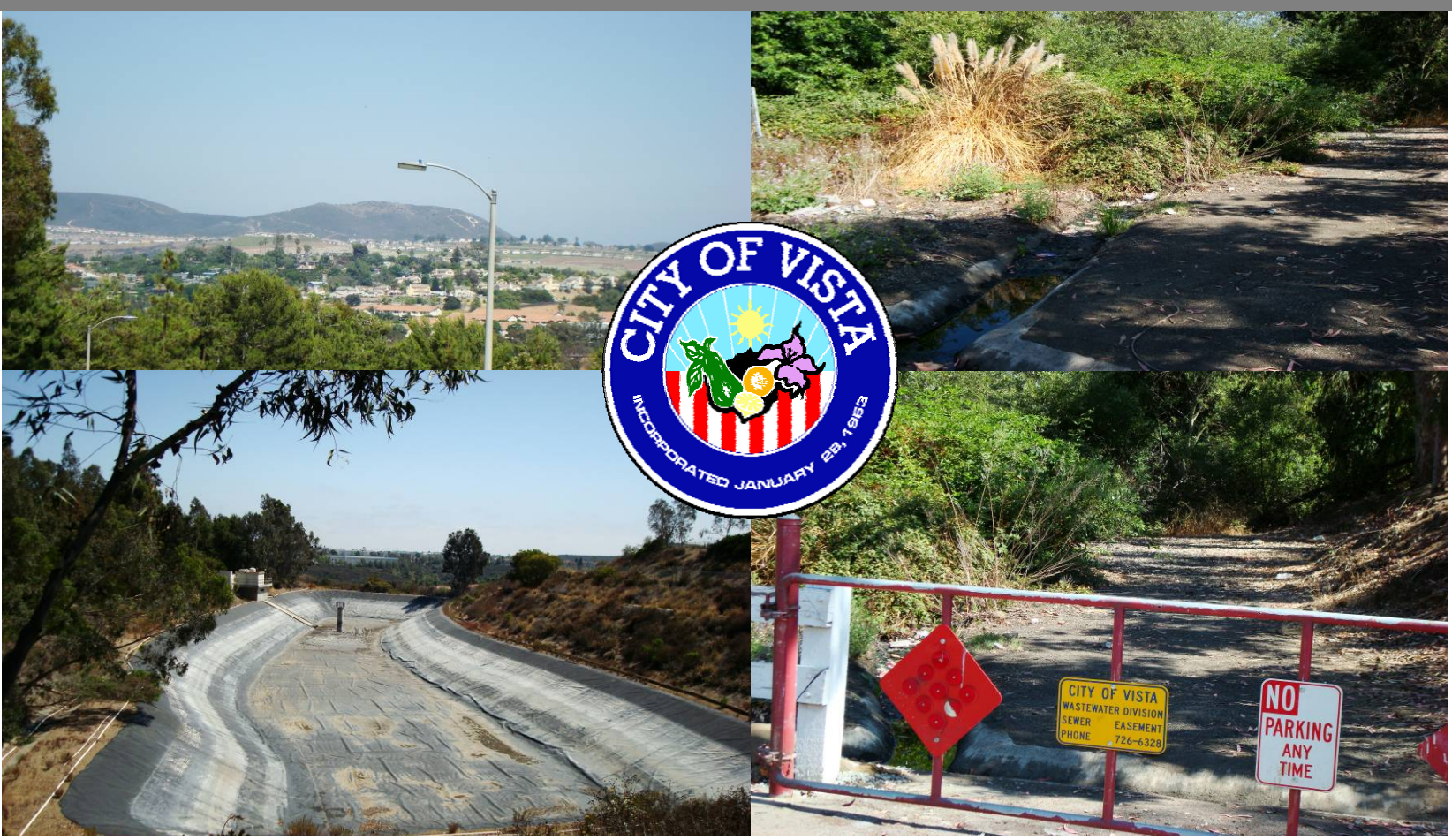
DUDEK ENGINEERING + ENVIRONMENTAL

CITY OF VISTA AND BUENA SANITATION DISTRICT SEWER MASTER PLAN UPDATE JANUARY 2008



JANUARY 2008

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CITY OF VISTA & BUENA SANITATION DISTRICT

SEWER MASTER PLAN UPDATE

JANUARY 2008

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ACKNOWLEDGEMENTS

Dudek would like to express its sincere appreciation for the assistance and cooperation provided by the management and staff of the City of Vista and the Buena Sanitation District during the completion and preparation of this Master Plan Update. In particular, the efforts of the following individuals are acknowledged and greatly appreciated:

MAYOR AND CITY COUNCIL

- Morris B. Vance ..... City Mayor
- Steve Gronke ..... Mayor Pro Tem
- Bob Campbell ..... Councilmember
- Frank Lopez ..... Councilmember
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ANNOTATION

The following abbreviations and acronyms were used in the preparation of this Master Plan:

ACRONYM	DEFINITION
ABS	Acrylonitrile Butadiene Styrene
ABSP	Acrylonitrile Butadiene Styrene Pipe
ACP	Asbestos Cement Pipe
ADWF	Average Dry-Weather Flow
AWWF	Average Wet-Weather Flow
BII	Base Inflow and Infiltration
BSD	Buena Sanitation District
CCTV	Closed-Circuit Television
CIP	Cast Iron Pipe
CIP	Capital Improvement Program
City	City of Vista
CMMS	Computerized Maintenance Management System
COV	City of Vista
DIP	Ductile iron pipe
DIP/CL50	Ductile Iron Pipe Class 50
District	Buena Sanitation District
EDU	Equivalent Dwelling Unit
ENR CCI	Engineering News Record, Construction Cost Index
EPA	Environmental Protection Agency
ESVCP	Extra Strength Vitrified Clay Pipe
EWA	Encina Wastewater Authority
FOG	Fats, Oil and Grease
GIS	Geographical Information System
GPD	Gallons Per Day
HDPE	High Density Polyethylene
I&I, II	Inflow and Infiltration
JPA	Joint Powers Authority
MGD	Million Gallons per Day
MOU	Memorandum of Understanding
O&M	Operations and maintenance

ANNOTATION (CONTINUED)

ACRONYM	DEFINITION
PDWF	Peak Dry-Weather Flow
PF	Peaking Factor
PVC	Poly Vinyl Chloride
PVC/DIP	Poly Vinyl Chloride lined Ductile Iron Pipe
PVC/VCP	Poly Vinyl Chloride lined Vitrified Clay Pipe
PWWF	Peak Wet-Weather Flow
RCP	Reinforced concrete pipe
RDII	Rainfall-Derived Inflow and Infiltration
RPM	Reinforced Plastic Mortar
SANDAG	San Diego Association of Governments
SSF	South Santa Fe
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflows
SWMM	Storm Water Management Model
SWRF	Shadowridge Water Reclamation Facility
TFM	Temporary Flow Measurement
VCP	Vitrified Clay Pipe
VCP/DIP	Vitrified Clay Pipe/Ductile Iron Pipe
VCP/PVC	Poly Vinyl Chloride lined Vitrified Clay Pipe
VWD	Vallecitos Water District
WDR	Waste Discharge Requirements
WRF	Water Reclamation Facility

1.0 EXECUTIVE SUMMARY

This update is the product of greatly expanded hydraulic modeling detail prepared to address newly approved State regulations. The result is a program recommendation that optimizes replacement and rehabilitation projects. Starting with existing undersized pipelines in poor condition and located in streams and pipelines with poor access, the program schedules improvements over a 20-year period. The recommended program also includes a Complete Condition Assessment program composed of wet-weather flow measurement, televised inspections, smoke testing, and aboveground inspections. The televised inspection program is recommended on a 5-year program basis, reduced in frequency to a 10-year cycle following the initial assessments. All other components of this program will be completed within 1 year and will further optimize the Capital Improvement Program (CIP) and operations and maintenance (O&M) investment.

1.1 FINDINGS

The Master Plan preparation was based on significant analysis of the existing system through a combination of operations interviews, maintenance analysis and hydraulic analysis. The findings of this analysis is that the system is in need of significant investment to restore the system to acceptable physical condition and to provide adequate hydraulic capacity to minimize sanitary sewer overflows (SSOs). To address these needs, a list of prioritized Capital Improvements Program projects and their associated planning level costs has been prepared and is presented .

1.2 ANALYSIS

1.2.1 CAPACITY ANALYSIS

This Master Plan Update extends previous Master Plans by using a highly detailed hydraulic model that loads the flows in each pipe based on equivalent dwelling units (EDUs) in each adjacent parcel. (See Table 1-1) This level of detail was not available in previous planning efforts. Traditional master planning has relied on coarser analyses of trunk lines in the development of a Capital Improvement Program that addressed only capacity-related issues.

Capacity restoration may be provided by constructing larger replacement pipes or by reducing extraneous defect flows by pipeline rehabilitation. By estimating the rehabilitation costs associated with inflow and infiltration (I&I) reduction and the effects on pipeline capacity, this document identified a recommended set of CIP projects necessary to address identified capacity restrictions and condition related problems. Further, a Condition Assessment Program is recommended that will optimize the location of (I&I) reduction projects.

In addition to this Master Plan Update, the City of Vista (City)/Buena Sanitation District (District) engineering staff has been provided with the complete modeling data set to allow future changes in the system to be evaluated by the City. These management tools will allow the staff to accurately determine the level of development and required improvements in all parts of the collection system. The expanded modeling detail allows the City to analyze predicted flow versus measured flow to target I&I reduction and analyze EDU distribution and allocation. This additional analysis can be used to more efficiently manage O&M and CIP projects and more equitably assess rates and connection fees.

Table 1-1 shows the difference in modeled assets of the system for the past and current Master Plans.

Table 1-1 Modeled Pipes History

	Pipes Modeled		
Year	**Vista**	**Buena**	**Total**
1982	50	29	74
1993	89	32	121
2001	111	34	145
2007	5,537	2,326	7,863

1.2.2 OPERATIONAL ANALYSIS

During the course of the project, many meetings were held with the operation staff to identify non-capacity related deficiencies. The interviews included current and former field personnel that have been responsible for the CCTV inspection program since its' inception. The interviews also included detailed discussions of how past decisions for project development had occurred and the lessons learned from those experiences. Old maps and other documentation was reviewed to enhance the understanding of how the assets are currently being maintained. This included working with the CCTV crews, the Operations Staff Personnel and the IT Department. These discussion yielded a much better understanding of how the system is currently operated especially in the Priority Maintenance Areas.

Additionally the City's extensive database was used to determine areas that required additional attention through age, material and condition analysis. These conditions provided additional information that was used in the establishment of priorities for the projects identified.

1.3 REGULATORY CHANGES

Significant regulatory changes have occurred since the last Sewer Master Plan was prepared. The following discussion provides background on the dominant regulations that effect the management and operations of the sewer collection system.

In May 2006, the State Water Resources Control Board adopted Order 2006-003-DWQ, commonly known as the Waste Discharge Requirements (WDRs). The intent of the order is elimination of sanitary sewer overflows (SSOs). To achieve that goal, the State WDRs establish a uniform set of business requirements for the owners and operators of wastewater collection agencies. The documentation for the business process is embodied in a Sewer System Management Plan (SSMP). The primary elements of the SSMP are listed below.

(1) Restatement of the Goal ("To provide a plan and schedule to properly manage, operate and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that do occur.")
(2) Organization – Describes the organization and designates the Responsible Party
(3) Legal Authority – Describes the legal authority to control sewer system connections
(4) Operations and Maintenance Program
(5) Design and Performance Provisions
(6) Overflow Emergency Response Plan
(7) Fats, Oil, and Grease (FOG) Control Program
(8) System Evaluation and Capacity Assurance Program
    a. Evaluate the system to determine capacity-related restrictions
    b. Design Criteria
    c. Capacity enhancement measures (Develop and fund CIP)
    d. Schedule the CIP
(9) Monitor, Measure, and Modify SSMP
(10) SSMP Program Audits
(11) Communication Program (Public Outreach).

These State requirements were modified by the San Diego Regional Board by retaining more stringent reporting aspects of the previously adopted local Board Order R9-96-04. The Vista/Buena Sanitation District Sewer Master Plan Update directly addresses the primary requirements of Item 8 of the WDRs.

The following discussion highlights the findings of the master planning process and presents the recommended CIP as required in Section 8 of the State WDRs.

This document identifies and outlines recommendations to address all known deficiencies. The estimated cost to do so is $123,400,612 over the next 5 years and $287,384,153 over the next 20 years. The components are (1) condition assessment needs, (2) capacity upsizes, and other projects necessary due to material (e.g., ductile iron pipe (DIP)), age, observed condition, and minimum diameter upsizes.

Table 1-2 Pipeline Inventory*

Items	Buena	Vista	Unknown	Total
Total Length of Sewer Pipeline (Miles)	95.7	215.1	0.6	311.4
Total Length of Force Main (Miles)	5.3	0	0	5.3

To establish the baseline hydraulic conditions of the piped system, extensive hydraulic modeling was used to determine the system capacity. The basis for the analysis was the City's existing collection system databases and Geographic Information System (GIS) data sets. Changes to the GIS data, identified by the project team were incorporated until May 17, 2007. As a result, the hydraulic model and associated information are considered current.

1.4 DEFICIENCIES

1.4.1 CAPACITY

Capacity analyses of the collection system were performed for the existing and future dry-weather and wet-weather conditions and for a variety of defect-flow reduction scenarios. The existing model was calibrated for both the average dry-weather and wet-weather events to properly represent the collection system's hydraulic characteristics.

The determination of capacity restrictions in the system under varying flow conditions provides the basis of determining capacity-related replacement projects. The findings from the model showed that the capacity of the system was adequate in all but 82,000 feet of pipelines 12 inches and larger. **Figure 1-1** Recommended Capacity CIP Projects, shows the projects recommended to address each deficiency.

CITY OF VISTA

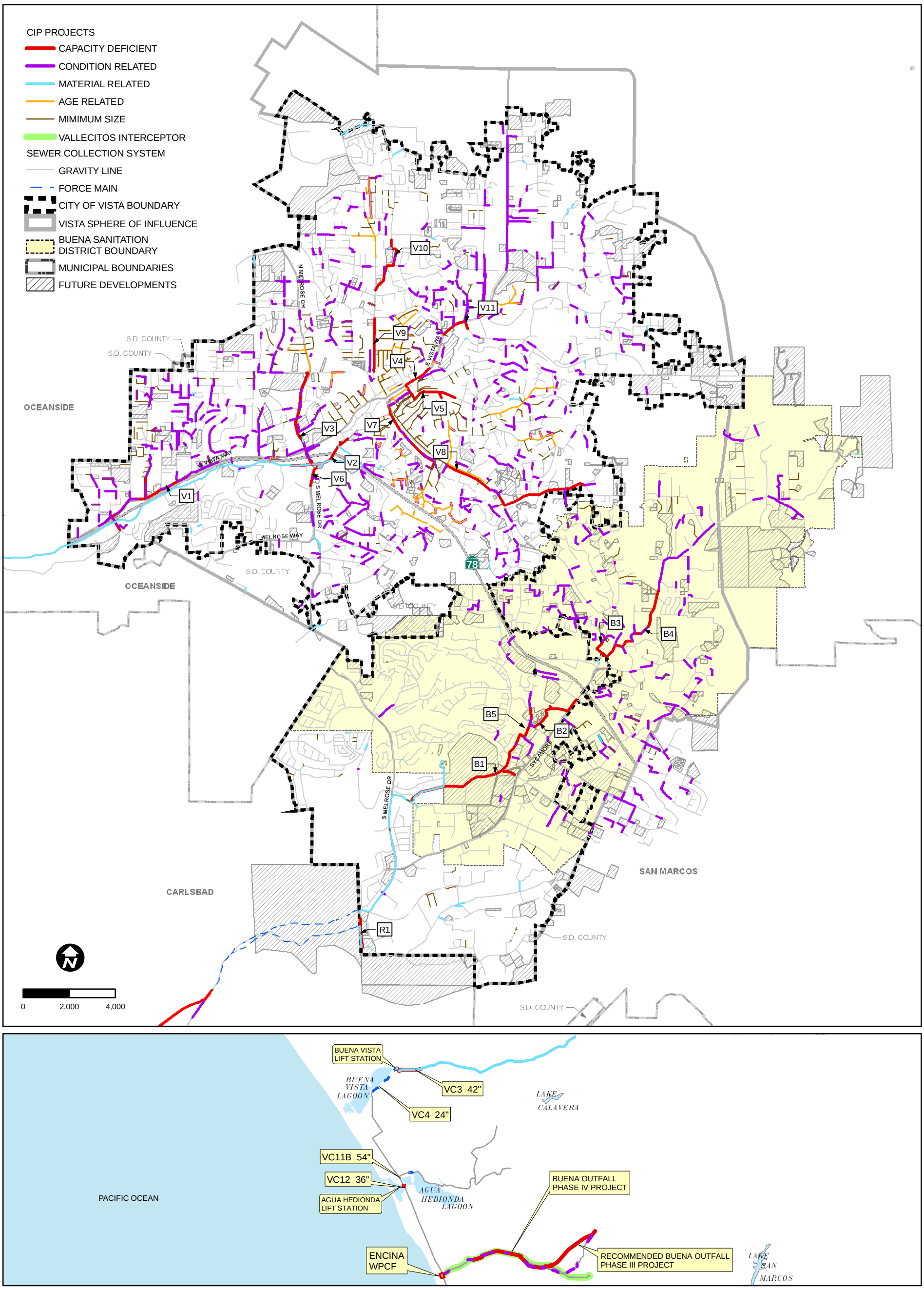

FIGURE 1-1 RECOMMENDED CIP PROJECTS

During wet-weather events, I&I volume was observed to be almost twice as much as in dry weather. This represents a significant cost to the City/District for pumping and treatment. The greatly increased flow rates also force costly upsizing of downstream facilities to handle the excessive peak flows.

