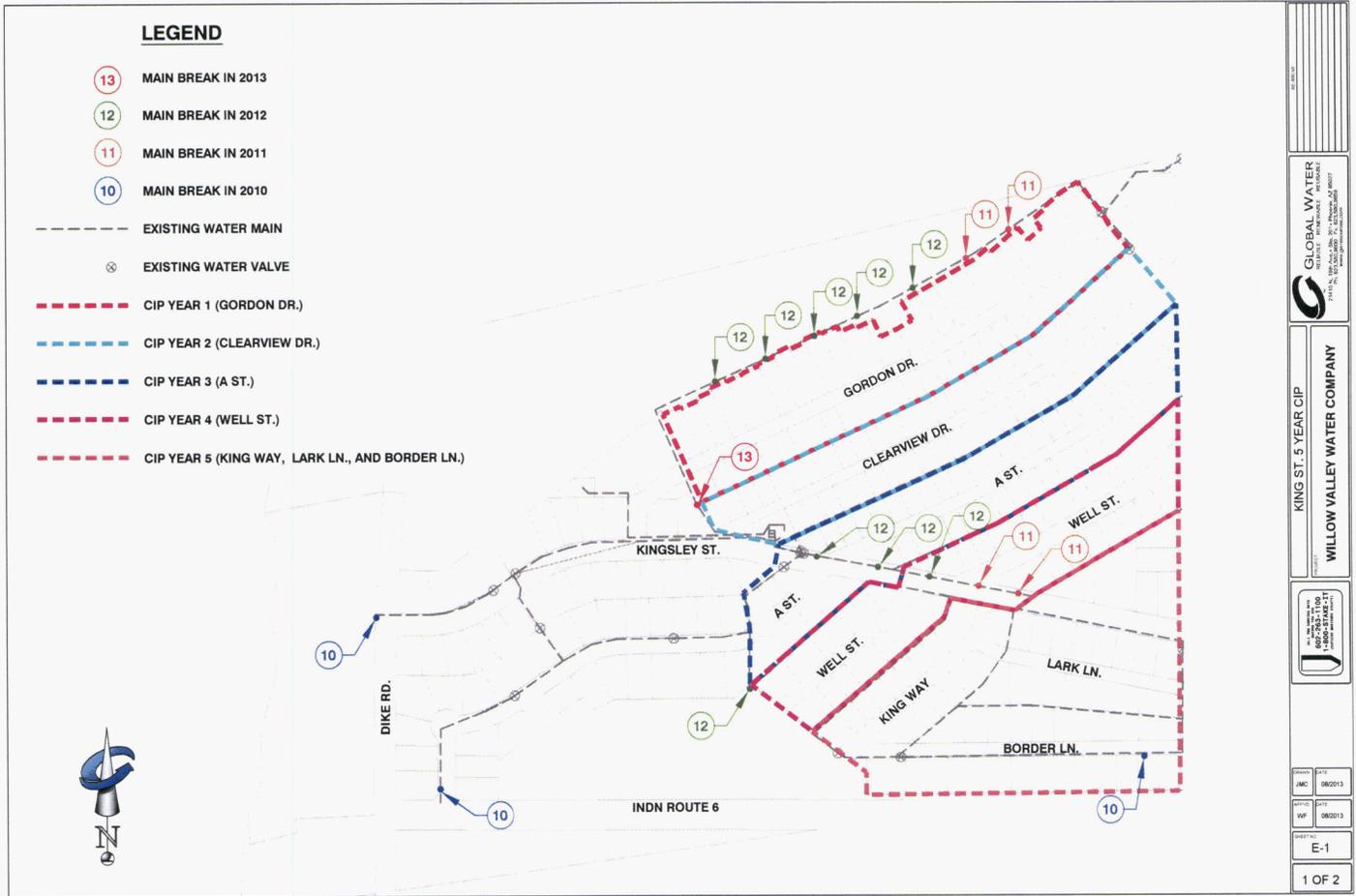


FIGURE 3



GLOBAL WATER
 1111 N. 100th Ave, Ste. 100, Aurora, IL 60017
 630.584.1234

KING ST. 5 YEAR CIP
 WILLOW VALLEY WATER COMPANY

DATE: 08/2013
 DRAWN BY: J
 CHECKED BY: J
 SCALE: AS SHOWN

DATE:	08/2013
BY:	08/2013
APP'D:	08/2013

E-1

1 OF 2

FIGURE 5

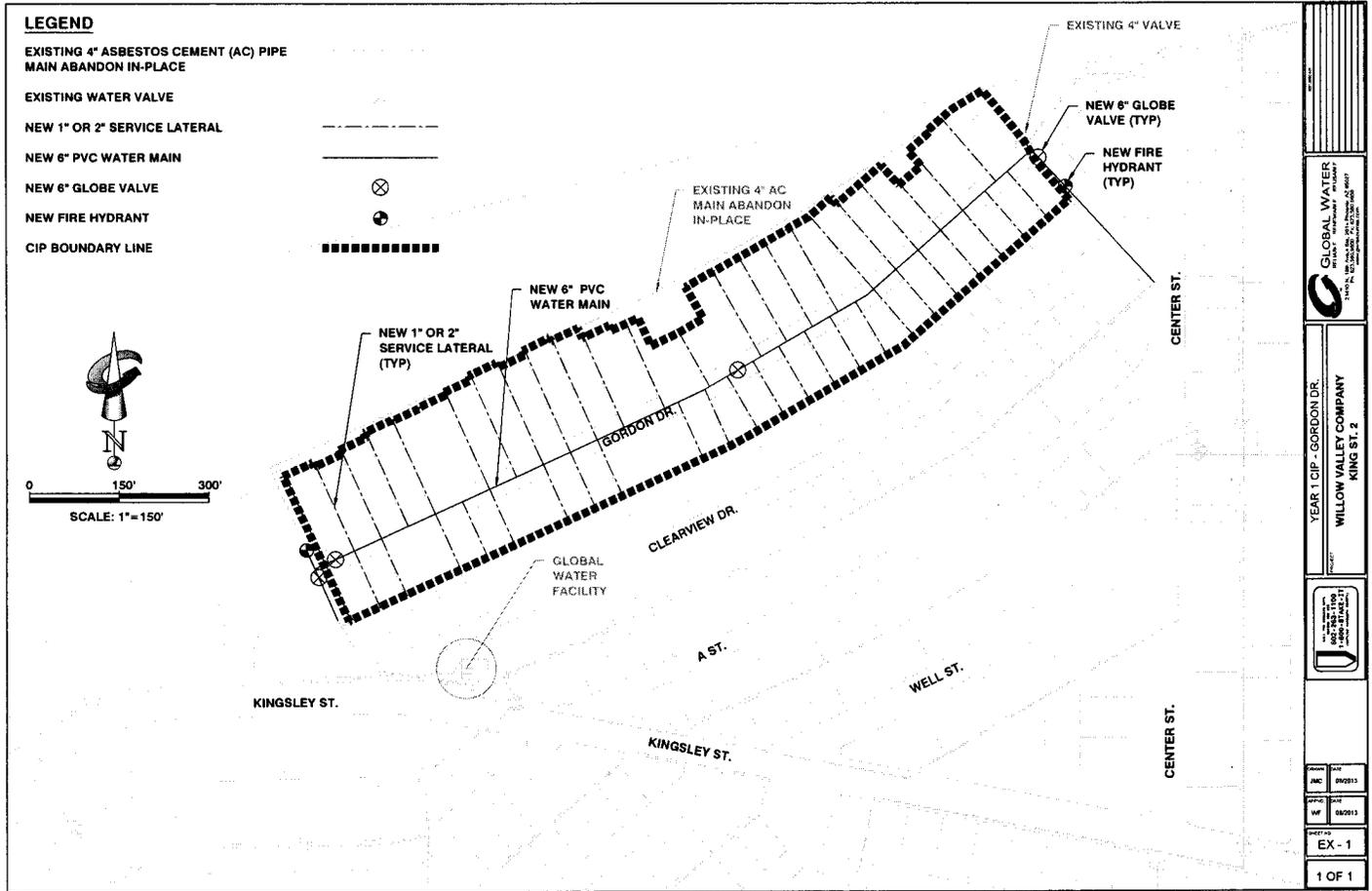


FIGURE 6