In the early stages of the master planning process, a screening-level Flow Measurement Plan was prepared and submitted. The Flow Measurement Plan was not implemented due to the low total rainfall amount during the 2006/2007 wet season.

1.5 RECOMMENDATIONS

A total of $287,384,153 in improvements is recommended with $123,400,612 in Years 1 through 5. Since resources are limited, these recommendations have been prioritized and broken down to facilitate funding decisions. It should be emphasized that the implementation level will affect any I&I reduction potential. A wet-weather flow study and reexamination is therefore recommended after funding decisions are made.

1.5.1 INFLOW AND INFILTRATION REDUCTION

1.5.1.1 Condition Assessment Program

To comply with the System Evaluation portion of the WDR program, the recommended CIP includes funding for a system evaluation through a full condition assessment of the collection systems. This includes a Revised Flow Measurement Plan (2007/2008), a 5-year closed-circuit television (CCTV) inspection program, and other direct physical observations through smoke testing and manhole inspections. This aggressive program will allow the City/District to focus the proposed I&I reduction and rehabilitation programs in the areas of most need. The condition-assessment program has an estimated cost of $4.3 million. **Table 1-3** describes the components of this program in detail.

Table 1-3 Condition Assessment Programs

Component	Estimated Cost	Cost/Foot
Flow Measurement	$ 295,983	$ 0.18
Smoke Testing	$ 822,174	$ 0.50
Physical Inspection	$ 548,116	$ 0.33
CCTV	$ 2,055,435	$ 1.25
Program Mgmt	$ 558,256	$ 0.34
Total	$ 4,279,964	$ 2.60

1.5.2 CAPACITY RELATED RECOMMENDATIONS

As a result of identified capacity-related deficiencies, a recommended CIP project list has been identified. The estimated cost for these collection-system projects is approximately $40 million as shown in **Table 1-4**. This table does not include VC interceptor improvements for which Carlsbad is the lead agency.

Table 1-4 Capacity Replacement Project Summary

Scenario	Vista	Buena	Total
Existing	$8,863,134	$6,377,760	**$15,240,894**
Ultimate	$20,871,955	$18,625,090	**$39,497,045**

1.5.3 CONDITION RELATED RECOMMENDATIONS

By considering the pipe age, materials, location, and known conditions, a complete replacement/rehabilitation program was developed. Note that this program is conservative and the total estimated costs may be reduced based on the results of the complete Condition Assessment Program. The total estimated costs for non-capacity-related replacements and rehabilitation for the City/District is approximately $148 million as shown in **Table 1-5**. Condition-related projects also include prior CIPs identified during the 2001/2003 Master Plan Update.

Table 1-5 Other Rehabilitation or Replacement Projects

Project Type	Vista	Buena	Unknown	Total
Material-Related Force Main (DIP)	$0	$793,119	$0	$793,119
Material-Related Gravity Main (DIP)	$24,248,766	$2,399,813	$0	$26,648,579
Age-Related	$6,948,675	$0	$0	$6,948,675
Condition-Related	$68,267,080	$22,622,933	$11,198	$90,901,211
Minimum Size	$20,013,301	$2,393,598	$24,183	$22,431,082
Total	**$119,477,822**	**$28,209,463**	**$35,381**	**$147,722,666**

Based on the previous findings, the recommended CIP projects were prioritized and scheduled for funding. **Table 1-6** describes the project, agency, and cost estimates for the next 5 years.

Table 1-6 CIP/O&M Projects

Basin	Near-Term Cost	Long-Term Cost
Complete Condition Assessment		
Buena Subtotal	$ 1,333,989	$ 2,258,935
Vista Subtotal	$ 2,995,975	$ 5,154,181
Condition Assessment Subtotal	$ 4,329,964	$ 7,413,116
Prioritized Capacity-Related Replacements		
Buena Subtotal	$ 12,069,120	$ 18,625,090
Vista Subtotal	$ 33,210,695	$ 39,738,354
Capacity-Related Replacement Subtotal	$ 45,279,815	$ 58,363,444
Other Rehab or Replacements		
Buena Subtotal	$ 17,283,644	$ 52,649,539
Vista Subtotal	$ 56,507,189	$168,958,054
Other Rehab or Replacement Subtotal	$ 73,790,834	$221,607,593
Buena Total	**$ 30,686,753**	**$ 73,533,564**
Vista Total	**$ 92,713,859**	**$213,850,589**
Grand Total	**$123,400,612**	**$287,384,153**

1.6 CONCLUSION

In conclusion, a comprehensive plan of collection-system improvements necessary to address capacity, (I&I) reduction and condition related deficiencies has been prepared.

These recommended CIP projects will fulfill the City's/District's long-term need for a sustainable collection system. Further detail of the analyses that were performed to develop the program is discussed in subsequent chapters.

2.0 INTRODUCTION

To know where you are going, you need to know where you have been. This section discusses the City/District's history, authorization, and Scope of Work for this Sewer Master Plan Update.

2.1 BACKGROUND

The City of Vista and the Buena Sanitation District, shown in **Figure 2-1**, operate a sewer collection system to convey wastewater from homes and businesses to the Encina Wastewater Agency's treatment facilities. This Sewer Master Plan Update provides a set of recommended projects for inclusion in the City's overall Capital Improvements Program. These projects were identified through hydraulic modeling and capacity analysis, review of known conditions and through addressing new regulatory requirements. The identified complete condition assessment, replacements, and rehabilitation program will minimize the potential for system overflows and facilitate compliance with the State's newly adopted Waste Discharge Requirements (WDRs).

To provide sewer-system planning, the City of Vista and the Buena Sanitation District have contracted with Dudek to prepare a Sewer Master Plan Update. This 2007 report is an extensive update based on new analyses using the latest Geographic Information System (GIS) data sets. A complete hydraulic model of all facilities was prepared from and integrated with the GIS. These new analyses, combined with maintenance analysis and extensive review of the Master Plan of Sewerage prepared in July 2001 and 2003,[1] are the basis of the Sewer Master Plan Update. Historical references are also included for ease of access from the previous Master Plans of Sewerage prepared by Wilson and Associates in May 1993 and by Fraser, Wilson and Associates in March 1982. This Sewer Master Plan Update establishes a structured program of system improvements.

The complete collection system is shown with jurisdictional and maintenance boundaries in **Figure 2-1**.

[1] The 2003 Master Plan Update was an update of 2001 project costs by application of the 2003 ENR Construction Cost Index. No new analyses were performed in the 2003 Update.

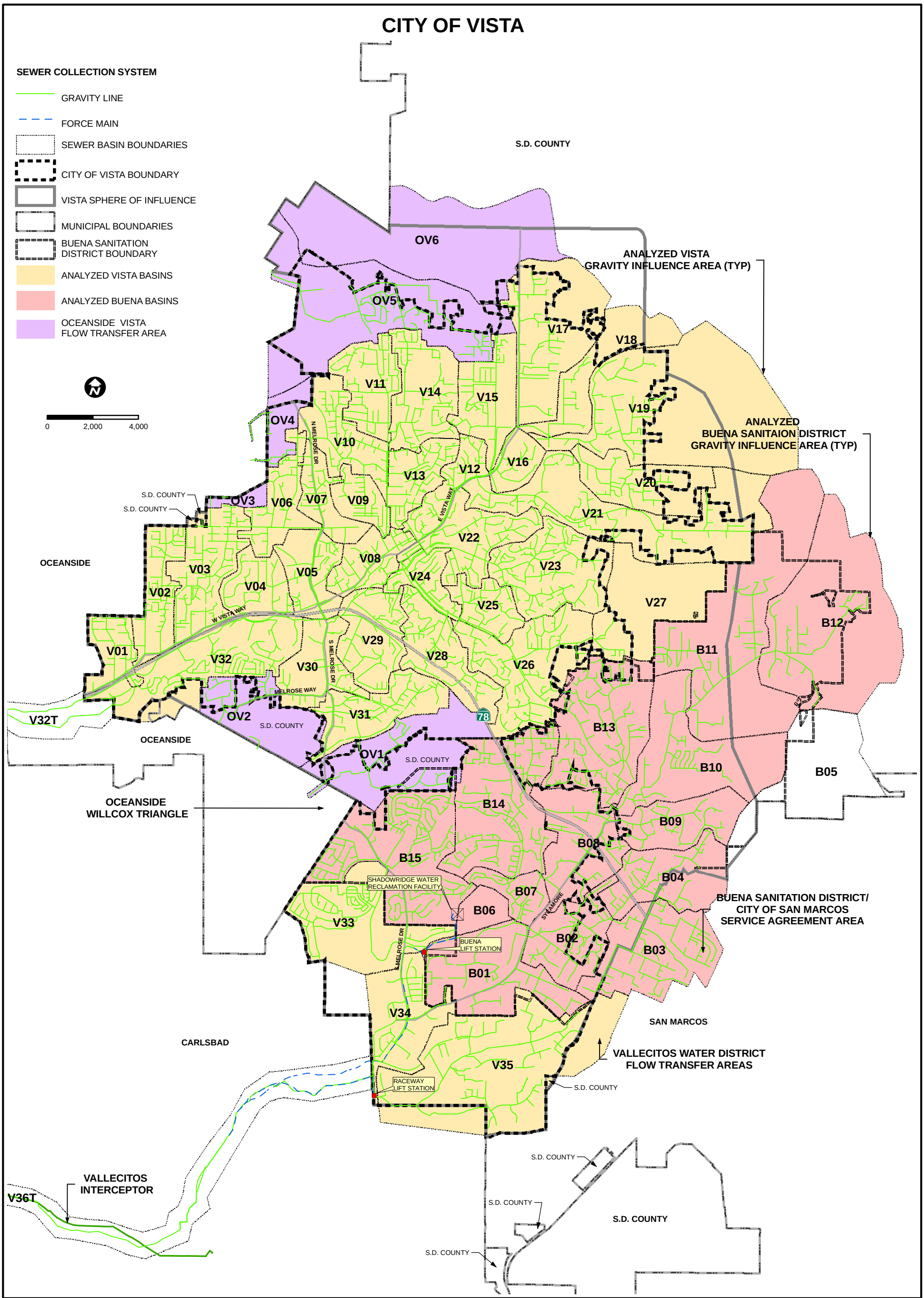

FIGURE 2-1 COLLECTION SYSTEM

2.1.1 HISTORY

The following excerpts from previous Master Plans trace the early organizational history of the collection system.

2.1.1.1 City of Vista

"The collection system in the older areas of town near South Santa Fe was constructed prior to the formation of the Vista Sanitation District in 1947. The County Board of Supervisors was the governing body of the District until the incorporation of the City in 1963. At that time the Vista City Council became the ex officio Board of Directors of the District. The District is now operated and maintained by the City of Vista Department of Public Works."[2]

"The City of Vista provides sewer service to areas within the City which lie in the Buena Vista Creek Basin. The City also provides sewer service to portions of the San Luis Rey and Agua Hedionda Creek Basins within the City. The Buena Sanitation District provides sewer service to the majority of the Agua Hedionda Creek Basin within the City of Vista as well as areas within the Agua Hedionda Creek Basin east of the City."

"Some facilities presently owned by the City of Vista date back to the late 1920s and were constructed by the Vista Sanitary District. The Vista Sanitary District was formed in 1928 to provide sewer service to a small area of downtown Vista. In 1946, the Vista Sanitary District authorized an election for the dissolution of the District to initiate the transformation from a Sanitary District to a Sanitation District."

"The Sanitation District was formed in 1947 with the County Board of Supervisors acting as the governing body. When the City of Vista was incorporated in 1963, the control of the Vista Sanitation District was transferred from the County Board of Supervisors to the Vista City Council. This Vista Sanitation District entered into a Joint Powers Agreement [JPA] with the City of Carlsbad and subsequently connected to the Encina Water Pollution Control Facility in 1965."

"In 1983 the Vista Sanitation District was dissolved and all rights and obligations of the Vista Sanitation District were assumed by the City of Vista. All sanitation functions are now accomplished by the City of Vista staff and an enterprise fund has been set up to keep sanitation funds separate from general fund revenues."[3]

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[2] *Master Plan of Sewerage;* Fraser, Wilson and Associates, 1982.
[3] *Master Plan of Sewerage,* Dexter Wilson and Associates, 1993.

As the City and District have grown, pockets of adjacent communities that are best served through transfer agreements and participation in the JPA have been identified. To provide service to these areas, the City/District has entered into Service Agreements with the City of San Marcos, San Diego County, City of Carlsbad, City of Oceanside, Vallecitos Water District, Encina Wastewater Authority (EWA), Leucadia Wastewater District, and San Marcos County Water District. These agreements are listed and provided in the appendices to this Update. Almost all of the sewer flows that are generated in Vista and Buena are treated and discharged from the Encina Water Pollution Control Facility. This facility and the pump stations are owned jointly and administered by the Encina Wastewater Authority. This agency and its formation are discussed in Section **2.1.1.3.**

In April 2007, the City/District experienced two spills from ductile iron force mains that were approximately 20 years old. The cause of the failures is still under investigation. Initially, it appears that the ductile iron pipe was in contact with corrosive soils. This report has identified the costs associated with replacing all ductile iron pipes in the system.

In June 2007, the voters of the City approved changing the status of the City from a General Law City to a Charter City. A Charter City has greater flexibility in establishing business practices that offer a cost savings to the City. A dominant part of the approval process will be the savings anticipated from not being required by the State law to pay prevailing wages. Additional taxing and an aggressive municipal improvements program have also been approved by the voters.

2.1.1.2 Buena Sanitation District

"The Buena Sanitation District was organized in 1960 with the San Diego County Board of Supervisors acting as its governing body. The Buena Sanitation District connected to the Encina Water Pollution Control Facility in September of 1965. In 1983 the City of Vista requested to be represented on the Buena Sanitation District Board. In September 1983 the Board of Directors of the Buena Sanitation District was restructured in accordance with the Health and Safety Code to a three member board. Two of the members were from the San Diego County Board of Supervisors and one from the Vista City Council."

"In 1990, population changes in the Buena Sanitation District required a change of representation on the Board. The Board of Directors was changed to two representatives from the Vista City Council and one representative from the County of San Diego Board of Supervisors. Thus, the City of Vista obtained the controlling vote on the Buena Sanitation District Board."[4]

In October 1998, as a result of population changes in the District, the Board of Supervisors of the County of San Diego adopted Resolution No. 98-289, designating the City of Vista as the Board of Directors of the Buena Sanitation District. Today, the City of Vista continues to maintain the District in order to provide an effective form of funding, operations, and maintenance for the sewer collection system in portions of Vista, San Marcos, Carlsbad, and unincorporated areas of San Diego County.

2.1.1.3 Encina Wastewater Authority

In 1961 the Vista Sanitation District and the City of Carlsbad agreed to create a JPA for the purpose of acquiring and constructing a sub-regional sewer system. Through the years, additional agencies (including Buena Sanitation District) joined the JPA to achieve a collection and treatment system that offers economies of scale. **Table 2-1** shows the managing agency, member agencies, and achievements by year. The City/District has played an increasingly significant role in the provision of collection and treatment facilities for the area.

[4] *Master Plan of Sewerage,* Dexter Wilson and Associates, 1993.

Table 2-1 EWA Organizational History

Year	Manager	Member Agencies						Achievments
1961	San Diego County	Vista San. District	City of Carlsbad					JPA Initiated by Vista San and Carlsbad
1962								
1963								Original site acquired
1964				Buena Sanitation District				
1965					Vallecitos Water District			WPCF/EOO Complete 4.5 MGD
1966								
1967								
1968								
1969								
1970								
1971						City of Encinitas	Leucadia County Water District	Phase I Complete 6.75 MGD
1972								
1973								
1974								
1975								Phase 2 Complete 13.75 MGD,EOO Ext.
1976								COV performs service for BSD
1977								
1978								
1979	Leucadia CWD							
1980								
1981								
1982								
1983								VSD dissolved became City Enterprise
1984		City of Vista						
1985								
1986								
1987								
1988	Encina Admin. Agency							Phase 3 Complete 22.5 MGD Secondary
1989								
1990								
1991	Encina Wastewater Authority							
1992								Phase 4 Complete 36.0 MGD
1995								South Parcel Acquired
1996								
1997								
1998								
1999								
2000							Leucadia Wastewater District	
2001								
2002								
2003								
2004								
2005								
2006								
2007								Phase 5 In Process

As shown in the previous table, Vista and Buena have proactively engaged in planning and executing the sub-regional collection and treatment facilities operating under the auspices of the Encina Wastewater Authority. As the plant nears the final expansion phases, the costs for expansion will diminish and those for normal operating and maintenance expenses will likely increase. **Table 2-2** shows the near-term increase in EDUs, Operating Expenses, and flows for the City and District since 2002.

Table 2-2 Buena and Vista Flow and Cost History at Encina[5]

Vista						
Year	Operating Exp.	Avg MGD	Annual Flow	EDUs	$/MGD	OpExp/EDU
2002	$ 1,479,507	6.58	2,402	22,257	$ 616.02	$ 66.47
2003	$ 1,517,606	6.51	2,376	22,595	$ 638.68	$ 67.17
2004	$ 1,615,147	6.66	2,433	22,804	$ 664.42	$ 70.83
2005	$ 1,792,413	7.37	2,690	22,934	$ 666.31	$ 78.16
2006	$ 1,975,084	6.79	2,478	23,103	$ 796.94	$ 85.49
Buena						
Year	Operating Exp.	Avg MGD	Annual Flow	EDUs	$/MGD	OpExp/EDU
2002	$ 479,835	1.34	489	4,180	$ 981.06	$ 114.80
2003	$ 560,789	1.58	577	4,266	$ 972.41	$ 131.45
2004	$ 633,955	1.88	686	4,360	$ 923.86	$ 145.41
2005	$ 658,222	1.98	723	4,413	$ 910.78	$ 149.16
2006	$ 713,689	1.87	683	4,482	$ 1,045.62	$ 159.25
Totals					**Average**	
Year	Operating Exp.	Avg MGD	Annual Flow	EDUs	$/MGD	OpExp/EDU
2002	$ 1,959,342	7.92	2,891	26,437	$ 677.79	$ 74.11
2003	$ 2,078,395	8.09	2,953	26,861	$ 703.86	$ 77.38
2004	$ 2,249,102	8.54	3,119	27,164	$ 721.15	$ 82.80
2005*	$ 2,450,635	9.35	3,413	27,346	$ 718.08	$ 89.61
2006	$ 2,688,773	8.66	3,161	27,585	$ 850.64	$ 97.47

*2005 Experienced increased flow due to rainfall

The average cost for treatment at the Encina facility has increased from $616.02/million gallons per day (MGD) to $796.94/MGD in the last 5 years for the City of Vista. Average treatment costs for Buena Sanitation District have increased from $981.06/MGD to $1,045.62/MGD in the same period. These represent average annual increases of 6% for Vista and 1% for Buena Sanitation District. The increase in treatment costs may require a change in the user rates structure. A rate study will be performed based on final selection of recommended projects in the Sewer Master Plan Update.

[5] City of Vista, Agency Flow and EDU Counts, Memos to EWA June 2002–2006; Encina Wastewater Authority, Comprehensive Annual Financial Report, FY Ended June 30, 2006.

2.1.2 AUTHORIZATION

On March 26, 2006, the Vista City Council approved a contract with Dudek to prepare a Sewer Master Plan Update and a Stormwater GIS and Master Plan. The Sewer Master Plan Update authorized includes the following highlights from the Approved Scope of Work.

2.1.3 SCOPE OF WORK

The following items were specifically identified in the approved Scope of Work.

- Update the 2003 CIP
    - This task used the 2003 list of projects and prepared updated 2006 costs and modified projects to include logically located line segments. This update is superseded by the currently proposed program.
- Prepare a complete GIS integrated link-node model of the collection system
- Evaluate the capacity of the collection system under existing and future/wet and dry flow conditions
- Develop an I&I Reduction Program Plan
- Prepare a Sewer Master Plan Update
- Integrate Maintenance Management System (CMMS)
- Prepare a prioritized CIP recommendation
- Perform recommended CIP cost analyses
- Coordinate with IT staff

Each scope item was performed and is discussed in the following chapters.

3.0 STUDY AREA

Sewer collection systems are generally designed to flow downhill by gravity. As a result, the general topography of an area defines the layout of the collection system.

Sanitary sewer collection systems often contain defects and illicit connections that allow rainwater to enter. These flows are often termed “defect flows” or “Inflow and Infiltration” (I&I). Inflow is the result of a direct connection to the surface while infiltration occurs through groundwater. As a result, rainfall and its effect on the collection system drive the peak wet-weather flow (PWWF) that a system may accommodate without spilling.

This chapter describes the physical geography and the climate that influence the design of a collection system. It also delineates the study area.

3.1 PHYSICAL GEOGRAPHY

Drainage patterns within the District’s wastewater collection system are defined by the physical geography of its service area. The District is bounded on the northeast by the San Marcos Mountains and on the southwest by the Buena Vista and Agua Hedionda Lagoons. This results in a general flow direction from the northeast to the southwest. The overall area can be split into the two areas that flow towards each lagoon. Sewer service in each of these areas is also generally divided by the jurisdictional agency and by the original nature of development. The majority of the Vista Service Area is in the Buena Vista drainage basin, and the Buena Sanitation District Boundary dominates the Agua Hedionda drainage basin. Each of these collection systems is discussed more in Chapter 4. The dominant drainage features and jurisdictional boundaries are shown in **Figure 3-1**.

Physical geography influences jurisdictional boundaries quite naturally. The availability of sewer services induces increased density. These densified land uses require public services, and cities annex unincorporated areas to provide those services, to expand the revenue base, and to regulate development in accordance with the general plan.

The flow of sewer across jurisdictional boundaries has led to joint ownership and flow transfer agreements involving the City of San Marcos, San Diego County, City of Carlsbad, City of Oceanside, Vallecitos Water District, Encina Wastewater Authority, Leucadia Wastewater District and San Marcos County Water District. These agreements require maintenance and revision as legal conditions change or as the agreements expire or become superseded.

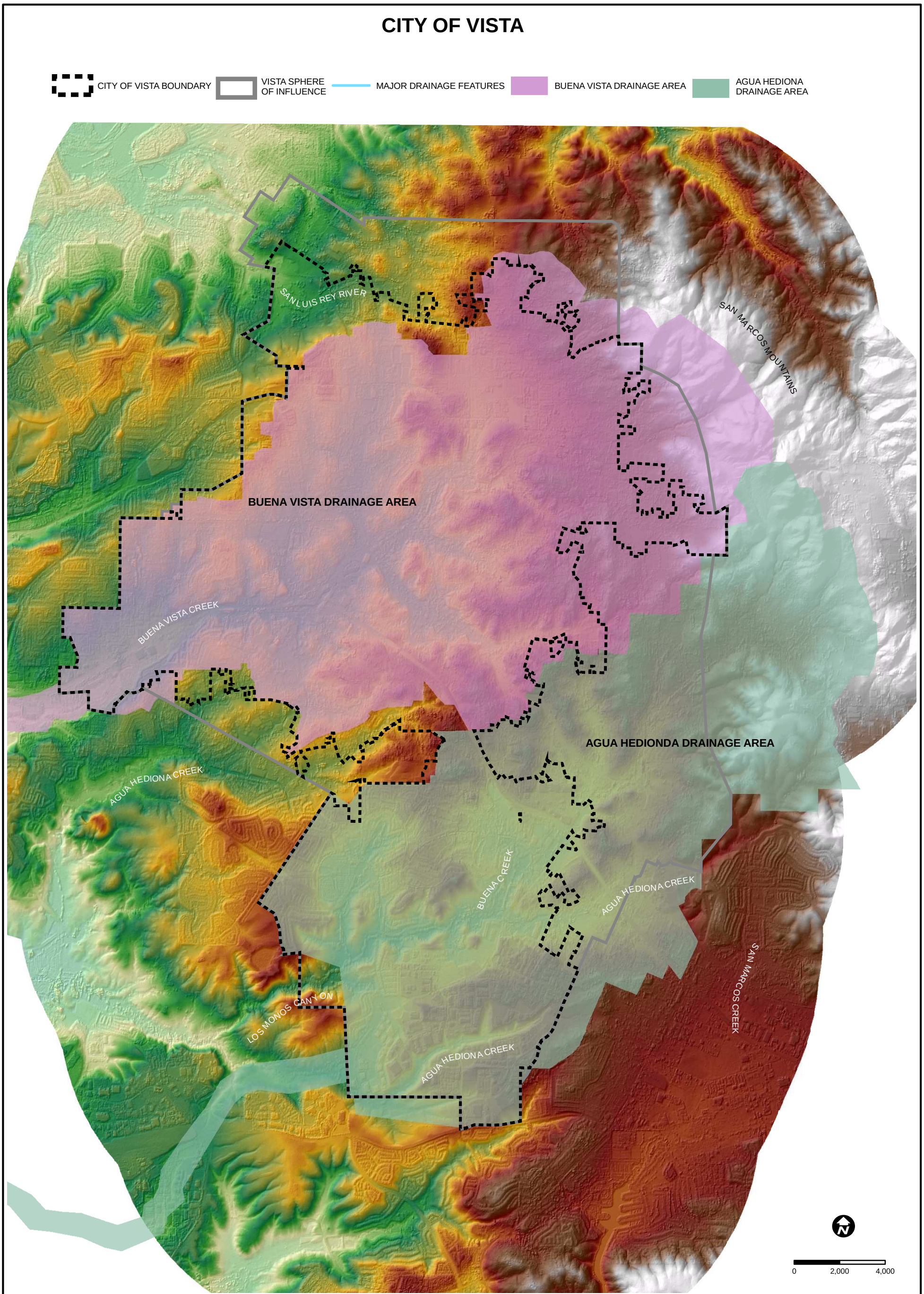
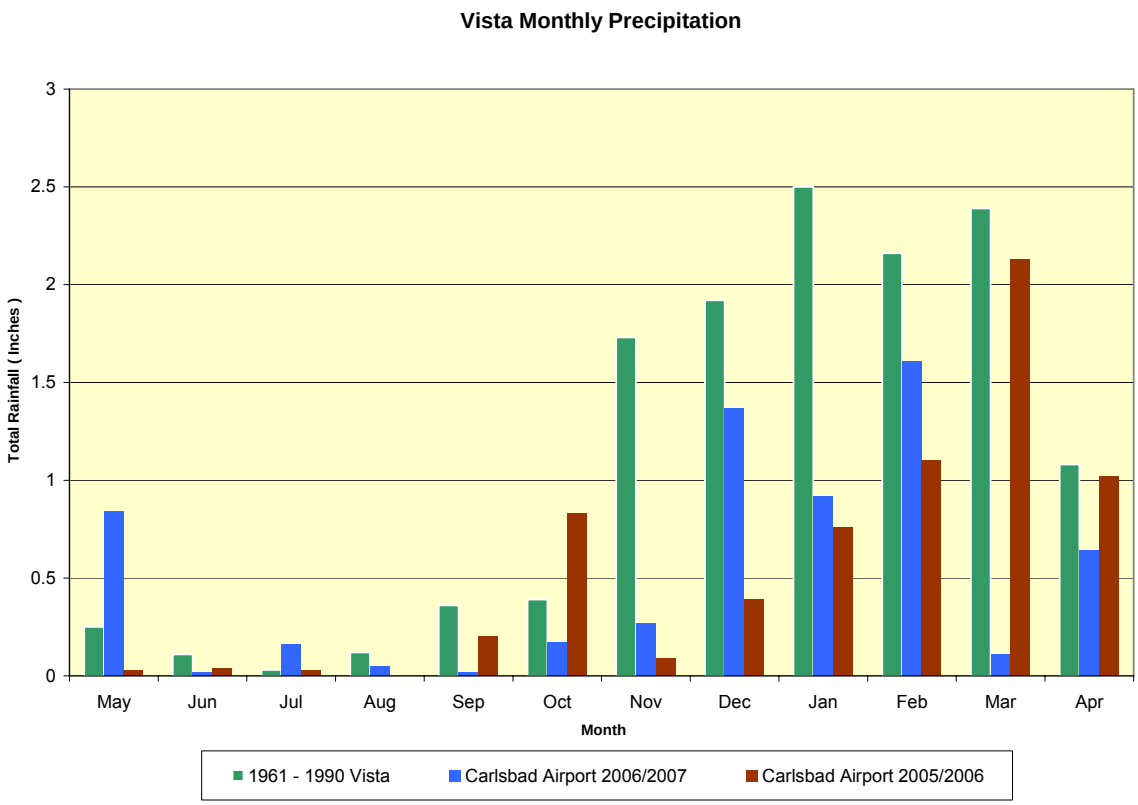


FIGURE 3-1 DOMINANT DRAINAGE FEATURES

3.2 CLIMATE

As mentioned, the distribution of rainfall is an important consideration in planning a sewer system that is free from overflow. Wet-weather or defect flows represent the extreme event for consideration of capacity planning. This will be discussed fully in the development of Existing and Future Wet-Weather Flow Scenarios that were used as the basis of the capacity analysis. **Figure 3-2** shows the Historical Monthly Rainfall Totals in Vista.[6]

Figure 3-2 Vista Historical Monthly Rainfall Totals



3.3 STUDY AREA

The study area is defined by a combination of political and physical boundaries. The logical physical extents of the drainage include areas up to the ridgeline in the San Marcos Mountains. These areas are outside of the political boundaries of the City of Vista and the Buena Sanitation District. **Figure 3-3** shows the boundaries of the study area. The total area of the study area is

[6] NOAA, National Climatic Data Center, Climatography of the U.S. No. 81, Monthly Station Normals of Temperature, Precipitation, and Heating and Cooling Days 1961–1990, 2005–2007, Carlsbad Airport.

approximately 33 square miles or 21,120 acres. This includes all areas maintained by the City/District and areas that can flow by gravity into the system regardless of jurisdiction.

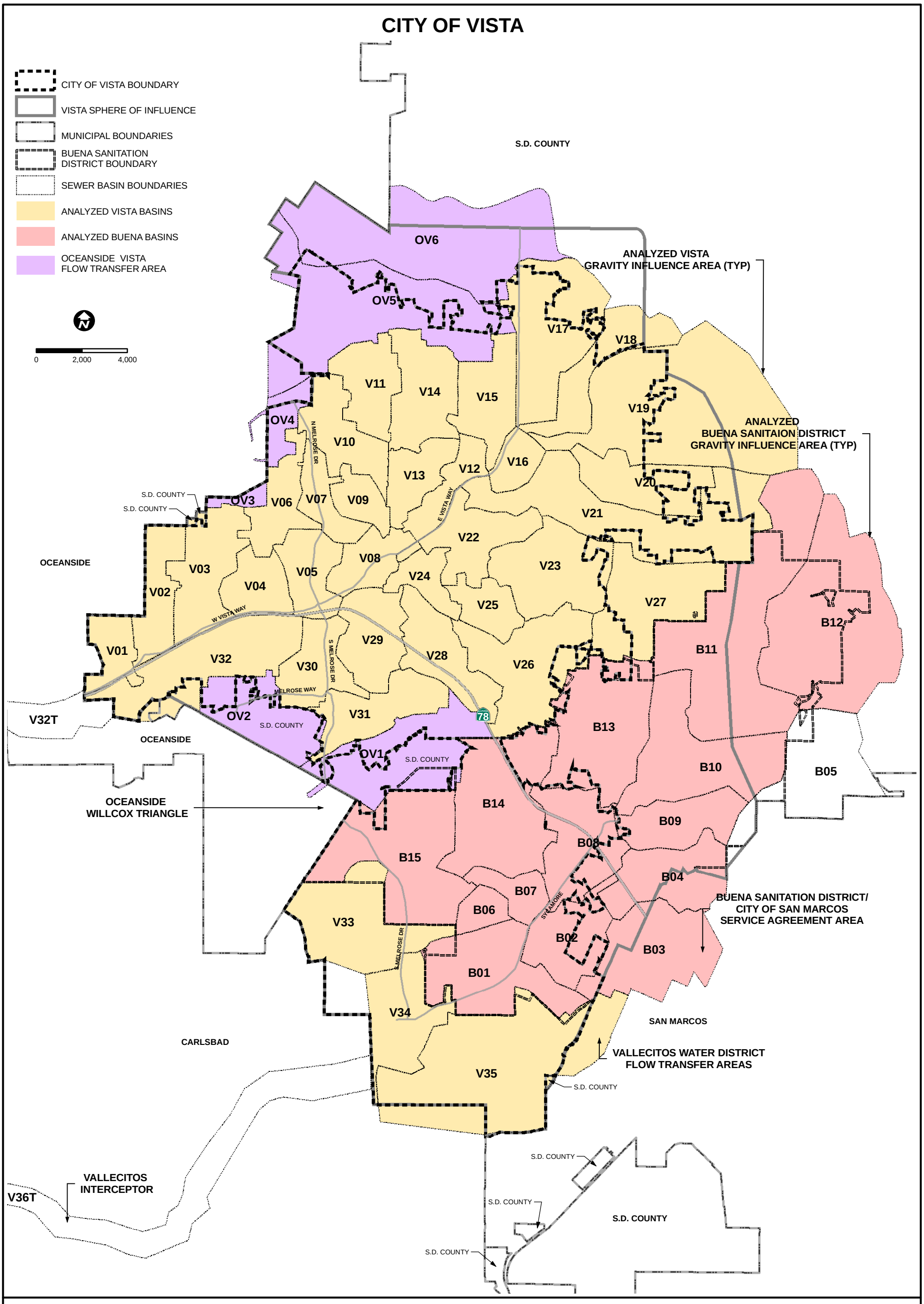


FIGURE 3-3 STUDY AREA BOUNDARY

4.0 WASTEWATER COLLECTION SYSTEM

A primary requirement of the WDRs and recommendation of the General Accounting Standards Board (GASB-34) is that the owner of the collection system prepares a complete inventory of the system. This chapter describes the collection-system pipelines owned by the City/District in terms of length, material, and age. A complete inventory would also contain remote and shared facilities. **Figure 2-1** shows the extent of the existing collection system.