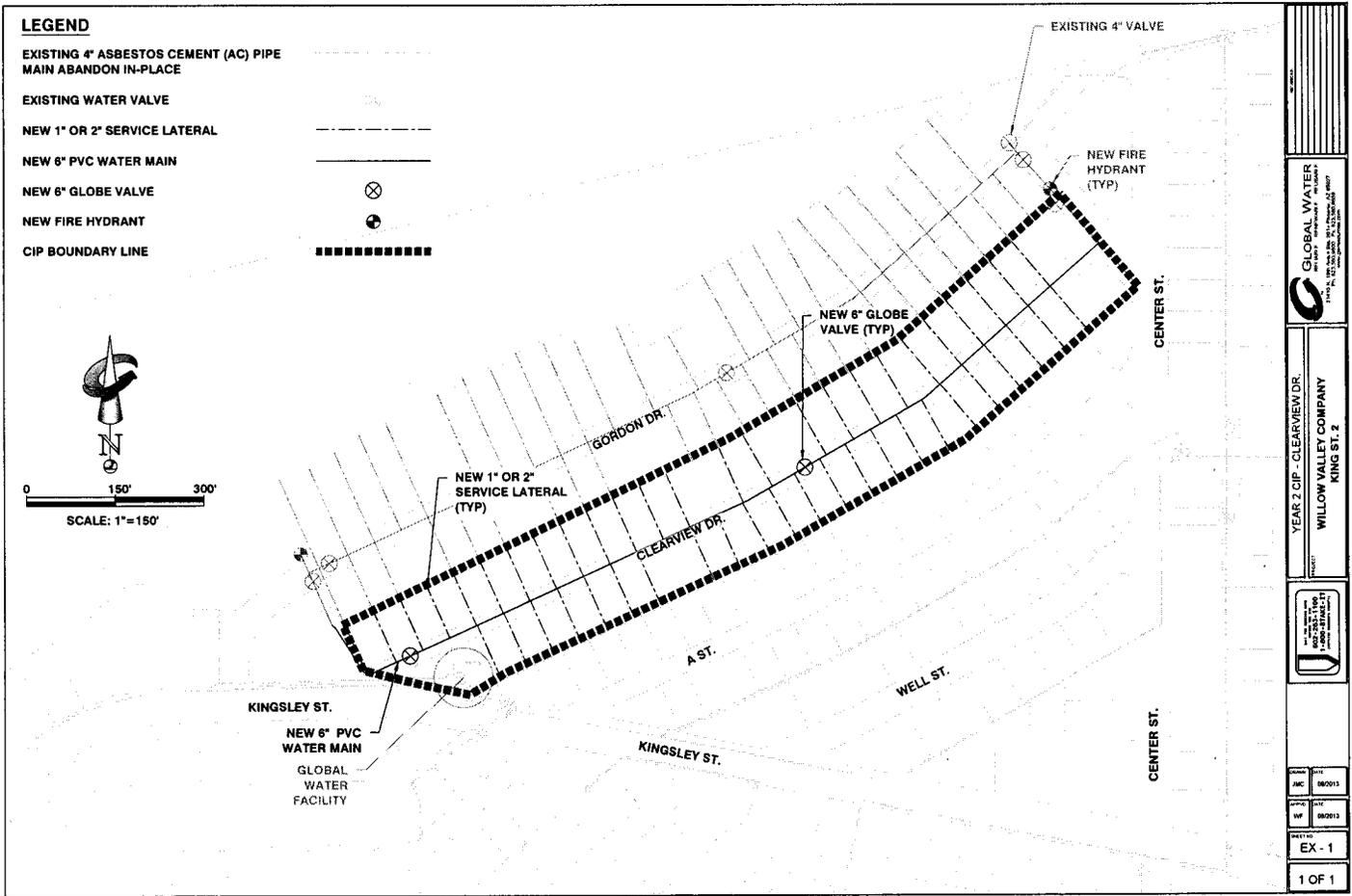
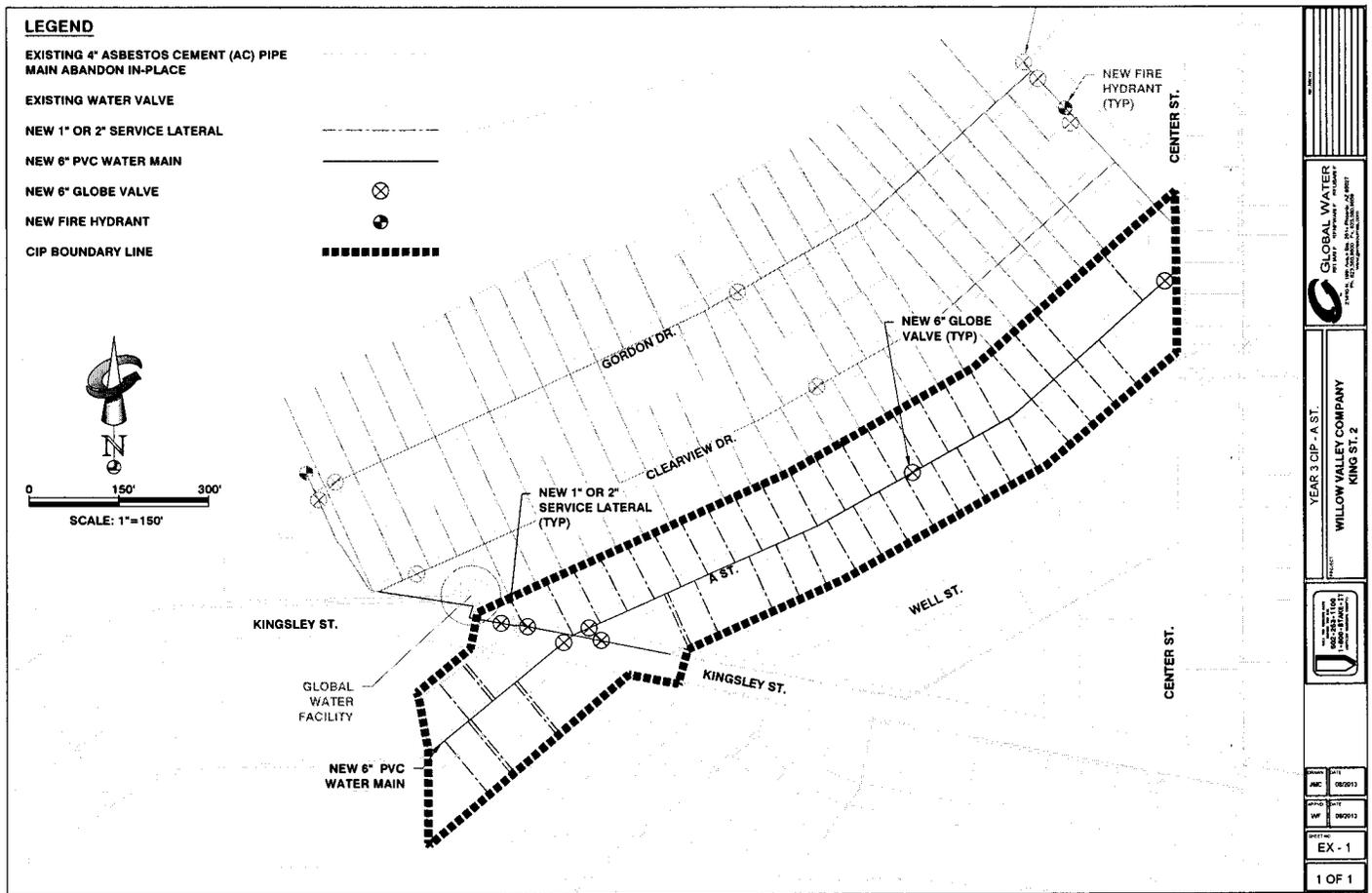


FIGURE 7



<p>GLOBAL WATER WATER MAINS & SERVICE LATERALS 1000 S. 1000 E. SUITE 200 TAMPA, FL 33606</p>	
<p>YEAR 3 CIP - A-ST. WILLOW VALLEY COMPANY KING ST. 2</p>	
<p>DATE: 08/2012</p>	<p>BY: [Signature]</p>
<p>DATE: 08/2012</p>	<p>BY: [Signature]</p>
<p>EX - 1</p>	
<p>1 OF 1</p>	