4.1 EXISTING SEWER SYSTEM

To define the collection-system characteristics for the City and the Buena Sanitation District, the ownership category in the City of Vista Collection System GIS was used.

4.1.1 CITY OF VISTA

The City of Vista collection system is located primarily in the Buena Vista Drainage Area and is comprised of 35 sub-drainage areas. Three sub-drainage areas (V33, V34, and V35) are located in the Agua Hedionda Drainage Basin. The majority of sewer flows generated from the City drains to the Encina Wastewater Treatment plant via the Vista-Carlsbad Interceptor, with the exception of sewer flows generated in subsections V33, V34, and V35. These flows drain to the Encina Wastewater Treatment via the Buena Interceptor.

The City of Vista wastewater collection system includes approximately 215 miles of sanitary sewers ranging in size from 6 to 42 inches in diameter. **Table 4-1** summarizes the characteristic length of the Vista collection system based on the diameter of the pipelines.

Table 4-1 City of Vista's Pipeline Length

Diameter (Inches)	Length (Feet)	Length (Miles)
6	110,760	20.98
8	843,129	159.68
10	56,405	10.68
12	49,737	9.42
14	321	0.06
15	14,955	2.83
18	15,644	2.96
21	3,994	0.76
24	5,130	0.97
27	3,770	0.71
30	3,193	0.60
36	25,454	4.82
42	2,950	0.56
Total	**1,135,724**	**215.10**

Age spans of 10 years were calculated to determine the relationship between age and length of pipelines. **Table 4-2** summarizes the pipe age versus length relationship.

Table 4-2 City of Vista's Pipeline Age

Age Range (Years)	Length (Feet)	Length (Miles)
0 to 10	90,815	17.20
11 to 20	228,324	43.24
21 to 30	256,843	48.64
31 to 40	133,825	25.35
41 to 50	361,626	68.49
Greater Than 50	58,608	11.10
Unknown	5,683	1.08
Total	**1,135,724**	**215.10**

The City of Vista owns a total of 711,739 feet (approximately 135 miles) of pipeline made from vitrified clay pipe (VCP). This amounts to roughly 63% of the total collection system. Note that VCP lines installed prior to 1963 were regularly installed in short lengths with open joints and manholes 2 feet in diameter. Over half of the VCP lines (412,039 feet) are over 41 years old. Additionally, sewers were frequently located in very narrow easements centered on private-property lines. These factors make the older clay lines the most prone to root intrusion and offset joints. Those that are located in easements are extremely difficult (sometimes impossible) to maintain and should be relocated. The majority of remaining pipeline is constructed of plastic (PVC), for a total of 352,682 feet (approximately 67 miles). PVC pipeline accounts for 31% of the total collection system. **Table 4-3** presents the pipeline material and length relationship.

Table 4-3 City of Vista's Pipeline Material

Pipe Material	Length (Feet)	Length (Miles)
ABS	103	0.02
ABSP	5,133	0.97
ACP	385	0.07
CIP	487	0.09
DIP	41,117	7.79
DIP/CL50	162	0.03
ESVCP	416	0.08
HDPE	246	0.05
PVC	352,682	66.80
PVC/DIP	2,357	0.45
PVC/VCP	848	0.16
VCP	711,739	134.80
VCP/DIP	207	0.04
VCP/PVC	4,786	0.91
Unknown	15,055	2.85
Total	**1,135,724**	**215.10**

Table 4-4 shows the relationship between the City of Vista's pipeline age, material, and length for DIP, PVC, and VCP. Much of this is subject to the problems noted above.

Table 4-4 City of Vista's Combined Pipeline Age, Material, and Length (Ft)

Pipe Material	0 to 10 Years	11 to 20 Years	21 to 30 Years	31 to 40 Years	41 to 50 Years	Greater Than 50 Years	Unknown Age	Total Length
DIP	322	12,006	28,666		20		103	**41,117**
PVC	89,477	180,026	80,522	1,552	831		274	**352,682**
VCP	102	33,559	138,521	126,507	356,314	55,725	1,011	**711,739**

4.1.2 BUENA SANITATION DISTRICT

The Buena Sanitation District is located primarily in the Agua Hedionda Drainage Area. The first sewer pipelines were installed in 1964. The Buena Sewer Collection System comprises approximately 101 miles of sanitary sewers and force mains ranging in size from 4 to 30 inches in diameter. Sewer flows generated from the Buena Sanitation District drain to the Buena Pump Station and are conveyed to Encina Wastewater Treatment Plant via the Buena Force Main and the Buena Interceptor. **Table 4-5** summarizes the characteristic length of the collection system based on the diameter of the pipelines.

Table 4-5 Buena Sanitation District's Pipeline Length

Diameter (Inches)	Length (Feet)	Length (Miles)
4	46	0.01
6	12,850	2.43
8	408,614	77.39
10	13,794	2.61
12	25,551	4.84
14	15,947	3.02
15	9,946	1.88
16	5,623	1.06
18	20,211	3.83
21	7,232	1.37
24	10,275	1.95
30	2,602	0.49
Total	**532,691**	**100.89**

Table 4-6 summarizes the pipeline age versus length relationship. The entire collection system owned by the District is less than 50 years old.

Table 4-6 Buena Sanitation District's Pipeline Age

Age Range (Years)	Length (Feet)	Length (Miles)
0 to 10	39,009	7.39
11 to 20	95,212	18.03
21 to 30	187,206	35.46
31 to 40	35,726	6.77
41 to 50	171,250	32.43
Greater Than 50	0	0
Unknown	4,289	0.81
Total	**532,691**	**100.89**

VCP accounts for more than 50 miles of pipeline in the collection system. Another 23 miles of the collection system is composed of PVC. **Table 4-7** presents the pipeline material and length relationship.

Table 4-7 Buena Sanitation District's Pipeline Material

Pipe Material	Length (Feet)	Length (Miles)
ABS	5,152	0.98
ACP	6,403	1.21
CIP	816	0.15
DIP	13,625	2.58
HDPE	2,127	0.40
PE	498	0.09
PVC	120,286	22.78
RCP	996	0.19
RPVC	2,416	0.46
VCP	266,580	50.49
VCP/ PVC	190	0.04
VCP/PVC	229	0.04
XVCP	949	0.18
Minor Materials	777	0.15
Unknown	111,648	21.15
Total	**532,691**	**100.89**

Table 4-8 shows the relationship between the District's pipeline age, material, and length for DIP, PVC, and VCP. The majority of the District's collection system is comprised of VCP pipe that is less than 30 years old.

Table 4-8 Buena Sanitation District's Combined Pipeline Age, Material, and Length (Ft)

Pipe Material	0 to 10 Years	11 to 20 Years	21 to 30 Years	31 to 40 Years	41 to 50 Years	Unknown Age	Total Length
DIP	181	10,621	2,823				**13,625**
PVC	35,671	55,931	28,307		377		**120,286**
VCP	994	2,981	72,537	29,574	160,060	433	**266,580**

4.1.3 LIFT STATIONS

Lift stations convey tributary flow from low areas constrained by topographic elevations to higher elevations where the flows can be conveyed to the treatment plant by gravity. Lift stations typically require significant maintenance and attention by operations personnel and represent a significant risk point in the system for overflows or spills.

Flows tributary to lift stations are conveyed through pumps and pressure pipelines (force mains). The force-main flows discharge into the gravity collection system. The potential for odor at these discharge points is significant. As a result, lift stations and force mains are operated in such a manner to minimize the travel time in the force main and the turbulence at the discharge point. Lift stations are also constructed with redundant facilities and standby power to minimize the potential for spills and potential impact to the environment.

Recent force-main failures at the Buena and Buena Vista Lift Stations are currently under review. It is suspected that force-main installation techniques, pipeline materials, and age may have contributed to their failure. Further discussion of this issue is found in Chapter 7. There are four lift stations shared between the City of Vista and the Buena Sanitation District. These are:

- Raceway PS aka Melrose PS located at 2685 South Melrose Drive
- Buena PS aka Buena Creek PS located at 2080 South Melrose Drive
- Buena Vista PS aka Jefferson Street PS located at Buena Vista Lagoon at Jefferson
- Agua Hedionda PS located at Agua Hedionda Lagoon northeast of SDG&E power plant

All lift stations are operated by the Encina Wastewater Agency under various MOUs and agreements. The Buena Vista and Agua Hedionda Pump Stations are under shared ownership with Carlsbad as the lead agency.

The location of lift stations and force mains are shown in **Figure 4-1.**

CITY OF VISTA

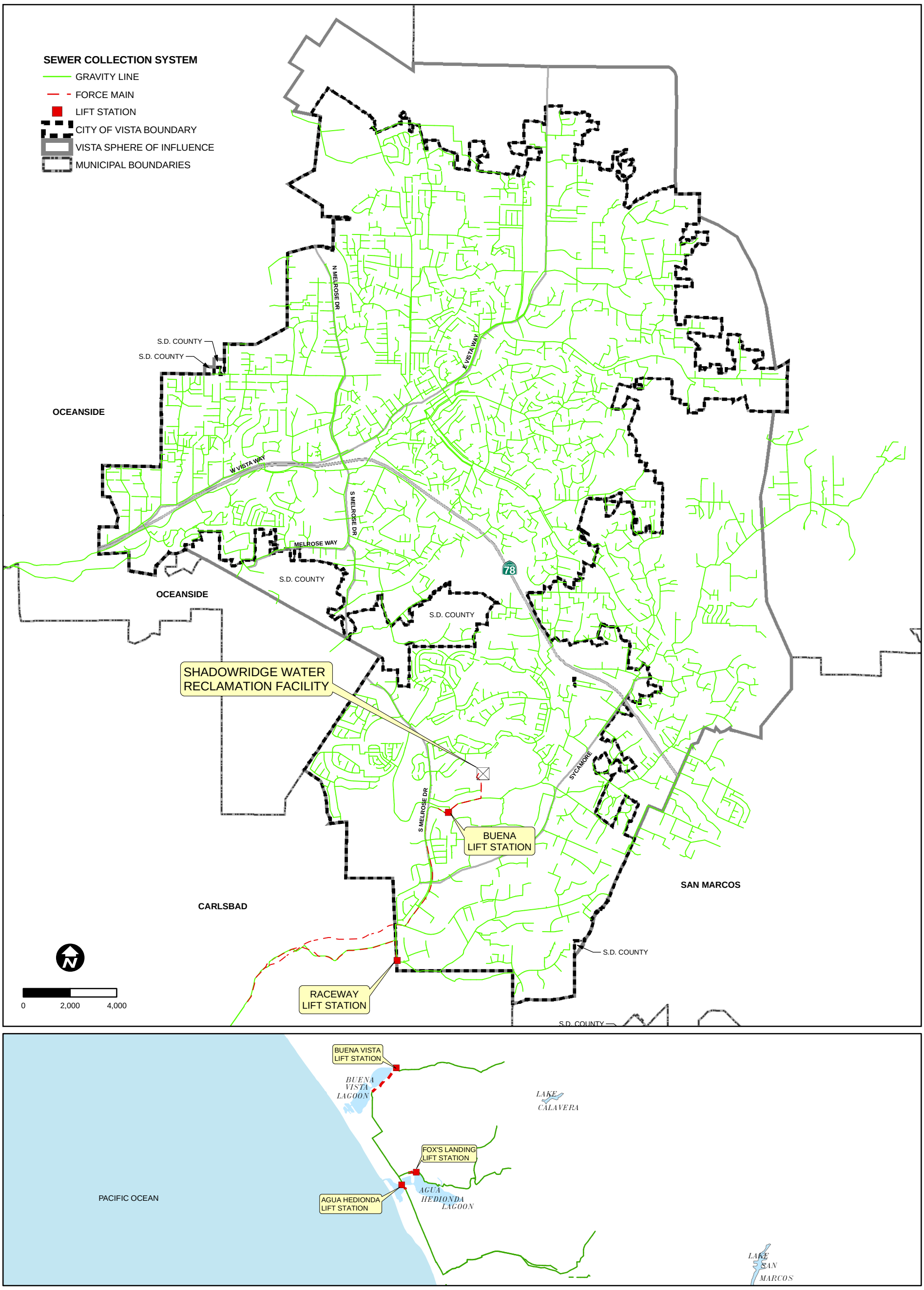


FIGURE 4-1 MAJOR LIFT STATIONS AND FORCE MAINS

4.1.4 WATER RECLAMATION FACILITY

The Buena Sanitation District Shadowridge Water Reclamation Facility (SWRF) (**Figure 4-2**) was built in 1986 to add the required capacity to develop the Raceway Basin located just north of Palomar Airport Road and Melrose Drive. Since that time, Encina capacity and line upgrades have been sufficient to treat the flow at the Encina WRF. Without the need for additional treatment capacity and with rising O&M costs, the District decided to mothball the plant in February 2002. A restart is not anticipated until it becomes cost effective to expand the reclaimed water service area, upgrade the plant technology, and execute new agreements with State and local water resource agencies. A schedule for reevaluation and restarting has not been prepared. It is recommended that a schedule be considered for the economic evaluation of restarting this plant within the next 5 years. This will become especially relevant as funding is made available for evaluation of local water supplies to reduce the dependence on imported water.

Figure 4-2 Shadowridge Water Reclamation Facility

5.0 WASTEWATER FLOWS

5.1 INTRODUCTION

To assess the existing and future capacity of the collection system, determination of existing and future flows is required. Wastewater flows are greatly influenced by weather when there are a large number of defects in the system. This chapter discusses the development of existing and future flows under both dry and wet weather conditions. The impact of defect flow reduction is also analyzed and presented in this chapter.

5.2 HISTORICAL WASTEWATER FLOWS

The previous Sewer Master Plans, prepared in 1982, 1993, and 2001, each report flows from the flow meters at Vista and for the Buena Sanitation District. **Table 5-1** shows the past and existing sewer flows.

Table 5-1 Wastewater Flow

Average Measured Flow (MGD)			
Report Year	**Vista**	**Buena**	**Total**
1982	4.20	0.68	4.88
1993	5.14	2.03	7.17
2001	5.50	2.75	8.25
2007	5.57	3.17	8.74

5.3 EXISTING SEWER FLOWS

Existing sewer flows were measured by utilizing the 24-hour flow monitoring data in 15-minute intervals obtained from Encina Wastewater Agency. Flow measurement data at four meter locations (V1, V2, B2, and OV1) was obtained for the years 2003 to 2006. Meter locations B1, OS1, and BV1 were not analyzed since they include additional flows from other agencies and do not directly affect the capacity analysis of the existing collection system. **Table 5-2** Flow Measurement Locations, presents a summary of flow meter IDs used in this analysis. It includes the meter location and the agencies that flow into each meter.

Table 5-2 Flow Measurement Locations

Meter ID	Location*	Measured Flows
V1	Intersection of College Blvd. and SR-78	City of Vista + City of Oceanside
OS1	Near V1	City of Oceanside
V2	Upstream of the Raceway Pump Station	Subsections V34 and V35 of the City of Vista
B2	Downstream of the Buena Pump Station	Buena Sanitation District
BVPS	Intersection of Jefferson and SR-78	City of Vista + City of Oceanside + City of Carlsbad

**See Figure 7-1 Flow Measurement Locations*

5.3.1 AVERAGE DRY-WEATHER FLOW (ADWF)

Statistical analysis of the flow data was performed to define the existing average and peak dry-weather flow (ADWF and PDWF), average and peak wet-weather flows, and rainfall-derived I&I (defect flows) for each of the flow meters. ADWF was determined by analyzing the data for the dry days only. A dry day is defined as a day when no rainfall occurred 72 hours prior to that day and when there were no lingering effects from a previous rainfall. ADWF is important because it becomes the baseline for determining the amount of defect flows.

The average hourly dry-weather flow rate for each of the flow meters reflects the dominant land use that drains to each meter. The V1 meter is dominated by residential flow, while the V2 meter (basins V34 and V35) is dominated by industrial and commercial flows. V1 flows show increased wastewater production in the early morning and late evening associated with bathing and meals delayed by the travel time to the meter (**Figure 5-1**).

At V2, peak flows occur around noon due to activities in commercial and industrial areas with little delay due to the characteristically short, steep flow paths to the Raceway Pump Station (**Figure 5-2**).

The B2 meter is also dominated by residential flows, with peak flows occurring during morning and evening hours (**Figure 5-3).**

Figure 5-1 V1 Vista Average Dry-Weather Flow

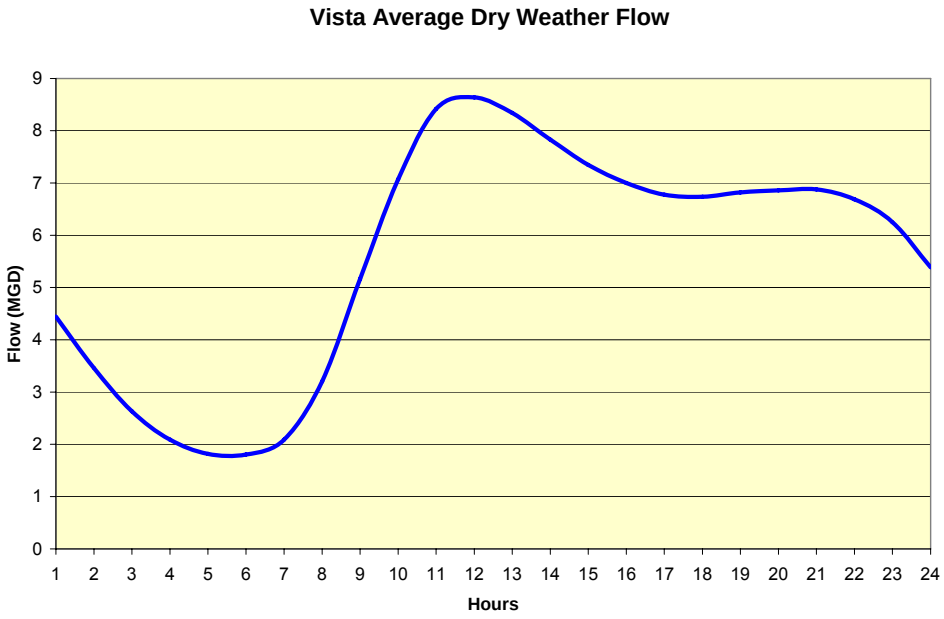


Figure 5-2 V34 V35 Average Dry-Weather Flow

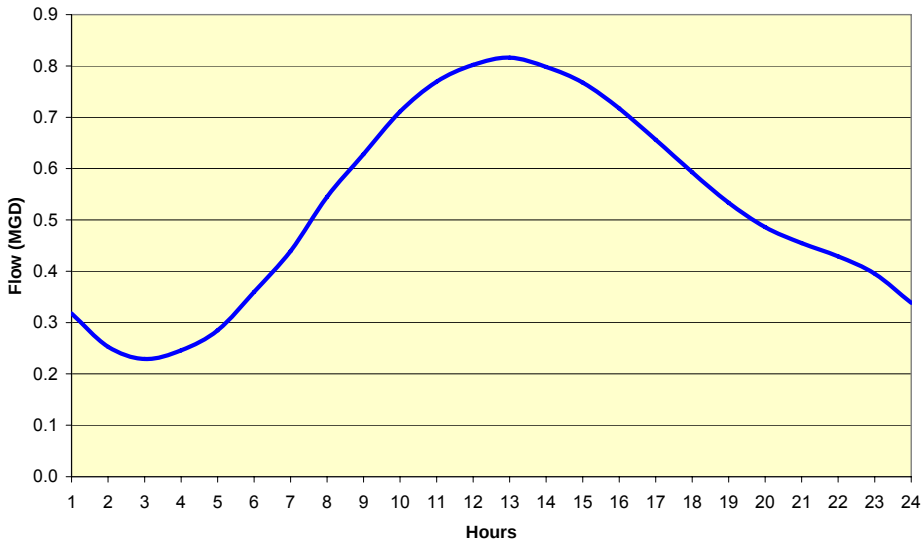
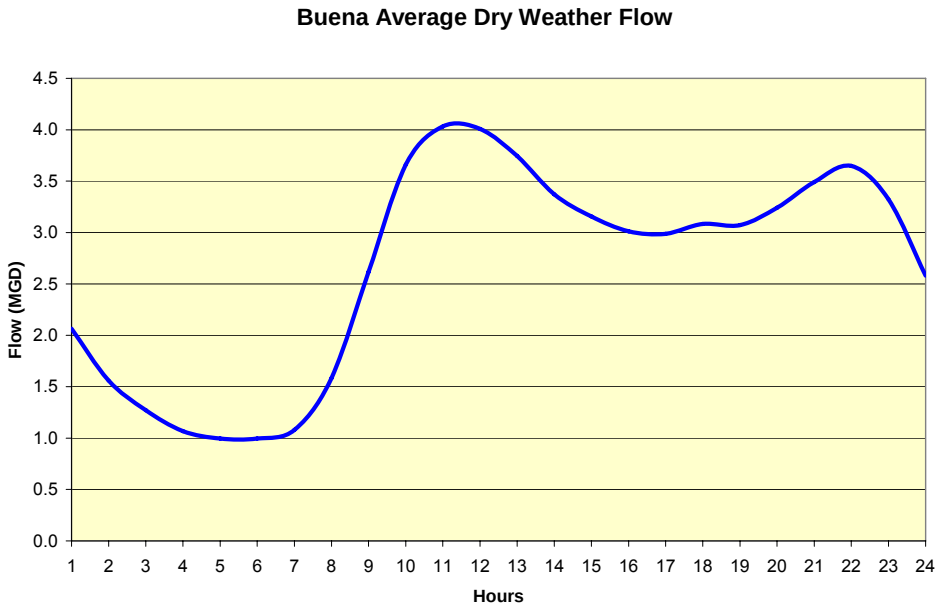


Figure 5-3 B2 Buena Sanitation District Average Dry-Weather Flow



The unit flow or average gallons per day (gpd) per EDU was calculated from the EDU records in the sewer billing database which tracks the EDUs to each parcel address. Each record is assigned a sewer tributary area and an estimated EDU. By calculating the total number of EDUs in each basin and the observed daily dry-weather flow volume, the unit flow per EDU was determined. **Table 5-3** shows the results of that calculation.

Table 5-3 Existing Unit Flow per EDU

Wastewater Basin	Tributary Flows by Type								TOTAL EDUs	Average Dry Weather Flow	Calculated Unit Flow per Basin gpd/EDU
	Residential [1]						Comm.	Gov/Sch/ Industrial			
	Single family		Multi-family		Mobile Home						
	Units	EDUs	Units	EDUs[2]	Units	EDUs[2]	EDUs[3]	EDUs[4]			
Vista	12,351	12,351	7,449	5,214	1,707	1,195	3,749	721	23,230	5.57 MGD	240
Raceway	455	455	-	-	-	-	1,239	-	1,694	0.52 MGD	307
Buena	6,659	6,659	3,941	2,759	480	336	2,409	161	12,323	2.65 MGD	215
Outside Vista	685	685	50	35	-	-	22	8	750	--	--
TOTALS:	20,150	20,150	11,440	8,008	2,187	1,531	7,418	890	37,997	8.74 MGD	
										Weighted average unit flow =	**236 gpd/EDU**

(1) Number of residential units and locations determined from 2005 water meter accounts
(2) Multi-family and mobile home EDUs calculated as 0.7 times a single family EDU
(3) Commercial EDUs calculated from 2005 water billings assuming a 90% return rate to the sewer system and a unit flow of 220 gpd/EDU
(4) EDUs obtained from water meter billing database (hand-billed accounts)

Table 5-4 indicates the estimated unit flows in previous master plans.

Table 5-4 Historic Unit Flows

Historic Unit Flow	
Report Year	**Gallons per day / EDU**
1982	248
1993	230
2001	226
2007	236

The decrease in unit flows between 2007 and1982, and increase in unit flows from 2001 to 2007, is considered to be too small to attribute to any single change in sewer ordinance EDU calculations or changes in the groundwater infiltration. The Wastewater unit flow has varied with time but has always been ±5.0% of 235 gpd per EDU. This is within the accuracy limits of the flow measurement devices. To assure that the capacity is assessed conservatively, the existing system was evaluated at an EDU loading of 250 gpd/EDU.

5.3.2 INFLOW AND INFILTRATION ANALYSIS

A wet-weather or I&I analysis was used to determine the impacts of defect flow. Flows originating from defects are generally known as defect flows or I&I. Defect flows that occur consistently regardless of precipitation are known as Base Inflow and Infiltration (BII). Defect flows that only occur as a result of a rainfall event are known as Rainfall-Derived Inflow and Infiltration (RDII). This section discusses the methodology used to estimate RDII.

I&I flows originate from defects in the collection system. Each is distinguished by the method by which it enters the collection system. Inflow comes from direct connections to the surface waters. Examples of inflow sources would include: missing clean-out covers; missing manhole covers; damaged manhole rings and cones in watercourses; manholes in street gutters; and roof, patio, refuse bin, storm and other drains that are connected to the sanitary sewer system. Inflow is characterized by a rapid response and diminishment closely following the pattern of the rainfall event. Inflow is most frequently located through the use of smoke testing during dry weather.

Infiltration flows enter the system from indirect connections through the soil/groundwater interface. Examples of infiltration source include cracked pipe, offset joints, manhole/pipe connections, and manhole chimney seals. Infiltration has a slow initial response to rainfall and infiltration defect flows may last for months after a rainfall event. Infiltration defects are best located through the use of CCTV inspections performed during periods of high groundwater.

BII is accounted for in the calculation of ADWF and not derived separately as in previous studies.

RDII flows into the sewer and temporarily elevates wastewater flows in the collection system. The nature of the RDII response is indicative of the type, magnitude, and distribution of the defects in the system. Defect flows were calculated by subtracting the ADWF from wet-weather flow on a selected storm event.

Table 7-2, Observed Defect Flows (by basin and event), describes the impact of several significant storm events that occurred during the flow data period. To consider the most conservative approach to wet-weather influences, the February 23, 2005 event was selected for wet-weather calibration. **Table 7-2** provides the basis of defect flow loading in the existing and future wet-weather models. Calibration of the wet-weather event was also performed using this data.

Table 5-5 indicates the magnitude of RDII during this event.

Table 5-5 Wet Flow Characteristics 2/23/2005

Basin	Dry Weather		Wet Event 2/23/2005			
	ADWF	PDWF	AWWF	AWWF PF	PWWF	PWW PF
Vista	5.57	8.64	10.90	1.96	13.33	2.39
Buena	2.65	4.03	4.45	1.68	5.26	1.98
Raceway	0.52	0.82	1.11	2.13	1.47	2.83
Total	8.74		16.46	1.88		2.40

ADWF = Average Dry-Weather Flow (2007)
PDWF = Peak Dry-Weather Flow
AWWF = Average Wet-Weather Flow (2/23/2005)
AWWF PF = AWWF/ADWF
PWWF = Peak Wet-Weather Flow
PWW PF = PWWF/ADWF
PF = Peak Rate Factor

It is notable that the average daily flow volumes were almost double (1.9 times) the ADWFs. This is an indication of widespread defects. The location of these defects will be narrowed by the implementation of a comprehensive flow-measurement program. The increase is significant and expensive, as these additional flows must be pumped and treated. The wet-weather peak flow rate to dry-weather average flows varied from 2.0 to 2.8.

Figure 5-4, **Figure 5-5,** and **Figure 5-6** graphically show wet-weather event flow, precipitation, RDII defect flow, and ADWF at each meter location.

Figure 5-4 Vista Wet-Weather Response 2/23/2005

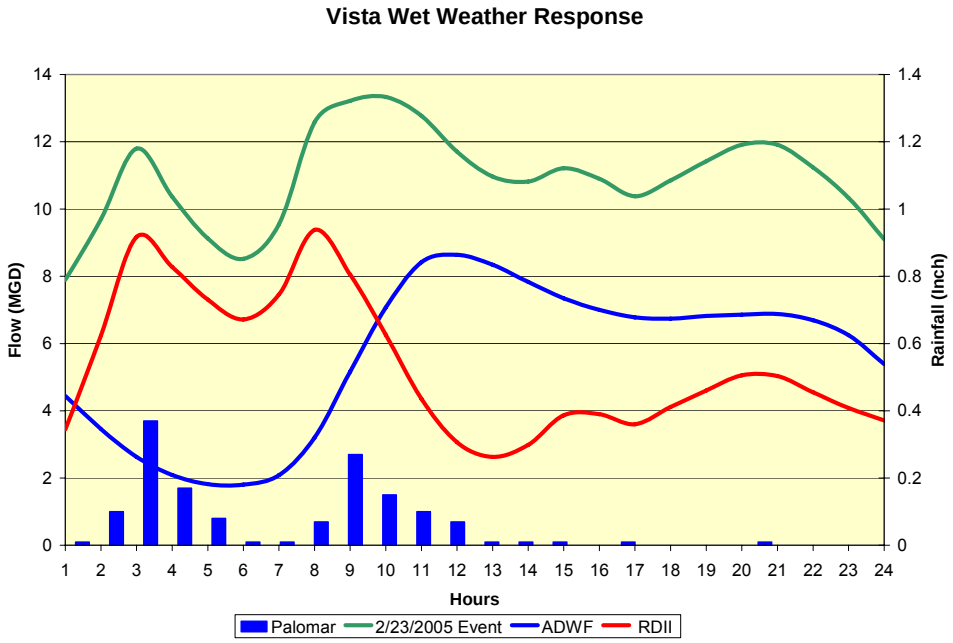


Figure 5-5 Buena Wet-Weather Response 2/23/2005

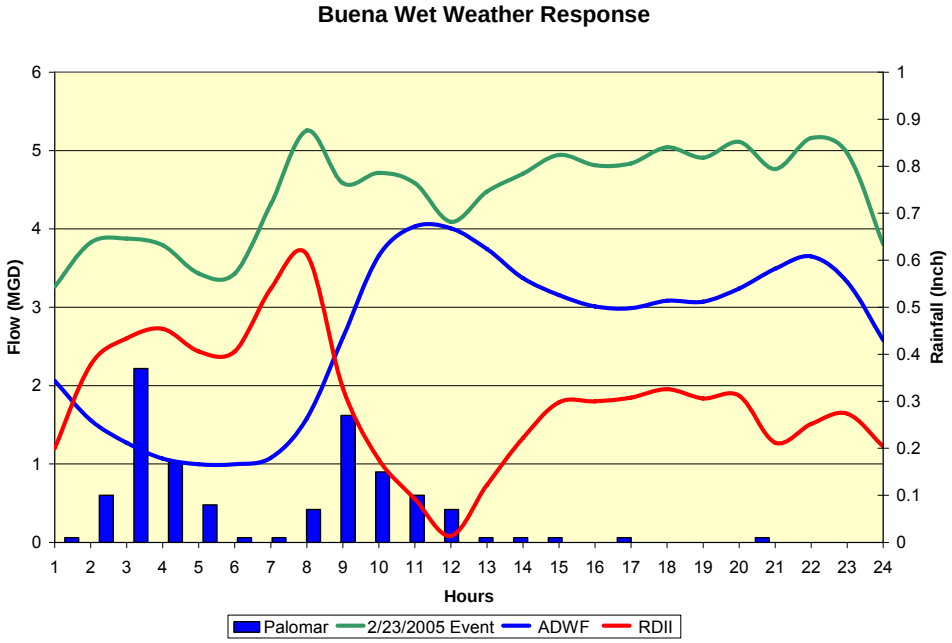
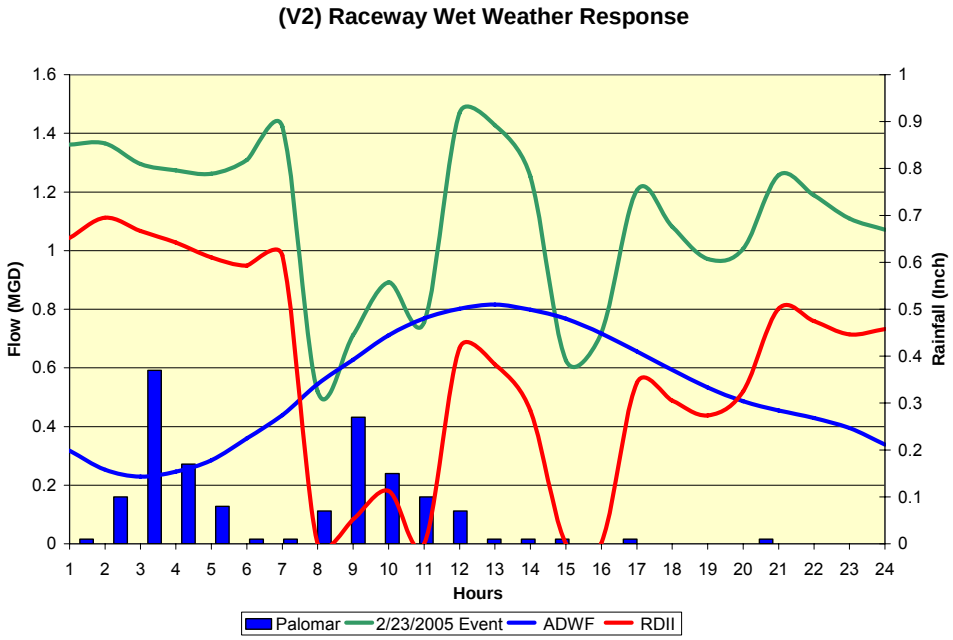


Figure 5-6 V2 Wet-Weather Response 2/23/2005



Note that the proximity of the pump station affects the shape of the curve at V2.