FIGURE 8

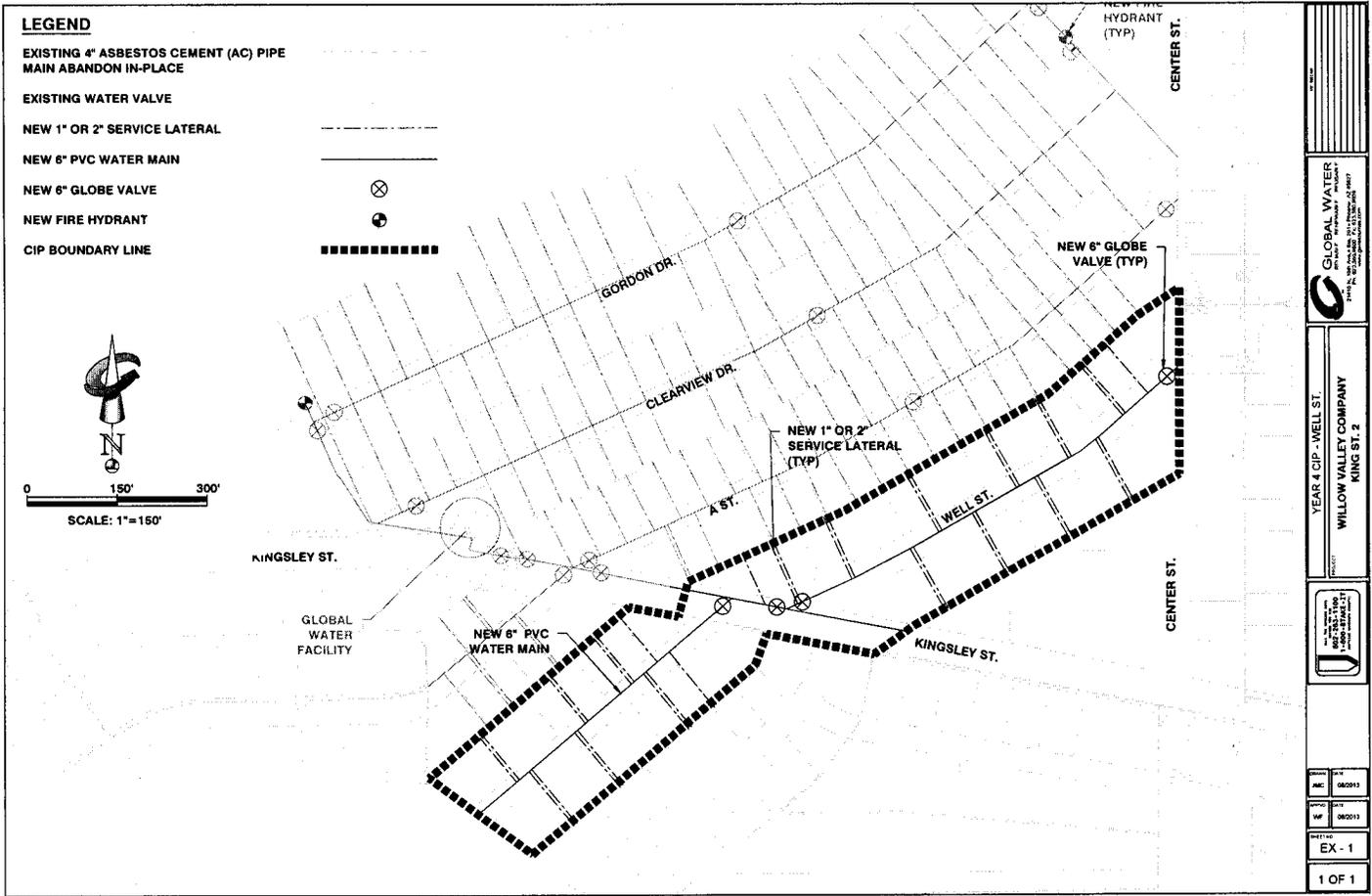


FIGURE 9

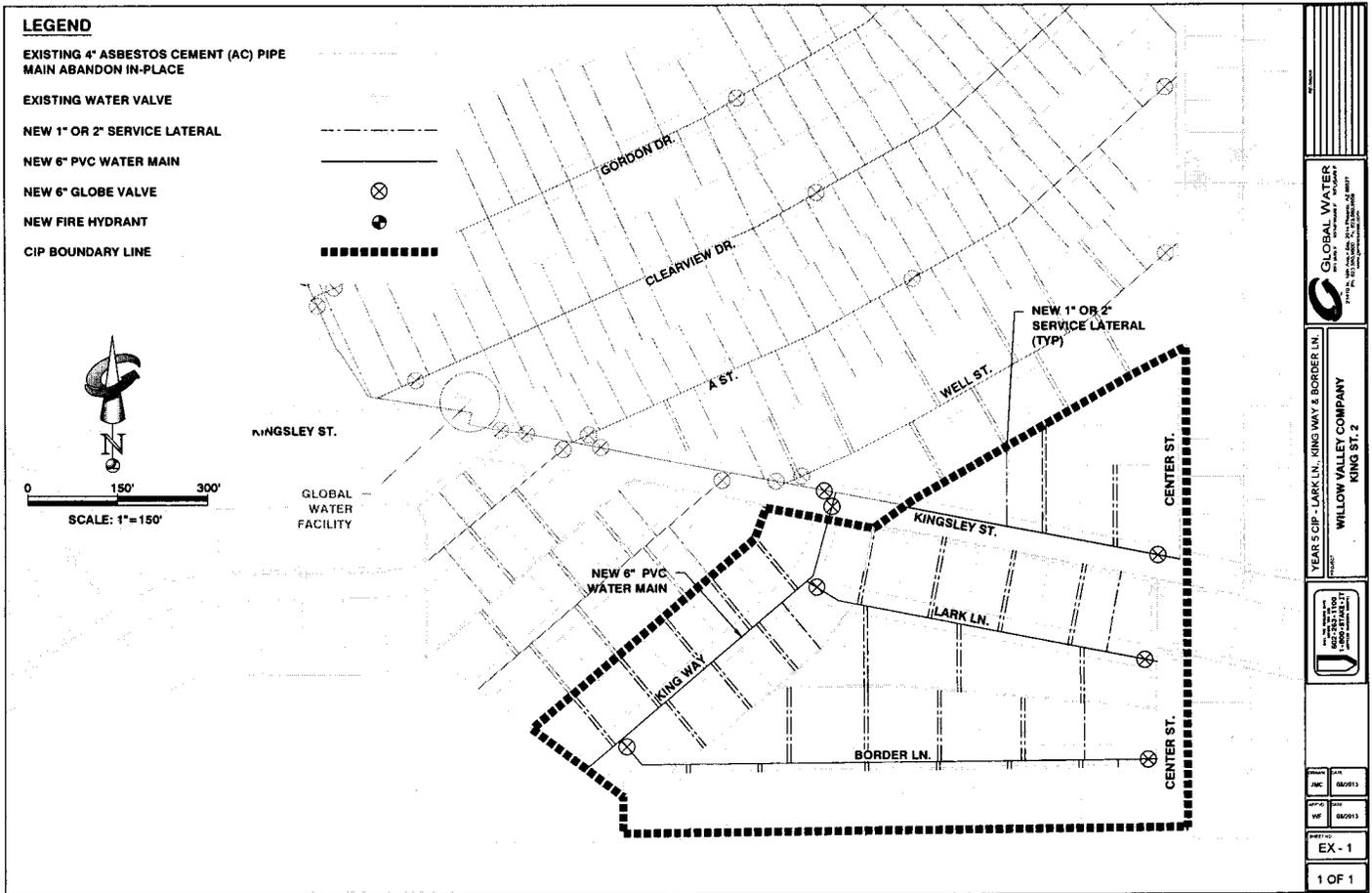


FIGURE 10

8/29/2013

WILLOW VALLEY- 5 YEAR SIB DETAILED COST ESTIMATES

SIB Year 1-Project #1 King Street (Gordon Dr.)					
Line	Item	QTY	Unit	Cost/Unit	Total Replacement Cost
	6" PVC, AWWA C900, Class 160, SDR 26 (Not Including Excavation or Backfill)	1,626	LF	\$40	\$65,028
G1030-805-1340	2' Wide 6' Deep, 3/8 C. Y. Bucket (Includes: Excavation, backfill and removal of spoil, and compaction)	1,626	LF	\$8	\$12,996
02510-820-4100	1" to 2" Water Service Installation, Drill and Tap Pressurized Main (labor only)	47	EA	\$255	\$11,989
02510-920-2200	1" Copper Pipe Water Service Installation (Not Including Excavation or Backfill)	6,078	LF	\$5	\$31,786
G1030-805-1330	2' Wide 4' Deep, 3/8 C. Y. Bucket (Includes: Excavation, backfill and removal of spoil, and compaction)	6,078	LF	\$6	\$38,454
15110-700-3770	6" Globe Valve, 150 lb., Flanged	4	EA	\$3,176	\$12,705
	5-1/4" Fire Hydrants	2	EA	\$1,642	\$3,284
	<i>Subtotal</i>				\$176,243
	Engineering, Surveying, Permitting (10%)				\$17,624
	Contingency (10%)				\$17,624
	Total				\$211,491
SIB Year 2-Project # 2 King Street (Clearview Dr.)					
Line	Item	QTY	Unit	Cost/Unit	Total Replacement Cost
	6" PVC, AWWA C900, Class 160, SDR 26 (Not Including Excavation or Backfill)	1,805	LF	\$40	\$72,194
02510-820-4100	1" to 2" Water Service Installation, Drill and Tap Pressurized Main (labor only)	48	EA	\$255	\$12,244
02510-920-2200	1" Copper Pipe Water Service Installation (Not Including Excavation or Backfill)	4,647	LF	\$5	\$24,302
15110-700-3770	6" Globe Valve, 150 lb., Flanged	3	EA	\$3,176	\$9,529
G1030-805-1330	2' Wide 4' Deep, 3/8 C. Y. Bucket (Includes: Excavation, backfill and removal of spoil, and compaction)	4,647	LF	\$3	\$14,220
G1030-805-1340	2' Wide 6' Deep, 3/8 C. Y. Bucket (Includes: Excavation, backfill and removal of spoil, and compaction)	1,805	LF	\$6	\$10,030
	<i>Subtotal</i>				\$142,519
	Engineering, Surveying, Permitting (10%)				\$14,252
	Contingency (10%)				\$14,252
	Total				\$171,022
SIB Year 3-Project # 3 King Street (A St.)					
Line	Item	QTY	Unit	Cost/Unit	Total Replacement Cost
	6" PVC, AWWA C900, Class 160, SDR 26 (Not Including Excavation or Backfill)	1,447	LF	\$40	\$57,893
02510-820-4100	1" to 2" Water Service Installation, Drill and Tap Pressurized Main (labor only)	39	EA	\$255	\$9,948
02510-920-2200	1" Copper Pipe Water Service Installation (Not Including Excavation or Backfill)	3,894	LF	\$5	\$20,362
15110-700-3770	6" Globe Valve, 150 lb., Flanged	4	EA	\$3,176	\$12,705
G1030-805-1330	2' Wide 4' Deep, 3/8 C. Y. Bucket (Includes: Excavation, backfill and removal of spoil, and compaction)	3,894	LF	\$3	\$11,914
G1030-805-1340	2' Wide 6' Deep, 3/8 C. Y. Bucket (Includes: Excavation, backfill and removal of spoil, and compaction)	1,447	LF	\$6	\$8,043
	<i>Subtotal</i>				\$120,866
	Engineering, Surveying and Permitting (10%)				\$12,087
	Contingency (10%)				\$12,087
	Total				\$145,040

SIB Year 4-Project #4 King Street (Well St.)					
Line Number	Item	QTY	Unit	Cost Per Foot	Total Replacement Cost
	6" PVC, AWWA C900, Class 160, SDR 26 (Not Including Excavation or Backfill)	1,328	LF	\$40	\$53,110
02510-820-4100	1" to 2" Water Service Installation, Drill and Tap Pressurized Main (labor only)	35	EA	\$255	\$8,928
02510-920-2200	1" Copper Pipe Water Service Installation (Not Including Excavation or Backfill)	3909	LF	\$5	\$20,442
15110-700-3770	6" Globe Valve, 150 lb., Flanged	3	EA	\$3,176	\$9,529
G1030-805-1330	2' Wide 4' Deep, 3/8 C. Y. Bucket (Includes: Excavation, backfill and removal of spoil, and compaction)	3909	LF	\$3	\$11,961
G1030-805-1340	2' Wide 6' Deep, 3/8 C. Y. Bucket (Includes: Excavation, backfill and removal of spoil, and compaction)	1,328	LF	\$6	\$7,379
02510-840-8600	Install 4" Plug End (Not Including Excavation or Backfill)	2	EA	\$34	\$68
	<i>Subtotal</i>				\$111,417
	Engineering, Surveying, Permitting (10%)				\$11,142
	Contingency (10%)				\$11,142
	<i>Total</i>				\$133,701
SIB Year 5-Project # 5 King Street (King Way)					
Line Number	Item	QTY	Unit	Cost Per Foot	Total Replacement Cost
	6" PVC, AWWA C900, Class 160, SDR 26 (Not Including Excavation or Backfill)	643	LF	\$40	\$25,707
02510-820-4100	1" to 2" Water Service Installation, Drill and Tap Pressurized Main (labor only)	17	EA	\$255	\$4,336
02510-920-2200	1" Copper Pipe Water Service Installation (Not Including Excavation or Backfill)	1,712	LF	\$5	\$8,955
15110-700-3770	6" Globe Valve, 150 lb., Flanged	1	EA	\$3,176	\$3,176
G1030-805-1330	2' Wide 4' Deep, 3/8 C. Y. Bucket (Includes: Excavation, backfill and removal of spoil, and compaction)	1,712	LF	\$3	\$5,240
G1030-805-1340	2' Wide 6' Deep, 3/8 C. Y. Bucket (Includes: Excavation, backfill and removal of spoil, and compaction)	643	LF	\$6	\$3,572
02510-840-8600	Install 4" Plug End (Not Including Excavation or Backfill)	2	EA	\$34	\$68
	<i>Subtotal</i>				\$51,054
	Engineering, Surveying, Permitting (10%)				\$5,105
	Contingency (10%)				\$5,105
	<i>Total</i>				\$61,265
SIB Year 5-Project # 5 King Street (Border Ln.)					
Line Number	Item	QTY	Unit	Cost Per Foot	Total Replacement Cost
	6" PVC, AWWA C900, Class 160, SDR 26 (Not Including Excavation or Backfill)	918	LF	\$40	\$36,705
02510-820-4100	1" to 2" Water Service Installation, Drill and Tap Pressurized Main (labor only)	22	EA	\$255	\$5,612
02510-920-2200	1" Copper Pipe Water Service Installation (Not Including Excavation or Backfill)	1,232	LF	\$5	\$6,441
15110-700-3770	6" Globe Valve, 150 lb., Flanged	2	EA	\$3,176	\$6,353
G1030-805-1330	2' Wide 4' Deep, 3/8 C. Y. Bucket (Includes: Excavation, backfill and removal of spoil, and compaction)	1,232	LF	\$3	\$3,769
G1030-805-1340	2' Wide 6' Deep, 3/8 C. Y. Bucket (Includes: Excavation, backfill and removal of spoil, and compaction)	918	LF	\$6	\$5,100
02510-840-8600	Install 4" Plug End (Not Including Excavation or Backfill)	2	EA	\$34	\$68
	<i>Subtotal</i>				\$64,048
	Engineering, Surveying, Permitting (10%)				\$6,405
	Contingency (10%)				\$6,405
	<i>Total</i>				\$76,857

SIB Year 5-Project #5 King Street (Lark Ln.)					
Line Number	Item	QTY	Unit	Cost Per Foot	Total Replacement Cost
	6" PVC, AWWA C900, Class 160, SDR 26 (Not Including Excavation or Backfill)	918	LF	\$40	\$36,705
02510-820-4100	1" to 2" Water Service Installation, Drill and Tap Pressurized Main (labor only)	22	EA	\$255	\$5,612
02510-920-2200	1" Copper Pipe Water Service Installation (Not Including Excavation or Backfill)	1,232	LF	\$5	\$6,441
15110-700-3770	6" Globe Valve, 150 lb., Flanged	2	EA	\$3,176	\$6,353
G1030-805-1330	2' Wide 4' Deep, 3/8 C. Y. Bucket (Includes: Excavation, backfill and removal of spoil, and compaction)	1,232	LF	\$3	\$3,769
G1030-805-1340	2' Wide 6' Deep, 3/8 C. Y. Bucket (Includes: Excavation, backfill and removal of spoil, and compaction)	918	LF	\$6	\$5,100
02510-840-8600	Install 4" Plug End (Not Including Excavation or Backfill)	2	EA	\$34	\$68
	<i>Subtotal</i>				\$64,048
	Engineering, Surveying, Permitting (10%)				\$6,405
	Contingency (10%)				\$6,405
	<i>Total</i>				\$76,857