The numerical data associated with the RDII curve are used in the model as a pattern representing hourly changes of flow during a wet-weather event. The volume of defect flow in each basin was calculated separately and is shown in **Table 7-2, Observed Defect Flows.**

5.4 FUTURE SEWER FLOWS

In the development of this Master Plan Update, analyses were performed to determine the sewage-flow generation factors for representative land uses throughout the City's service area. Sewage-flow generation factors are presented as EDUs per acre for a particular land-use category. These values were used to generate the flow per loading unit for use in the sewer collection system model. Average dry-weather flow loads were generated for each parcel by multiplying the unit flows by the corresponding sewage-flow generation factor and the acreage of the parcel. Average dry-weather unit flow of 250 gpd per EDU was predicted for the land use during future sewage-flow generation. Future build-out flows were derived from all parcels as if they were developed to the highest zoning of the property. The source of the land-use categories used to develop sewage-flow generation factors was based on the City of Vista's Zoning and the SANDAG Designated Land Use. A summary of the sewage-flow generation factors developed in the study is presented in **Table 5-6**. Land use is shown in **Figure 5-7**.

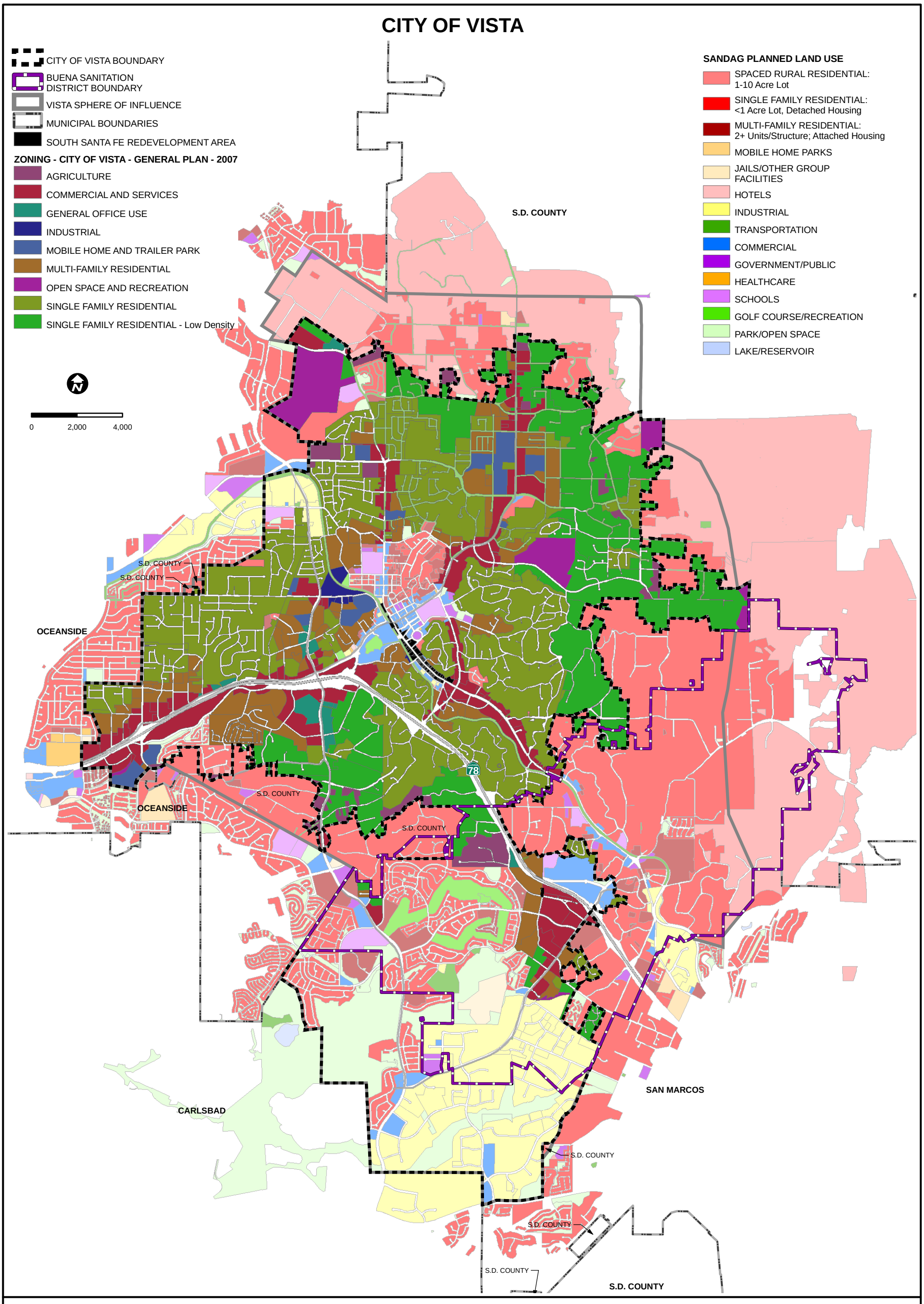


FIGURE 5-7 EXISTING LAND USE

Table 5-6 Land-Use Sewage-Flow Generation Factors

City of Vista Zoning	GPD/Acre	EDU/Ac
SSF Redev	10,000	40
Agriculture - 1	250	1
Commercial and Services	1,500	6
General Office	1,500	6
Industrial	1,000	4
Mobile Home and Trailer Park	1,000	4
Residential - Multi Family	2,625	10.5
Open Space - 0	-	0
Residential - Single Family R-1	1,000	4
Residential - Single Family R-1-B	1,750	7
Residential - Single Family - Low Density	500	2
SANDAG		
Residential - Spaced Rural - 1-10 acre lot	250	1
Residential - Spaced Residential	100	0.4
Residential - Single Family - 2	500	2
Residential - Multi Family - 10.5	2,625	10.5
Mobile Home	1,000	4
Jail/Other		150 gpd/bed
Hotels	13,750	55
Industrial	1,000	4
Transportation	-	0
Commercial	1,500	6
Government	1,500	6
Healthcare		150 gpd/bed
Schools	1,250	5
Golf Course/Recreation	500	2
Park/Open Space - 0	-	0

For future wet-weather flows, the wet-weather flows from 2005 were used and added to the future dry-weather flows. The defect flows were held constant as system deterioration and system rehabilitation were conservatively expected to balance. Consistent flow measurements for pre- and post-rehab will indicate whether this should change in the future. The following sections discuss the allocation of flows in the hydraulic model.

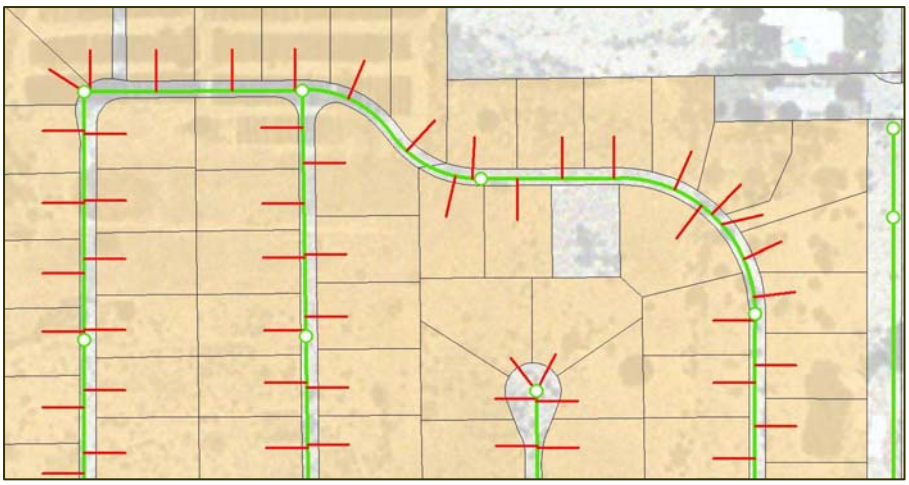
5.5 FLOW MODELING TECHNIQUES

In the previous models prepared for the City/District, many simplifications were made due to limitations of data availability or what hardware/software was available. The flow-modeling techniques employed in the model prepared for this report represent the state-of-the-art. The following sections discuss how the flow was allocated to each of the collection-system pipes.

ADWF is allocated in the model by assigning flow from each individual parcel to the nearest manhole (**Figure 5-8**). In the existing model, wastewater flows were calculated by apportionment based on the water billing information. In previous models, flows were allocated based on the sub-drainage area and then assigned to the connecting node on the trunk.

RDII or defect flows were calculated for each meter basin and were distributed over the nodes within the basin. There are 7,897 nodes in the current model. The previous models allocated flow by EDU or by loading based on pipe diameter. Further wet-weather flow monitoring would allow a more precise allocation of defect flows.

Figure 5-8 Parcel-Based Flow Allocation



5.6 MODEL CALIBRATION RESULTS

Model calibration is the process by which model flows are compared with the observed flows. Iterative adjustments are made to the sewage-flow generation factor volumes, the diurnal curves, or the physical model until the model's predicted hydrographs closely represent the observed flows. The primary purpose of a calibrated model is to provide an accurate representation of the hydraulic characteristics of the collection system.

A well-calibrated model is used as the basis of future modeling. In a calibrated model, the representations of the flow loading and allocation and the collection system facilities are representative of the characteristics in the system.

Figure 5-9 through **Figure 5-14**, and **Table 5-7**, show the comparison of the measured and modeled flows for the dry- and wet-weather conditions.

Table 5-7 Calibration Results

Scenario	Basin	Calibration Results					
		Measured		Modeled		Percent Difference	
		Average	Maximum	Average	Maximum	Average	Maximum
Dry	Vista	5.57	8.64	5.27	8.00	−5.39%	−7.36%
	Buena	2.65	4.03	2.55	3.85	−3.77%	−4.47%
	Raceway	0.52	0.82	0.52	0.81	0.00%	−1.22%
Wet	Vista	10.90	13.33	10.02	13.91	−8.07%	4.35%
	Buena	4.45	5.26	4.43	5.17	−0.45%	−1.71%
	Raceway	1.11	1.47	1.19	1.61	7.21%	9.52%

As shown in **Table 5-7,** all flows were modeled under wet and dry conditions to within less than 10% difference. This is considered an excellent calibration and is well within the accuracy of the flow-measurement data. This level of calibration is an indicator of the reliability and accuracy of the model. It is an indication that the data representing both the conveyance system and the flows injected closely represent the flow measurements.

Figure 5-9 Vista ADWF Calibration

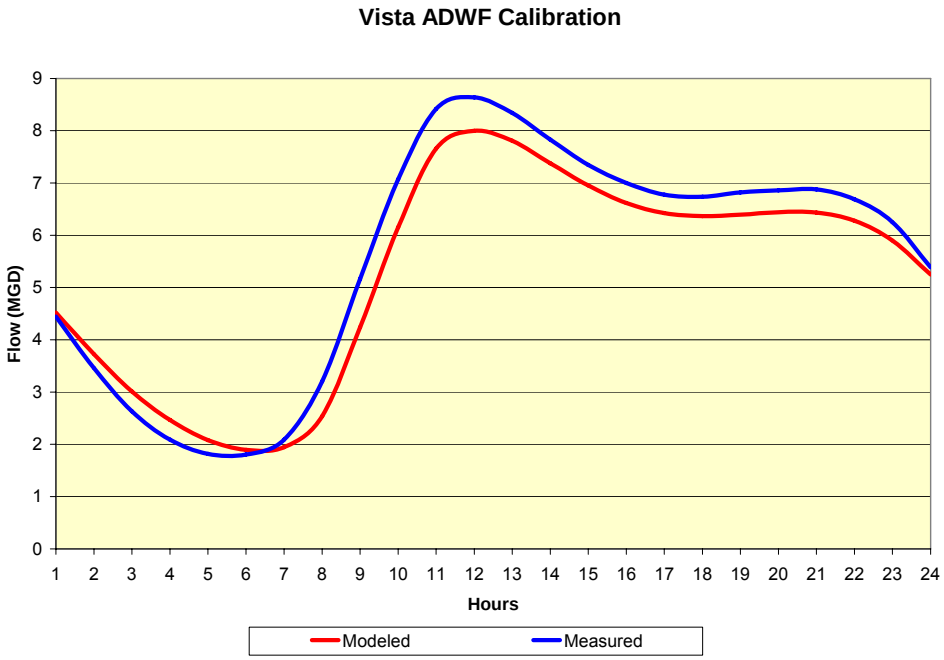


Figure 5-10 Buena ADWF Calibration

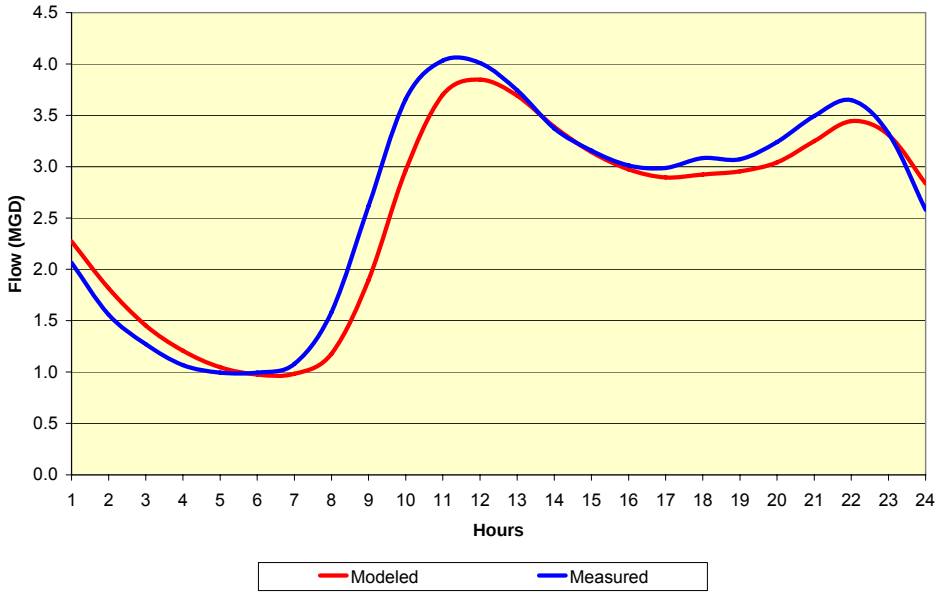


Figure 5-11 V2 ADWF Calibration

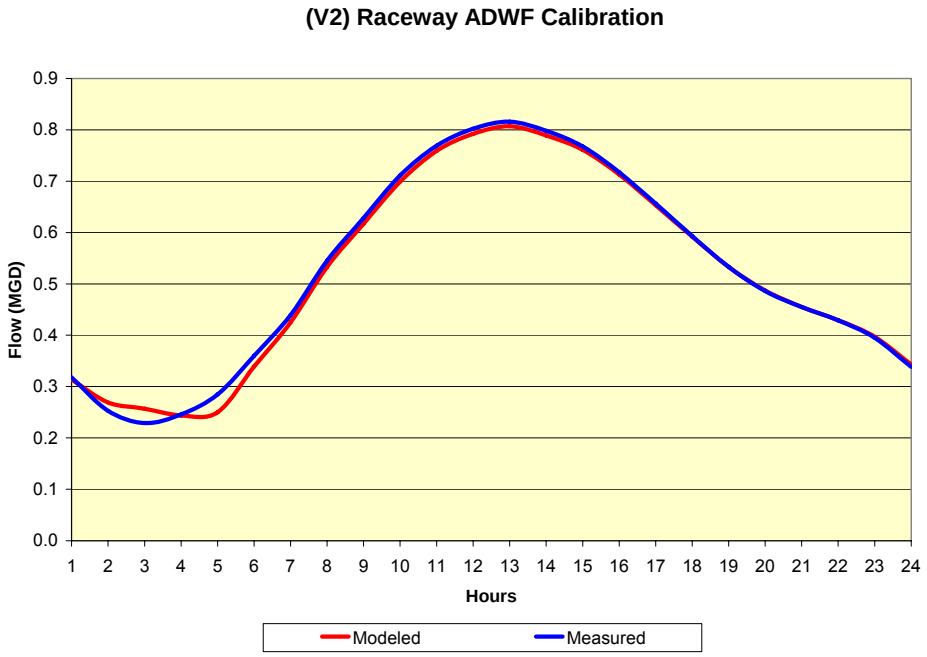


Figure 5-12 Vista Wet-Weather Calibration

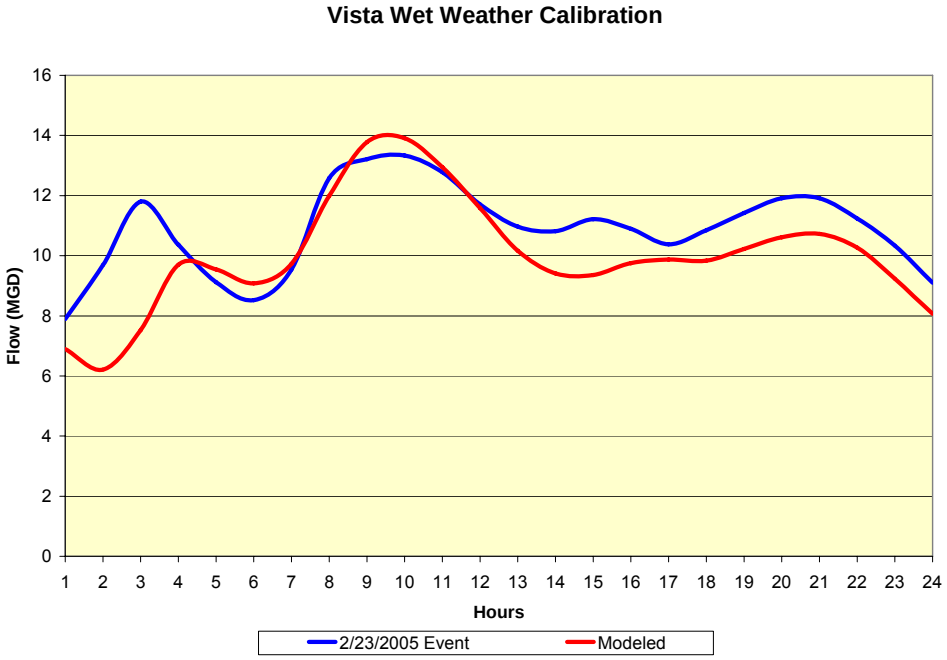


Figure 5-13 Buena Wet-Weather Calibration

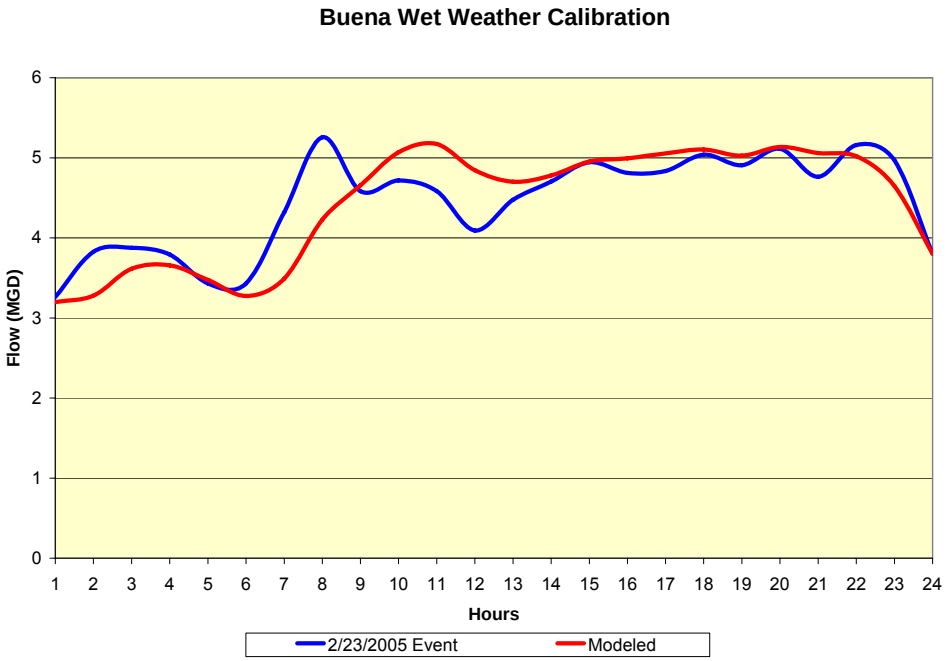
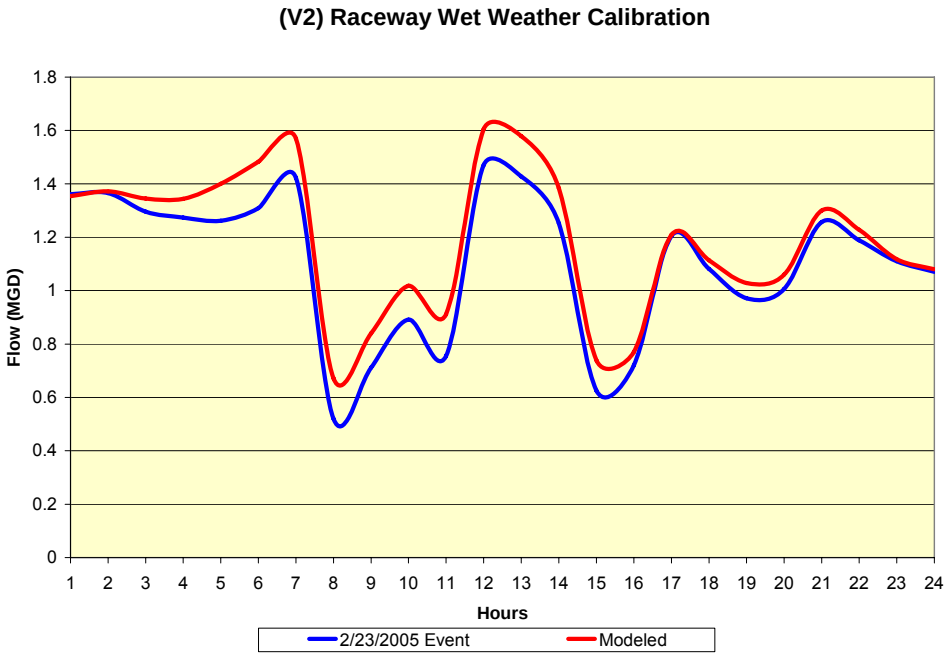


Figure 5-14 V2 Wet-Weather Calibration



In conclusion, the development of the collection-system model and the analysis of dry and wet flows have resulted in a well-calibrated model. The model is now used as the basis of capacity analysis and project development.

6.0 CAPACITY ANALYSIS

By modeling the sewer collection system under a variety of hydraulic conditions, the capacity deficient pipes are identified. These sections of pipe are then used as the basis of "projects" (logically collocated reaches of pipe). These projects are known as Capacity or Replacement projects. Operational projects related to material, minimum upsizing and relocation are discussed in Chapter 7.

6.1 COLLECTION SYSTEM MODELING

Using the information from the GIS (Chapter 4) and the flow measurement data (Chapter 5), a complete hydraulic model of the Vista sewer system was prepared. The hydraulic model calculates the characteristics of flow in each of 7,496 pipes in the system over a specified time period. Each pipe segment is represented by a link while each manhole is represented by a node. This is known as a link-node model.

Hydraulic modeling software is composed of two primary parts, the user interface and the analytical engine. The user interface is the aspect of the model that is used to input data, provide scenario settings and assumptions, initiate analyses and review results. The analytical engine performs the hydraulic calculations. The InfoSWMM model was selected for the Vista model since its user interface is based on the City's GIS and its analytical engine is based on the Environmental Protection Agency's Storm Water Management Model (SWMM). The user interface is beneficial to the City since the end-user is already trained and oriented to ESRI's ArcGIS.

The SWMM model was originally created in 1975 to model combined sewer overflows that plagued the country. As a result the capabilities of EPA SWMM include the ability to model the hydraulics of sanitary or storm water conveyance systems. While not used for capacity analysis, SWMM has the ability to model the water quality throughout the collection system. As the regulations governing the operation of sanitary and storm sewers increase, this capability will allow the City/District to assess water quality impacts of various operating strategies. SWMM has recently been updated incorporating over 30 years of user feedback, direct project experience and the latest object oriented programming techniques.

Due to improvements in available input data, software and hardware, the hydraulic model of the collection system is vastly different than previous models prepared to support earlier master plans.

The earlier models represented groups of pipes, or reaches, as single pipes with the hydraulics being determined by the pipe with the least capacity. The collection system was "skeletonized" or simplified to include only large diameter pipes. In addition to the simplification of the conveyance system, flow representations were also simplified. The average dry weather flow (ADWF) volume was calculated and an empirical peaking factor equation was used to determine peak dry weather flow (PDWF) rate. The PDWF rate was used to assess the capacity of the simplified trunk system to accommodate the flow under dry weather conditions. To simulate the effects of rainfall and defect flows, the Peak Wet Weather Flow (PWWF) rates were calculated by applying empirical peaking factors to the peak dry weather flow (PDWF) rate. This rate was then applied at locations along the simplified trunk system to determine the capacity of the system during wet weather events. The representation of flows in this way is considered "static" and represents a conservative approach to determining the system's hydraulic capacity.

Table 1-1 shows the history of modeling detail by the number of pipes considered in each master plan update. The current model evaluates the capacity of all 7,496 pipes in the collection systems using the criteria described in Section 6.2. The comprehensive, up-to-date (May 2007) GIS dataset provided by the City was used as the basis of the conveyance system. Flows from each of the 23,581 parcels in the City of Vista, Buena Sanitation District, and OV basins were entered into one of 7,897 manhole nodes nearest the parcel. The flow from each parcel is represented as a hydrograph that presents a varying flow based on the time of day. The representation of the flow hydrograph for the ADWF/PDWF condition was based on the observed variation of flow rates from the flow measurement sites. Residential, industrial and commercial parcels have different flow patterns and are discussed in Chapter 5 – Wastewater Flows. Peak Wet Weather Flows were derived from observed conditions during the February 23, 2005 storm event. This representation of defect flow, RDII was used to assess the ability of the system to convey flows without overflow.

SWMM performs its analysis of flow routing using the St.Venants equation. Hydraulic calculations were performed for every 10 seconds. SWMM's analytical engine is fully dynamic and can accurately predict surcharge, backflow and overflow conditions. Through the use of improved data representing the collection system and flow variations, combined with the SWMM analytical engine, a more complete determination of hydraulic capacity has been performed for all flow scenarios. A complete description of the capacity analysis and cost estimation techniques follows.

6.2 PERFORMANCE CRITERIA

This section describes the technical basis of determining adequate pipeline operating capacity and design criteria for the capacity analysis. The capacity analysis defines minimum pipe sizing and project prioritization.

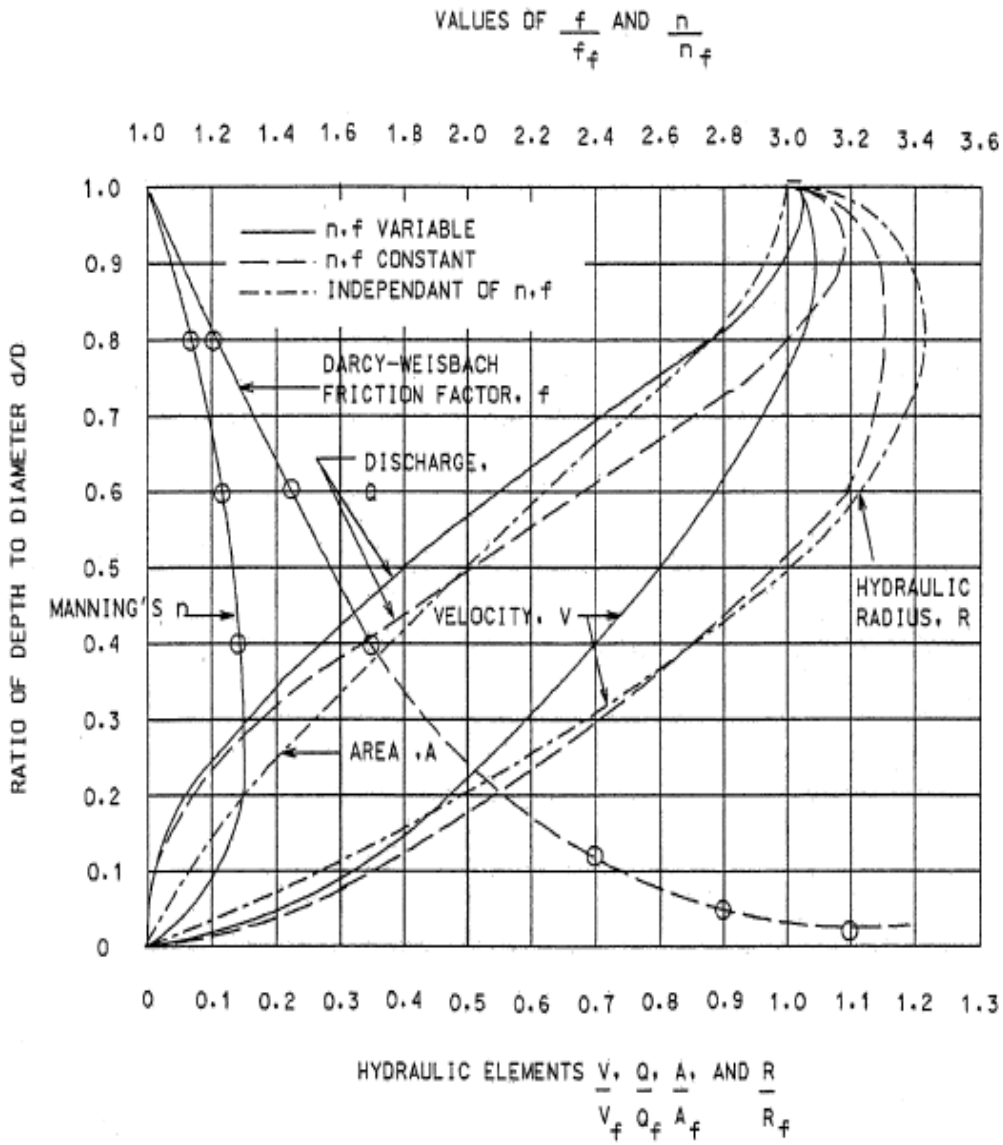
One purpose of a capacity analysis is to evaluate the hydraulic capacity of the collection system under current and future flow conditions. Criteria must be established to (1) Define the maximum allowable depth/Diameter ratio, (d/D), that is used as a threshold for further investigation and (2) the Design Criteria used for sizing future facilities. There are inherent allowances that are made to reflect the difference in installed or planned facilities.

The value used for the threshold or "trigger" value in 2001 was reduced from 0.85 in the 2001 report to 0.80 in the current report.

Figure 6-1 shows the depth/Diameter ratios and the corresponding Qpartial/Qfull values for circular pipes with a constant friction factor as used in the capacity analysis. As shown the pipe is flowing at 99% of its full pipe flow capacity when the depth is 80% of full pipe. In areas between 80% and 100% of depth the hydraulic regime is unstable. The use of the 0.80 value is considered more conservative than the 0.85 value. In addition, the InfoSWMM model reports the partial flow ratio of full flow in q/Q. In instances where the d/D is greater than 0.80 and the q/Q < 0.99 the line is surcharging because of a downstream restriction. The projects were reviewed and those with d/D >0.80 and q/Q <0.99 were removed from a recommended project.

Section 4.2.9 of the WAS suggests using a depth to diameter ratio of 0.5/0.75 depending on pipe diameter for Peak Dry Weather Flow (PDWF). We are using a depth to diameter ratio of 0.80 for conservative capacity evaluation of the system during Peak Wet Weather Flow (PWWF). The system has high levels of defect flow that may be reduced as rehabilitation continues. If the defect flow is reduced significantly in future years, the WAS standard may become appropriate.

Figure 6-1 Comparison Depth Flow Relationship



Constant n values were used in the capacity analysis. The remainder of the values for the Design Criteria are the same as they were in the 1993 and 2001 Master Plan Updates. These are presented in **Table 6-1**.

Table 6-1 Pipe Design Criteria

PIPE PARAMETER	VALUE
Minimum Velocity	**2 fps**
Manning's Roughness Coefficient	**0.013**
Force Main Velocity	**3 - 5 fps**
Minimum Pipe Size	**8-inch**
Threshold for Depth/Diameter in Peak Wet Weather Flow	**0.80**
Peak Wet Weather d/D: 12-inch and smaller	**0.5**
Peak Wet Weather d/D: larger than 12-inch	**0.75**

Water use and the corresponding sewer flows vary throughout the day. Pipelines are designed to convey the peak flow. Peak flows for the Vista and Buena System were derived from flow measurement information. A full discussion of the findings regarding the Dry and Wet Peak Flow Rates are discussed in Chapter 5 – Wastewater Flows.

It is further suggested that the City/District adopt more comprehensive design standards as required by the WDRs. We recommend the San Diego Water Agencies Standards as a comprehensive approach to promoting consistency in planning facilities throughout the County.

6.3 BASIS OF PIPE COSTS

To estimate the financial resources required for the replacement pipelines identified in this section, project cost estimates were made. The Engineering News Record, Construction Cost Index (ENR CCI) for Los Angeles in April 2006 is 8555. In the future all construction cost estimates should be adjusted using the current ENR CCI.

6.3.1 PIPELINE REPLACEMENT COSTS

Pipeline replacement costs were estimated from previous planning documents and from recent bid tabulations. Note that these are estimated costs for conceptual projects. The actual costs for design and construction may vary due to site specific requirements. The following table indicates the unit costs that were used as the basis of the project cost estimates.