FIGURE 11

5 YEAR SIB - COST SUMMARY TABLE

Year	2014		2015		2016		2017		2018		5-Year Total	
Plant	units	cost	units	cost	units	cost	units	cost	units	cost	units	cost
Pipelines	1,626	\$ 93,630	1,805	\$ 98,669	1,447	\$ 79,124	1,328	\$ 72,668	2,478	\$ 135,711		\$ 479,801
Services	47	\$ 98,674	48	\$ 60,919	39	\$ 50,670	35	\$ 49,598	61	\$ 60,210		\$ 320,070
Meters	-	\$ -	-	\$ -	-		-	\$ -	-	\$ -	-	\$ -
Hydrants	2	\$ 3,941	-	\$ -	-			\$ -	-	\$ -		\$ 3,941
Valves	4	\$ 15,246	3	\$ 11,435	4	\$ 15,246	3	\$ 11,435	5	\$ 19,058		\$ 72,420
Total		\$ 211,491		\$171,022		\$145,040		\$133,701		\$ 214,979		\$ 876,233

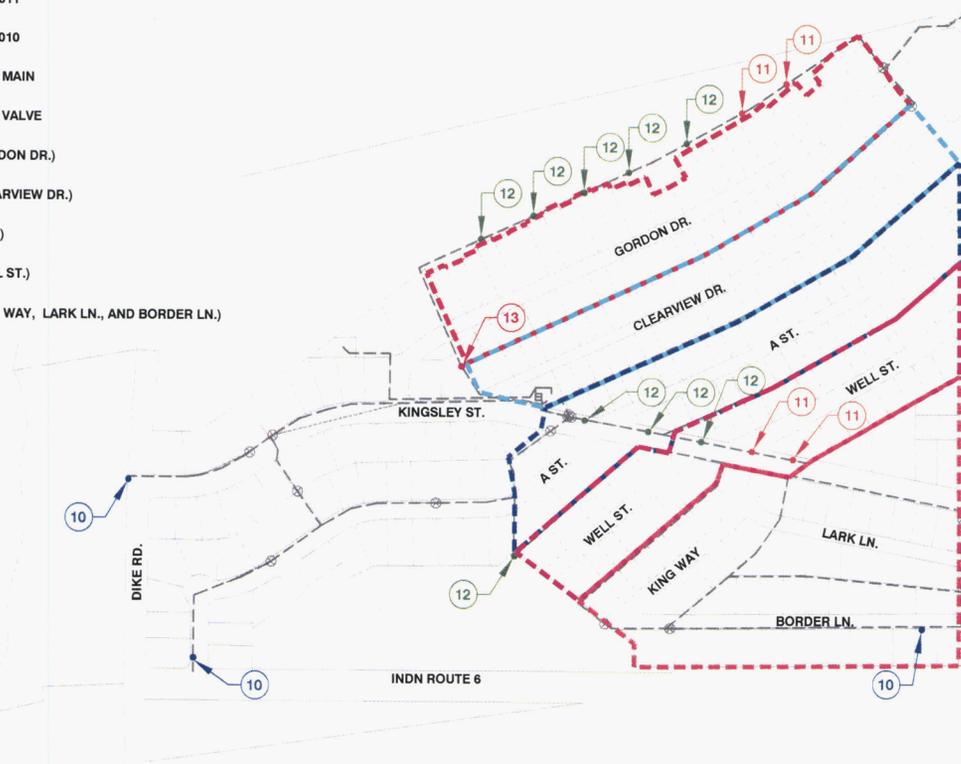
LEGEND

- 13 MAIN BREAK IN 2013
- 12 MAIN BREAK IN 2012
- 11 MAIN BREAK IN 2011
- 10 MAIN BREAK IN 2010

- - - EXISTING WATER MAIN
- ⊗ EXISTING WATER VALVE

- - - CIP YEAR 1 (GORDON DR.)
- - - CIP YEAR 2 (CLEARVIEW DR.)
- - - CIP YEAR 3 (A ST.)
- - - CIP YEAR 4 (WELL ST.)
- - - CIP YEAR 5 (KING WAY, LARK LN., AND BORDER LN.)

FIGURE 12



<p>GLOBAL WATER 11111 N. 110th Ave, Suite 200, Greenwood, IN 46037 www.globalwater.com</p>	
<p>KING ST. 5 YEAR CIP WILLOW VALLEY WATER COMPANY</p>	
<p>DATE: 08/20/13 BY: J. [unreadable]</p>	<p>DATE: 08/20/13 BY: J. [unreadable]</p>
<p>SHEET: E-1</p>	
<p>1 OF 2</p>	

FIGURE 13

Company Name: Willow Valley Water Company Inc
Name of System: King Street

WILLOW VALLEY SIB- HISTORICAL WATER LOSS TOTALS

Year	Total Gallon Sold	Total Gallon Pumped	System Water Leakage
2008	91,995	115,312	20.2%
2009	101,495	121,812	16.7%
2010	83,227	104,209	20.1%
2011	68,712	89,824	23.5%
2012	66,696	87,516	23.8%

Source: 2008-2012 Willow Valley Water Company Annual Report

WILLOW VALLEY SIB-PROJECT FUTURE WATER LOSS

Year	SIB Project	Projected Water Loss
2014*	Project 1 Completed	<19%
2015*	Project 2 Completed	<16%
2016*	Project 3 Completed	<14%
2017*	Project 4 Completed	<12%
2018*	Project 5 Completed	<10%

* The reduction in water loss is calculated by taking the realized benefits from replacing the aging infrastructure that has failed a multitude of times in the past and proved to be a major contributor to the water loss recorded for the system. The overall objective of the Willow Valley Water Company is to reduce the overall system water loss to approximately 7%. The 5 Year SIB Project Plan targets the area where infrastructure is most prone to failure and the biggest contributor to water loss. It is estimated that water loss will be at approximately 10% when all five SIB projects have been completed.

FIGURE 14

Willow Valley- SIB Submittal

5 YEAR HISTORICAL COSTS DETIAL

2008 Historical Costs		
Item	Desc	Cost
Pipelines	\$34,682 dollars expended towards Capital Expenditure Projects to repair main breaks that occurred within the last 5 years and install/maintain necessary valves. \$4,256 dollars spent in maintenance activities on the pipeline infrastructure	\$ 38,939
Services	\$1,949 dollars spent on installing new water services	\$ 1,949
Meters	\$1,480 dollars spent on installing new meters	\$ 1,470
Hydrants	\$9,975 dollars spent on installing/ maintaining fire hydrants	\$ 9,975
Total		\$ 52,332.58

2009 Historical Costs		
Item	Desc	Cost
Pipelines	\$20,132 dollars expended towards Capital Expenditure Projects to repair main breaks that occurred within the last 5 years and install/maintain necessary valves. \$7,465.06 dollars spent in maintenance activities on the pipeline infrastructure	\$ 27,597
Services	\$1,22 dollars spent on installing new water services	\$ 1,322
Meters	\$2,331 dollars spent on installing new meters	\$ 2,331
Hydrants	\$9,975 dollars spent on installing/ maintaining fire hydrants	\$ -
Total		\$ 31,249.85

2010 Historical Costs		
Item	Desc	Cost
Pipelines	\$8,960 dollars expended towards Capital Expenditure Projects to repair main breaks that occurred within the last 5 years and install/maintain necessary valves. \$3,436.59 dollars spent in maintenance activities on the pipeline infrastructure	\$ 12,396
Services	No new services added this year	\$ -
Meters	\$309,135 dollars spent on installing all new water meters at each service location- complete meter replacement program	\$ 309,135
Hydrants	\$0 spent on Hydrants this year	\$ -
Total		\$ 321,531.27

2011 Historical Costs		
Item	Desc	Cost
Pipelines	\$28,103 dollars expended towards Capital Expenditure Projects to repair main breaks that occurred within the last 5 years and install/maintain necessary valves. \$14,128.66 dollars spent in maintenance activities on the pipeline infrastructure	\$ 42,232
Services	No new services added this year	\$ -
Meters	\$29 dollars spent on installing all new water meters this year and \$1,825.98 in maintenance on new metering system maintenance	\$ 1,855
Hydrants	\$9,425 dollars spent on installing/ maintaining fire hydrants	\$ 9,425
Total		\$ 53,511.32

2012 Historical Costs		
Item	Desc	Cost
Pipelines	\$33,524 dollars expended towards Capital Expenditure Projects to repair main breaks that occurred within the last 5 years and install/maintain necessary valves. \$14,909.76 dollars spent in maintenance activities on the pipeline infrastructure	\$ 48,434
Services	No new services added this year	\$ -
Meters	\$4,464 dollars spent on installing all new water meters this year, and \$9,104.51 dollars spent on new meter system maintenance	\$ 13,569
Hydrants	\$2,119 dollars spent on installing/ maintaining fire hydrants	\$ 2,119
Total		\$ 64,122

5 YEAR HISTORICAL TOTAL: \$ 522,747

FIGURE 15

WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
 SIB PLANT TABLE I – GORDON DRIVE (2014)
 Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			1. <u>Provide narrative why Replacement Plant is necessary.</u> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition - Replacement of existing plant to address excessive water loss (greater than 20%) - Replacement of existing plant for other reasons detailed in SIB Engineering Report 2. <u>Provide narrative explaining why this segment of plant is a priority.</u> Please reference Page 10 in SIB Engineering Report. 3. <u>Provide narrative explaining how replacing this plant will benefit existing customers.</u> reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers. 4. <u>Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers.</u> The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers. 5. <u>Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB.</u> Please reference Page 10 in SIB Engineering Report.
		Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
1									Supply mains not included in this project	
2										
3										
4										
5										
6										
7										
Estimated Total Cost										

**WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
SIB PLANT TABLE I – GORDON DRIVE (2014)
Information to be included with SIB-Eligible Project Notification**

Project No.	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			<p>1. <u>Provide narrative why Replacement Plant is necessary.</u> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition</p> <p>- Replacement of existing plant to address excessive water loss (greater than 20%)</p> <p>- Replacement of existing plant for other reasons detailed in SIB Engineering Report</p> <p>2. <u>Provide narrative explaining why this segment of plant is a priority.</u> Please reference Page 10 in SIB Engineering Report.</p> <p>3. <u>Provide narrative explaining how replacing this plant will benefit existing customers.</u> reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers.</p> <p>4. <u>Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers.</u> The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers.</p> <p>5. <u>Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB.</u> Please reference Page 10 in SIB Engineering Report.</p>
		Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Cost (by project)	
1	331	1,626	6	PVC	\$66.96	Gordon Drive	2014	\$108,876	Install approximately 1,626 LF of 6-inch water main that will replace the existing water main that is constructed of 4 inch Asbestos Cement (AC) pipe. Also, 4 new valves will be installed at appropriate locations as to provide adequate system isolation when necessary. There have been seven recorded main line breaks on this section of water main over the last three years.	
Estimated Total Cost								\$108,876		

WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
 SIB PLANT TABLE 1- GORDON DRIVE (2014)
 Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			<p>1. Provide narrative why Replacement Plant is necessary:</p> <ul style="list-style-type: none"> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition - Replacement of existing plant to address excessive water loss (greater than 20%) - Replacement of existing plant for other reasons detailed in SIB Engineering Report <p>2. Provide narrative explaining why this segment of plant is a priority: Please reference Page 10 in SIB Engineering Report.</p> <p>3. Provide narrative explaining how replacing this plant will benefit existing customers: reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers.</p> <p>4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers.</p> <p>5. Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Please reference Page 10 in SIB Engineering Report.</p>
		Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
1	333	47	1-inch	Copper	\$2,099	Gordon Drive	2014	\$98,674	Install approximately 6,078 LF of 1" copper services lines to 47 service connections for this project.	
2										
3										
4										
5										
6										
7										
8										
9										
Estimated Total Cost								\$98,674		

WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
 SIB PLANT TABLE I – GORDON DRIVE (2014)
 Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			<p>1. <u>Provide narrative why Replacement Plant is necessary:</u></p> <ul style="list-style-type: none"> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition - Replacement of existing plant to address excessive water loss (greater than 20%) - Replacement of existing plant for other reasons detailed in SIB Engineering Report <p>2. <u>Provide narrative explaining why this segment of plant is a priority:</u> Please reference Page 10 in SIB Engineering Report.</p> <p>3. <u>Provide narrative explaining how replacing this plant will benefit existing customers:</u> reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers.</p> <p>4. <u>Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers.</u> The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers.</p> <p>5. <u>Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB.</u> Please reference Page 10 in SIB Engineering Report.</p>
		Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
1	334 Meters								Meters not included in this project	
2										
3										
4										
5										
6										
7										
Estimated Total Cost										

**WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
SIB PLANT TABLE I – GORDON DRIVE (2014)
Information to be included with SIB-Eligible Project Notification**

Project No.	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			<p>1. <u>Provide narrative why Replacement Plant is necessary:</u> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition</p> <p>- Replacement of existing plant to address excessive water loss (greater than 20%)</p> <p>- Replacement of existing plant for other reasons detailed in SIB Engineering Report</p> <p>2. <u>Provide narrative explaining why this segment of plant is a priority:</u> Please reference Page 10 in SIB Engineering Report.</p> <p>3. <u>Provide narrative explaining how replacing this plant will benefit existing customers:</u> reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers.</p> <p>4. <u>Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers.</u> The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers.</p> <p>5. <u>Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB.</u> Please reference Page 10 in SIB Engineering Report.</p>
		Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
1	335	2	5-1/4 inch	Cast Iron	\$1,970	Gordon Drive	2014	\$3,941	Install approximately two new fire hydrants to replace the existing hydrants that are not up to current standards and specifications.	
2										
3										
4										
5										
6										
7										
Estimated Total Cost								\$3,941		

FIGURE 16

WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
 SIB PLANT TABLE I – CLEARVIEW DR (2015)
 Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary: - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition - Replacement of existing plant to address excessive water loss (greater than 20%) - Replacement of existing plant for other reasons detailed in SIB Engineering Report 2. Provide narrative explaining why this segment of plant is a priority: Please reference Page 10 in SIB Engineering Report. 3. Provide narrative explaining how replacing this plant will benefit existing customers: reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers. 5. Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Please reference Page 10 in SIB Engineering Report.
		Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
1									Supply mains not included in this project	
2										
3										
4										
5										
6										
7										
Estimated Total Cost										

WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
 SIB PLANT TABLE 1 – CLEARVIEW DR (2015)
 Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			<p>1. <u>Provide narrative why Replacement Plant is necessary:</u></p> <ul style="list-style-type: none"> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition - Replacement of existing plant to address excessive water loss (greater than 20%) - Replacement of existing plant for other reasons detailed in SIB Engineering Report <p>2. <u>Provide narrative explaining why this segment of plant is a priority:</u> Please reference Page 10 in SIB Engineering Report.</p> <p>3. <u>Provide narrative explaining how replacing this plant will benefit existing customers:</u> reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers.</p> <p>4. <u>Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers.</u> The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers.</p> <p>5. <u>Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB.</u> Please reference Page 10 in SIB Engineering Report.</p>
		Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Cost (by project)	
1	331	1,805	6	PVC	\$60.99	Clearview Drive	2015	\$110,103	Install approximately 1,805 LF of 6-inch water main that will replace the existing water main that is constructed of 4 inch Asbestos Cement (AC) pipe. Also, 3 new valves will be installed at appropriate locations as to provide adequate system isolation when necessary. There was one recorded main line break on this section of water main recorded in the year 2013.	
Estimated Total Cost								\$110,103		

WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
 SIB PLANT TABLE I – CLEARVIEW DR (2015)
 Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			<p>1. <u>Provide narrative why Replacement Plant is necessary.</u></p> <ul style="list-style-type: none"> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition - Replacement of existing plant to address excessive water loss (greater than 20%) - Replacement of existing plant for other reasons detailed in SIB Engineering Report <p>2. <u>Provide narrative explaining why this segment of plant is a priority.</u> Please reference Page 10 in SIB Engineering Report.</p> <p>3. <u>Provide narrative explaining how replacing this plant will benefit existing customers.</u> reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers.</p> <p>4. <u>Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers.</u> The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers.</p> <p>5. <u>Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB.</u> Please reference Page 10 in SIB Engineering Report.</p>
		Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
1	333	48	1-inch	Copper	\$1,269	Clearview Drive	2015	\$60,919	Install approximately 4,647 LF of 1" copper services lines to 48 service connections for this project.	
2										
3										
4										
5										
6										
7										
8										
9										
Estimated Total Cost								\$60,919		

WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
 SIB PLANT TABLE 1 – CLEARVIEW DR (2015)
 Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			<p>1. <u>Provide narrative why Replacement Plant is necessary:</u></p> <ul style="list-style-type: none"> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition - Replacement of existing plant to address excessive water loss (greater than 20%) - Replacement of existing plant for other reasons detailed in SIB Engineering Report <p>2. <u>Provide narrative explaining why this segment of plant is a priority.</u> Please reference Page 10 in SIB Engineering Report.</p> <p>3. <u>Provide narrative explaining how replacing this plant will benefit existing customers:</u> reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers.</p> <p>4. <u>Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers.</u> The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers.</p> <p>5. <u>Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB.</u> Please reference Page 10 in SIB Engineering Report.</p>
		Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
1									Meters not included in this project	
2										
3										
4										
5										
6										
7										
Estimated Total Cost										

WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
 SIB PLANT TABLE 1 – CLEARVIEW DR (2015)
 Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			<p>1. <u>Provide narrative why Replacement Plant is necessary:</u> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition</p> <p>- Replacement of existing plant to address excessive water loss (greater than 20%)</p> <p>- Replacement of existing plant for other reasons detailed in SIB Engineering Report</p> <p>2. <u>Provide narrative explaining why this segment of plant is a priority:</u> Please reference Page 10 in SIB Engineering Report.</p> <p>3. <u>Provide narrative explaining how replacing this plant will benefit existing customers:</u> reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers.</p> <p>4. <u>Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers.</u> The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers.</p> <p>5. <u>Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB.</u> Please reference Page 10 in SIB Engineering Report.</p>
		Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
1	335 Hydrants								Hydrants not included in this project	
2										
3										
4										
5										
6										
7										
Estimated Total Cost										

FIGURE 17

WILLOW VALLEY WATER COMPANY-KING STREET WATER SYSTEM
 SIB PLANT TABLE I – A STREET (2016)
 Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary: - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition - Replacement of existing plant to address excessive water loss (greater than 20%) - Replacement of existing plant for other reasons detailed in SIB Engineering Report 2. Provide narrative explaining why this segment of plant is a priority. Please reference Page 10 in SIB Engineering Report. 3. Provide narrative explaining how replacing this plant will benefit existing customers: reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers. 5. Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Please reference Page 10 in SIB Engineering Report.
		Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
1	309 Supply Mains								Supply Mains not included in this project	
2										
3										
4										
5										
6										
Estimated Total Cost										

**WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
SIB PLANT TABLE I – A STREET (2016)**

Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			<p>1. <u>Provide narrative why Replacement Plant is necessary:</u> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition</p> <p>- Replacement of existing plant to address excessive water loss (greater than 20%)</p> <p>- Replacement of existing plant for other reasons detailed in SIB Engineering Report</p> <p>2. <u>Provide narrative explaining why this segment of plant is a priority:</u> Please reference Page 10 in SIB Engineering Report.</p> <p>3. <u>Provide narrative explaining how replacing this plant will benefit existing customers:</u> reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers.</p> <p>4. <u>Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers.</u> The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers.</p> <p>5. <u>Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB.</u> Please reference Page 10 in SIB Engineering Report.</p>
		Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Cost (by project)	
1	331	1,447	6	PVC	\$65.21	A Street	2016	\$94,370	Install approximately 1,447 LF of 6-inch water main that will replace the existing water main that is constructed of 4 inch Asbestos Cement (AC) pipe. Also, 4 new valves will be installed at appropriate locations as to provide adequate system isolation when necessary. There have been three recorded main line breaks on this section of water main over the last two years.	
Estimated Total Cost									\$94,370	

**WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
SIB PLANT TABLE 1 – A STREET (2016)**

Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			<p>1. <u>Provide narrative why Replacement Plant is necessary:</u></p> <ul style="list-style-type: none"> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition - Replacement of existing plant to address excessive water loss (greater than 20%) - Replacement of existing plant for other reasons detailed in SIB Engineering Report <p>2. <u>Provide narrative explaining why this segment of plant is a priority:</u> Please reference Page 10 in SIB Engineering Report.</p> <p>3. <u>Provide narrative explaining how replacing this plant will benefit existing customers:</u> reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers.</p> <p>4. <u>Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers.</u> The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers.</p> <p>5. <u>Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB.</u> Please reference Page 10 in SIB Engineering Report.</p>
		Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
1	333	39	1-inch	Copper	\$1,299	A Street	2016	\$50,670	Install approximately 3,894 LF of 1" copper services lines to 39 service connections for this project.	
2										
3										
4										
5										
Estimated Total Cost								\$50,670		

WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
SIB PLANT TABLE 1 – A STREET (2016)

Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			<p>1. <u>Provide narrative why Replacement Plant is necessary:</u> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition</p> <p>- Replacement of existing plant to address excessive water loss (greater than 20%)</p> <p>- Replacement of existing plant for other reasons detailed in SIB Engineering Report</p> <p>2. <u>Provide narrative explaining why this segment of plant is a priority:</u> Please reference Page 10 in SIB Engineering Report.</p> <p>3. <u>Provide narrative explaining how replacing this plant will benefit existing customers:</u> reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers.</p> <p>4. <u>Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers.</u> The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers.</p> <p>5. <u>Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB.</u> Please reference Page 10 in SIB Engineering Report.</p>
		Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
1	334 Meters								Meters not included in this project	
2										
3										
4										
5										
6										
Estimated Total Cost										

WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
 SIB PLANT TABLE I – A STREET (2016)
 Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			<p>1. Provide narrative why Replacement Plant is necessary:</p> <ul style="list-style-type: none"> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition - Replacement of existing plant to address excessive water loss (greater than 20%) - Replacement of existing plant for other reasons detailed in SIB Engineering Report <p>2. Provide narrative explaining why this segment of plant is a priority: Please reference Page 10 in SIB Engineering Report.</p> <p>3. Provide narrative explaining how replacing this plant will benefit existing customers: reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers.</p> <p>4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers.</p> <p>5. Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Please reference Page 10 in SIB Engineering Report.</p>
		Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
1	335 Hydrants								Hydrants not included in this project	
2										
3										
4										
Estimated Total Cost										

FIGURE 18

WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
 SIB PLANT TABLE I – WELL STREET (2017)
 Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary: - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition - Replacement of existing plant to address excessive water loss (greater than 20%) - Replacement of existing plant for other reasons detailed in SIB Engineering Report 2. Provide narrative explaining why this segment of plant is a priority. Please reference Page 10 in SIB Engineering Report. 3. Provide narrative explaining how replacing this plant will benefit existing customers. reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers. 5. Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Please reference Page 10 in SIB Engineering Report.
		Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
1	309 Supply Mains								Supply mains not included in this project	
2										
3										
4										
5										
6										
7										
Estimated Total Cost										

**WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
SIB PLANT TABLE I – WELL STREET (2017)**

Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			<p>1. <u>Provide narrative why Replacement Plant is necessary:</u></p> <ul style="list-style-type: none"> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition - Replacement of existing plant to address excessive water loss (greater than 20%) - Replacement of existing plant for other reasons detailed in SIB Engineering Report <p>2. <u>Provide narrative explaining why this segment of plant is a priority.</u> Please reference Page 10 in SIB Engineering Report.</p> <p>3. <u>Provide narrative explaining how replacing this plant will benefit existing customers:</u> reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers.</p> <p>4. <u>Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers.</u> The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers.</p> <p>5. <u>Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB.</u> Please reference Page 10 in SIB Engineering Report.</p>
		Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Cost (by project)	
1	331	1,328	6	PVC	\$63.33	Well Street	2017	\$84,103	Install approximately 1,328 LF of 6-inch water main that will replace the existing water main that is constructed of 4 inch Asbestos Cement (AC) pipe. Also, 2 new valves will be installed at appropriate locations as to provide adequate system isolation when necessary. There have been three recorded main line breaks on this section of water main over the last two years.	
Estimated Total Cost								\$84,103		

WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
 SIB PLANT TABLE I – WELL STREET (2017)
 Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			<p>1. <u>Provide narrative why Replacement Plant is necessary.</u> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition</p> <p>- Replacement of existing plant to address excessive water loss (greater than 20%)</p> <p>- Replacement of existing plant for other reasons detailed in SIB Engineering Report</p> <p>2. <u>Provide narrative explaining why this segment of plant is a priority.</u> Please reference Page 10 in SIB Engineering Report.</p> <p>3. <u>Provide narrative explaining how replacing this plant will benefit existing customers:</u> reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers.</p> <p>4. <u>Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers.</u> The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers.</p> <p>5. <u>Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB.</u> Please reference Page 10 in SIB Engineering Report.</p>
		Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
1	333	35	1-inch	Copper	\$1,417	Well Street	2017	\$49,598	Install approximately 3,909 LF of 1" copper services lines to 35 service connections for this project.	
2										
3										
4										
5										
6										
7										
8										
9										
Estimated Total Cost								\$49,598		

WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
 SIB PLANT TABLE I – WELL STREET (2017)
 Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			<p>1. <u>Provide narrative why Replacement Plant is necessary:</u></p> <ul style="list-style-type: none"> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition - Replacement of existing plant to address excessive water loss (greater than 20%) - Replacement of existing plant for other reasons detailed in SIB Engineering Report <p>2. <u>Provide narrative explaining why this segment of plant is a priority:</u> Please reference Page 10 in SIB Engineering Report.</p> <p>3. <u>Provide narrative explaining how replacing this plant will benefit existing customers:</u> reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers.</p> <p>4. <u>Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers.</u> The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers.</p> <p>5. <u>Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB.</u> Please reference Page 10 in SIB Engineering Report.</p>
		Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
1									Meters not included in this project	
2										
3										
4										
5										
6										
7										
Estimated Total Cost										

**WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
SIB PLANT TABLE I – WELL STREET (2017)**

Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			<p>1. <u>Provide narrative why Replacement Plant is necessary:</u> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition</p> <p>- Replacement of existing plant to address excessive water loss (greater than 20%)</p> <p>- Replacement of existing plant for other reasons detailed in SIB Engineering Report</p> <p>2. <u>Provide narrative explaining why this segment of plant is a priority:</u> Please reference Page 10 in SIB Engineering Report.</p> <p>3. <u>Provide narrative explaining how replacing this plant will benefit existing customers:</u> reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers.</p> <p>4. <u>Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers.</u> The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers.</p> <p>5. <u>Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB.</u> Please reference Page 10 in SIB Engineering Report.</p>
		Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
1									Hydrants not included in this project	
2										
3										
4										
5										
6										
Estimated Total Cost										

FIGURE 19

WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
 SIB PLANT TABLE I – KING WAY, BORDER LANE, LARK LANE (2018)
 Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			<p>1. <u>Provide narrative why Replacement Plant is necessary:</u></p> <ul style="list-style-type: none"> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition - Replacement of existing plant to address excessive water loss (greater than 20%) - Replacement of existing plant for other reasons detailed in SIB Engineering Report <p>2. <u>Provide narrative explaining why this segment of plant is a priority;</u> Please reference Page 10 in SIB Engineering Report.</p> <p>3. <u>Provide narrative explaining how replacing this plant will benefit existing customers;</u> reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers.</p> <p>4. <u>Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers.</u> The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers.</p> <p>5. <u>Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB.</u> Please reference Page 11 in SIB Engineering Report.</p>
		Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
1	309 Supply Mains								Supply mains not included in this project	
2										
3										
4										
5										
6										
7										
Estimated Total Cost										

**WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
SIB PLANT TABLE I – KING WAY, BORDER LANE, LARK LANE (2018)
Information to be included with SIB-Eligible Project Notification**

Project No.	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			<p>1. <u>Provide narrative why Replacement Plant is necessary:</u></p> <ul style="list-style-type: none"> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition - Replacement of existing plant to address excessive water loss (greater than 20%) - Replacement of existing plant for other reasons detailed in SIB Engineering Report <p>2. <u>Provide narrative explaining why this segment of plant is a priority.</u> Please reference Page 10 in SIB Engineering Report.</p> <p>3. <u>Provide narrative explaining how replacing this plant will benefit existing customers:</u> reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers.</p> <p>4. <u>Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers.</u> The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers.</p> <p>5. <u>Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB.</u> Please reference Page 11 in SIB Engineering Report.</p>
		Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Cost (by project)	
1	331	2,479	6	PVC	\$62.43	King Way, Border Lane, Lark Lane	2018	\$154,769	Install approximately 2,479 LF of 6-inch water main that will replace the existing water main that is constructed of 4 inch Asbestos Cement (AC) pipe. Also, 5 new valves will be installed at appropriate locations as to provide adequate system isolation when necessary. There have been one recorded main line breaks on this section of water main over the last two years.	
Estimated Total Cost								\$84,103		

**WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
SIB PLANT TABLE I – KING WAY, BORDER LANE, LARK LANE (2018)
Information to be included with SIB-Eligible Project Notification**

Project No.	NARUC Acct No (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			<p>1. <u>Provide narrative why Replacement Plant is necessary:</u></p> <ul style="list-style-type: none"> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition - Replacement of existing plant to address excessive water loss (greater than 20%) - Replacement of existing plant for other reasons detailed in SIB Engineering Report <p>2. <u>Provide narrative explaining why this segment of plant is a priority:</u> Please reference Page 10 in SIB Engineering Report.</p> <p>3. <u>Provide narrative explaining how replacing this plant will benefit existing customers:</u> reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers.</p> <p>4. <u>Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers.</u> The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers.</p> <p>5. <u>Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB.</u> Please reference Page 11 in SIB Engineering Report.</p>
		Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
1	333	61	1-inch	Copper	\$987	King Way, Border Lane, Lark Lane	2018	\$60,210	Install approximately 4,176 LF of 1" copper services lines to 61 service connections for this project.	
2										
3										
4										
5										
6										
7										
8										
9										
Estimated Total Cost								\$60,210		

WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
 SIB PLANT TABLE I – KING WAY, BORDER LANE, LARK LANE (2018)
 Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (SIB-eligible plant) 334 Meters	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			<p>1. <u>Provide narrative why Replacement Plant is necessary:</u></p> <ul style="list-style-type: none"> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition - Replacement of existing plant to address excessive water loss (greater than 20%) - Replacement of existing plant for other reasons detailed in SIB Engineering Report <p>2. <u>Provide narrative explaining why this segment of plant is a priority:</u> Please reference Page 10 in SIB Engineering Report.</p> <p>3. <u>Provide narrative explaining how replacing this plant will benefit existing customers:</u> reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers.</p> <p>4. <u>Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers.</u> The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers.</p> <p>5. <u>Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB.</u> Please reference Page 11 in SIB Engineering Report.</p>
		Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
1									Meters not included on this project	
2										
3										
4										
5										
6										
7										
Estimated Total Cost										

WILLOW VALLEY WATER COMPANY- KING STREET WATER SYSTEM
 SIB PLANT TABLE 1 – KING WAY, BORDER LANE, LARK LANE (2018)
 Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)				Site (location description)	Replacement Plant			<p>1. <u>Provide narrative why Replacement Plant is necessary:</u> - Replacement of existing plant that has exceeded its designated useful life and has worn out or is in severe deteriorating condition</p> <p>- Replacement of existing plant to address excessive water loss (greater than 20%)</p> <p>- Replacement of existing plant for other reasons detailed in SIB Engineering Report</p> <p>2. <u>Provide narrative explaining why this segment of plant is a priority.</u> Please reference Page 10 in SIB Engineering Report.</p> <p>3. <u>Provide narrative explaining how replacing this plant will benefit existing customers.</u> reduction in overall system water loss, fewer water outages due to reduction in main line breaks, brings infrastructure to current standards, adds appropriate working valves and hydrants to provide better overall service to customers.</p> <p>4. <u>Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers.</u> The detailed engineering drawings in the SIB Engineering Report will prove that all work is to replace existing failing infrastructure, not to provide new service lines for future customers.</p> <p>5. <u>Provide reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB.</u> Please reference Page 11 in SIB Engineering Report.</p>
		Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
1	335 Hydrants								Hydrants not included on this project	
2										
3										
4										
5										
6										
7										
Estimated Total Cost										