Table 6-2 Replacement Pipe Unit Cost Estimates

Diameter (Inch)	Construction Costs ($15/In/LF)	Capital Costs[1] ($22.50/In/LF)	Capital Costs[2] ($29.25/In/LF)
8	$120	$180	$234
10	$150	$225	$293
12	$180	$270	$351
15	$225	$338	$439
18	$270	$405	$527
21	$315	$473	$614
24	$360	$540	$702
27	$405	$608	$790
30	$450	$675	$878
33	$495	$743	$965
36	$540	$810	$1,053
42	$630	$945	$1,229

[1]Includes 50% for technical services, field engineering and contingencies
[2]Includes additional 30% for easement contingencies

Technical services, field engineering and contingencies are estimated to equal 50% of the construction costs. These are described as follows:

Technical Services – 25%

- Preparation of environmental documentation
- Processing of approvals and permits
- Preliminary planning and design documents
- Final Design/Preparation of Plans, Specifications and Project Manuals
- Preparation of As-Builts
- Surveying

Field Engineering – 15%

- Contract Administration
- Coordination with other agencies
- Administration of geotechnical, archaeological, ROW and other outside services
- Construction Inspection

Contingencies – 10%

Easement Contingency [7]– 30%

- Permitting
- Special Construction
- Realignment

[7] Provided by staff and used only for projects located in potentially sensitive areas

An example of cost estimation is shown in **Table 6-3** below.

Table 6-3 Project Cost Calculation

Model Pipe Id	Vista Pipe Id	Length (ft)	Upsize Dia (in)	Easement Issues	Project Name	Unit Construction Cost ($15/In/LF)	Construction Cost ($)	Capital Cost[1] ($22.50/In/LF)	Capital Cost[2] ($29.25/In/LF)
1535	B10089.00-B10092.00	342	15	Yes	B4	$225	$76,950	$115,425	$150,053
4263	B10093.00-B10094.00	349	15	No	B4	$225	$78,525	$117,788	N/A

[1]Includes 50% for technical services, field engineering and contingencies
[2]Includes additional 30% for easement contingencies

Capital Cost[1] is the total project cost if there are no easement issues. Capital Cost[2] is the total project cost if there are easement issues.

6.4 EXISTING CAPACITY ANALYSIS

An understanding of the hydraulic condition of the existing system is essential to identify existing system related capacity deficiencies and to help prioritize recommended system improvements resulting from the ultimate system capacity analysis. The InfoSWMM hydraulic model developed as a part of this Master Plan was used to perform the capacity analysis of the existing collection system. Capacity analysis was performed for various flow scenarios including existing average and peak dry weather and wet weather flow scenarios. The existing flows were calibrated with the measured flows for all the scenarios before performing the existing system capacity analysis. **Table 6-4** presents the summary of existing average and peak dry weather and wet weather flows.

Table 6-4 Existing Wastewater Flows

Flow Scenarios	Dry Weather Flow		Wet Weather Flow	
	Average Flow (MGD)	Peak Flow (MGD)	Average Flow (MGD)	Peak Flow (MGD)
Vista	5.27	8.00	10.02	13.91
Buena	2.55	3.85	4.43	5.17
Raceway	0.52	0.81	1.19	1.61
OV Flow Transfer Obligations	2.15	2.5		5.375

Improvements were recommended based on the evaluation of the existing system during peak hours of wet weather conditions. Capacity analysis of open channel systems is generally based on the consideration of the depth of flow with respect to the diameter of the pipe. A capacity deficient section along a pipeline is recommended as a capacity related replacement project if depth-to-diameter ratio (d/D) exceeded the performance criteria established to define the projects during the wet weather flow scenario. A d/D ratio of 0.80 was used as a performance criteria threshold as discussed in Section 6.2.

Capacity deficient pipes were upsized in order to meet the design criteria of 50% full for the pipes with diameter less than or equal to 12-inch and 75% full for the pipes with diameter greater than 12-inch during peak wet weather flow. Capacity deficient pipes in close vicinity were grouped to define the potential projects and often include single pipe segments that do not have hydraulic restrictions. The pipes were grouped to create logically constructible projects. By doing this, material and age are consistent throughout an entire reach and there are fewer field coordination issues regarding protecting pipe in place.

6.5 FUTURE SYSTEM CAPACITY ANALYSIS

Methodology used during existing system capacity evaluation was adopted to identify and define capacity related replacement projects for the future collection system. InfoSWMM hydraulic model was used to perform the capacity analysis of the future collection system for various flow scenarios including ultimate average and peak dry weather and wet weather flow scenarios. **Table 6-5** presents the summary of ultimate average and peak dry weather and wet weather flows.

Table 6-5 Ultimate Wastewater Flows

Flow Scenarios	Dry Weather Flow		Wet Weather Flow	
	Average Flow (MGD)	Peak Flow (MGD)	Average Flow (MGD)	Peak Flow (MGD)
Vista	7.90	12.12	13.23	20.19
Buena	3.82	5.78	5.77	8.41
Raceway	0.91	1.42	1.59	2.57
OV Flow Transfer Obligations	2.15	2.5		5.375
OV1	0.23	0.35	0.34	0.55
OV2	0.15	0.23	0.22	0.35
OV3	0.003	0.005	0.007	0.011
OV4	0.06	0.09	0.10	0.16
OV5	0.32	0.50	0.54	0.86
OV6	0.23	0.36	0.27	0.43
OV TOTAL ADWF	0.99			2.36

Maximum anticipated peak flow factor is 1.60.

Improvements were recommended based on the evaluation of the future system during peak hours of wet weather conditions. A capacity deficient section along a pipeline is recommended as a capacity related replacement project if depth-to-diameter ratio (d/D) exceeded the threshold performance criteria of d/D greater than or equal to 0.80 and a q/Q ratio of 0.99.

Renegotiation of lower flows in the Oceanside flow agreement with has been recommended in the past and is supported by these findings. This may reduce overall future costs of downstream facilities.

7.0 OPERATIONAL ANALYSIS

Pipe capacity deficiencies may be restored by pipeline replacement (discussed in Chapter 6) or by pipeline rehabilitation to reduce the extraneous flows that enter the collection system through defects. These extraneous flows are known as inflow and infiltration (I&I), or defect flows. This chapter discusses recommended rehabilitation programs and their estimated costs. To further focus the rehabilitation efforts, additional operational processes were reviewed. This included the City's:

- Flow Measurement Plan
- Pipeline Relocation Program
- Pipeline material
- CCTV Sewer Inspection Program,
- Hot Spots (areas of frequent maintenance),
- Upsizing Minimum Pipe Sizes and
- Age or Useful Life Calculations.

7.1 INFLOW AND INFILTRATION PROGRAM

During the rainfall event that occurred on February 23, 2005, approximately 8.0 million gallons of inflow and infiltration was observed. Defect flows were added to the model as the basis for determining wet weather capacity requirements (Chapter 5 Wastewater Flows, Chapter 6 Capacity Analysis). This data provides an overview of the amount of inflow and infiltration in the three measured basins. These basins are the Vista, Buena and Raceway basins. Targeted wet weather flow measurement is proposed to more narrowly identify the defect flow distribution.

A cornerstone of the Master Plan Update is the Inflow and Infiltration Reduction Program. This program requires an overall approach to condition assessment, including flow measurement, CCTV Inspection, smoke testing and analysis of pipeline materials and age.

7.1.1 CONDITION ASSESSMENT PROGRAM

To focus limited resources on the most problematic areas, a full condition assessment program should be conducted. This would include an updated Temporary Flow Measurement Program, smoke testing, physical inspection and CCTV of the entire system. The maximum estimated costs associated with this program are shown in **Table 7-1**.

Table 7-1 Condition Assessment Costs

Component	Estimated Cost	Cost/Foot
Flow Measurement	$ 295,983	$ 0.18
Smoke Testing	$ 822,174	$ 0.50
Physical Inspection	$ 548,116	$ 0.33
CCTV	$ 2,055,435	$ 1.25
Program Mgmt	$ 558,256	$ 0.34
CA Total	$ 4,279,964	$ 2.60

7.1.2 PRELIMINARY VISTA FLOW MEASUREMENT PLAN

The foundation of inflow and infiltration reduction programs is the preparation of a Flow Measurement Plan. These plans provide specific locations for flow meters that allow future isolation of areas with high defect flows. These sub areas allow the City/District to focus resources in areas of observed high defect flows. Additionally, the wet weather flow measurements provide insight regarding the dominant defect type which tailors subsequent field investigations. In areas of observed high inflow, dry weather smoke testing identifies public and private defects and illicit connections. In areas of observed high rainfall derived inflow and infiltration (RDII), televised inspection during wet weather and high groundwater levels provides more specific pipe condition assessments. The scope of the Master Plan provided for the preparation of a Flow Measurement Plan.

The following text is excerpted from the Preliminary Flow Measurement Plan presented earlier to the City/District. Lack of rainfall has caused this plan to be superseded by the Full Flow Measurement Plan presented in Section 8.2.2

The purpose of the Flow Measurement Plan is to describe the location of temporary flow meters throughout the collection system based on:

a. The observed wet weather flows under existing conditions.
b. System characteristics.
c. Safety factors.
d. Available budget.

To further isolate RDII, a two phase flow measurement approach is recommended. The first phase involves selecting fewer flow measurement sites based on the available budget for preliminary flow measurement study. The second phase will involve a more detailed flow measurement study wherever necessary at a micro level. More flow meters will be installed as a part of the second phase.

Thirteen initial flow measurement sites are selected during the first phase. Each initial site is selected based on observed defect flows per unit inch of rainfall per unit foot of pipeline, upstream pipe length, safety factors (like traffic, depth of manhole, etc), and available budget for the task.

Defect flows per unit inch of rainfall per unit foot of pipeline were calculated during four highest storm events using the available Encina flow data for all three major basins (Vista, Buena, and Raceway). Defect flow calculations are presented in **Table 7-2**.

Table 7-2 Observed Defect Flows

Basin	Length of Pipeline (ft)	Storm Date	Rainfall (inch)	Defect Flow (MGD)	Defect Flow (gpd)/ inch of rainfall/ ft of pipeline
Vista	925,159	23-Feb-05	1.42	5.33	4.05
Vista	925,159	10-Jan-05	1.40	4.92	3.80
Vista	925,159	19-Feb-05	1.40	3.39	2.62
Vista	925,159	11-Jan-05	1.38	5.79	4.53
				Vista Max =	**4.53**
Buena	507,885	20-Oct-04	1.88	0.71	0.74
Buena	507,885	17-Oct-04	1.55	0.32	0.41
Buena	507,885	05-Apr-06	1.47	0.38	0.51
Buena	507,885	23-Feb-05	1.42	1.94	2.70
				Buena Max =	**2.70**
Raceway	82,365	05-Apr-06	1.47	0.08	0.64
Raceway	82,365	23-Feb-05	1.42	0.67	5.73
Raceway	82,365	10-Jan-05	1.40	0.58	5.03
Raceway	82,365	19-Feb-05	1.40	0.26	2.28
				Raceway Max =	**5.73**

Based on the defect flow calculations and the length of pipelines in each basin, eight sites in Vista basin and three sites in Buena basin are selected. Although defect flows in Raceway basin are comparatively higher, only two sites are selected because of the relatively smaller length. Higher defect flows in Raceway basin may also be occurring due to night time commercial and industrial flows.

These sites are selected at locations near the lower reach of the major trunks that are also capacity deficient under the existing conditions. Available budget and other safety factors like traffic and depth of the manhole were also considered while selecting the sites.

Pipelines upstream of the flow measurement sites were identified by using the upstream network trace tool in InfoSWMM modeling software. Upstream pipelines contributing flow to the flow measurement sites were used to generate flow basins for each meter location.

Table 7-3 presents summary information of thirteen primary meters that will be used to measure the collection system's response to wet weather events.

Table 7-3 Sub Basin Characteristics (Preliminary Flow Measurement Plan)

Model Id	Manhole Id / Location	Major Basin	Flow Meter	Upstream Pipe Length (ft)	Upstream Pipe Diameter (inch)
Temporary Flow Meters					
4727	V32T395	Vista	FM1	163,590	21
7384	V32T420	Vista	FM2	158,966	18
7385	V24101	Vista	FM3	182,460	27
3670	V05104	Vista	FM4	36,745	8
4710	V32T225	Vista	FM5	107,276	21
2495	V34109	Raceway	FM6	26,723	12
3300	V34110	Raceway	FM7	55,569	15
2840	V33174	Buena	FM8	118,879	18
2552	B01127	Buena	FM9	250,435	21
4220	V16042	Vista	FM10 (Optional)	86,050	15
1824	B08025.A	Buena	FM11 (Optional)	137,459	15
4747	V32T063	Vista	FM12 (Optional)	150,155	36
3672	V05046	Vista	FM13 (Optional)	28,005	12
Existing Flow Meters					
N/A	College/SR-78	Vista + Oceanside	V1	925,159	N/A
N/A	Near V1	Oceanside	OS1	N/A	N/A
N/A	Raceway PS	Raceway	V2	82,365	N/A
N/A	Buena PS	Buena	B2	507,885	N/A
N/A	Jefferson/SR-78	Vista + Oceanside + Carlsbad	BVPS	938,209	N/A

See section 8.4 for additional flows from Carlsbad.

Based on the preliminary wet weather analysis, upstream pipe lengths, safety factors, and available budget, Dudek recommended thirteen flow measurement sites to be selected in first phase of the flow measurement plan. Eight sites are in Vista basin, three sites in Buena, and two in Raceway basin.

To determine the distribution and magnitude of inflow and infiltration within the collection system, and further prioritize the rehabilitation programs, an intensive Sewer Flow Measurement Program has been defined. This program should be implemented as soon as the probability of rainfall increases.

7.1.3 REVISIONS TO THE PRELIMINARY FLOW MEASUREMENT PROGRAM

The Preliminary Flow Measurement Program was based on available funding for the budget year 2006/2007. The program as presented was limited to an initial screening of the system followed by more intensive flow measurements in the areas identified as having notable defect flows. **Figure 3-2**, **Vista Historical Monthly Rainfall Totals**, shows that the 2006/2007 budget year passed with significantly less rainfall than previously observed in the system.

To properly plan a Full Flow Measurement Program, we recommend that the number of flow meters be increased to 33 for a minimum period of 60 days. This number of meters is selected based on an average sub-basin size of 50,000 linear feet of pipe. This length improves data quality at the measurement location and provides a logical size of basin for further physical inspection techniques. The increased number of flow meters and the duration increases the costs to approximately $300,000 dollars. The advantage is that this additional investment potentially focuses the location of CCTV, smoke testing and additional physical inspection that would be required if adequate rainfall and measurable defect flow responses occur during the measurement period. If the program is not possible, or significant rainfall does not occur, the smoke testing and CCTV of the system will not be optimized through dominant defect determination. This will reduce the overall efficiency of the physical inspection program.

Table 7-4 presents summary information of the thirty-three (33) proposed temporary meters that will be used to measure the collection system's response to wet weather events. **Figure 7-1** shows meter locations for both the proposed temporary flow meters and the existing permanent flow meters.

Table 7-4 Sub Basin Characteristics
(Full Flow Measurement Plan)

Model Id	Manhole Id / Location	Major Basin	Flow Meter	Upstream Pipe Length (ft)	Upstream Pipe Diameter (inch)
Proposed Temporary Flow Meters					
4727	V32T395	Vista	FM1	45,598	21
7384	V32T420	Vista	FM2	41,929	18
7385	V24101	Vista	FM3	49,742	27
3670	V05104	Vista	FM4	36,745	8
4715	V32T220	Vista	FM5	59,589	21
2495	V34109	Raceway	FM6	26,723	12
3300	V34110	Raceway	FM7	55,569	15
2840	V33174	Buena	FM8	31,035	18
2552	B01127	Buena	FM9	57,598	21
4220	V16042	Vista	FM10	40,144	15
1824	B08025.A	Buena	FM11	45,509	15
4747	V32T063	Vista	FM12	57,287	36
3672	V05046	Vista	FM13	28,005	12
1532	B11062	Buena	FM14	38,123	8
1492	B13231	Buena	FM15	53,828	10
435	V33135	Buena	FM16	32,612	12
2330	V33140	Buena	FM17	55,232	12
662	B03183	Buena	FM18	41,996	8
1403	B02032	Buena	FM19	41,225	15
767	B14239	Buena	FM20	54,019	12
515	B07059	Buena	FM21	56,043	18
4602	V19110	Vista	FM22	45,906	12
6422	V02082	Vista	FM23	47,687	8
5257	V26237	Vista	FM24	54,617	8
6338	V24059	Vista	FM25	62,420	12
6302	V30059	Vista	FM26	51,835	10
6396	V32T083.A	Vista	FM27	41,033	36
6209	V23231	Vista	FM28	47,235	12
4693	V21191	Vista	FM29	44,851	12
4260	V16050	Vista	FM30	40,632	15
1747	V11123	Vista	FM31	30,662	12
1727	V10141.C	Vista	FM32	38,276	15
1744	V10142	Vista	FM33	49,054	18
Existing Permanent Flow Meters					
N/A	College/SR-78	Vista + Oceanside	V1	925,159	N/A
N/A	Near V1	Oceanside	OS1	N/A	N/A
N/A	Raceway PS	Raceway	V2	82,365	N/A
N/A	Buena PS	Buena	B2	507,885	N/A
N/A	Jefferson/SR-78	Vista + Oceanside + Carlsbad	BVPS	938,209	N/A

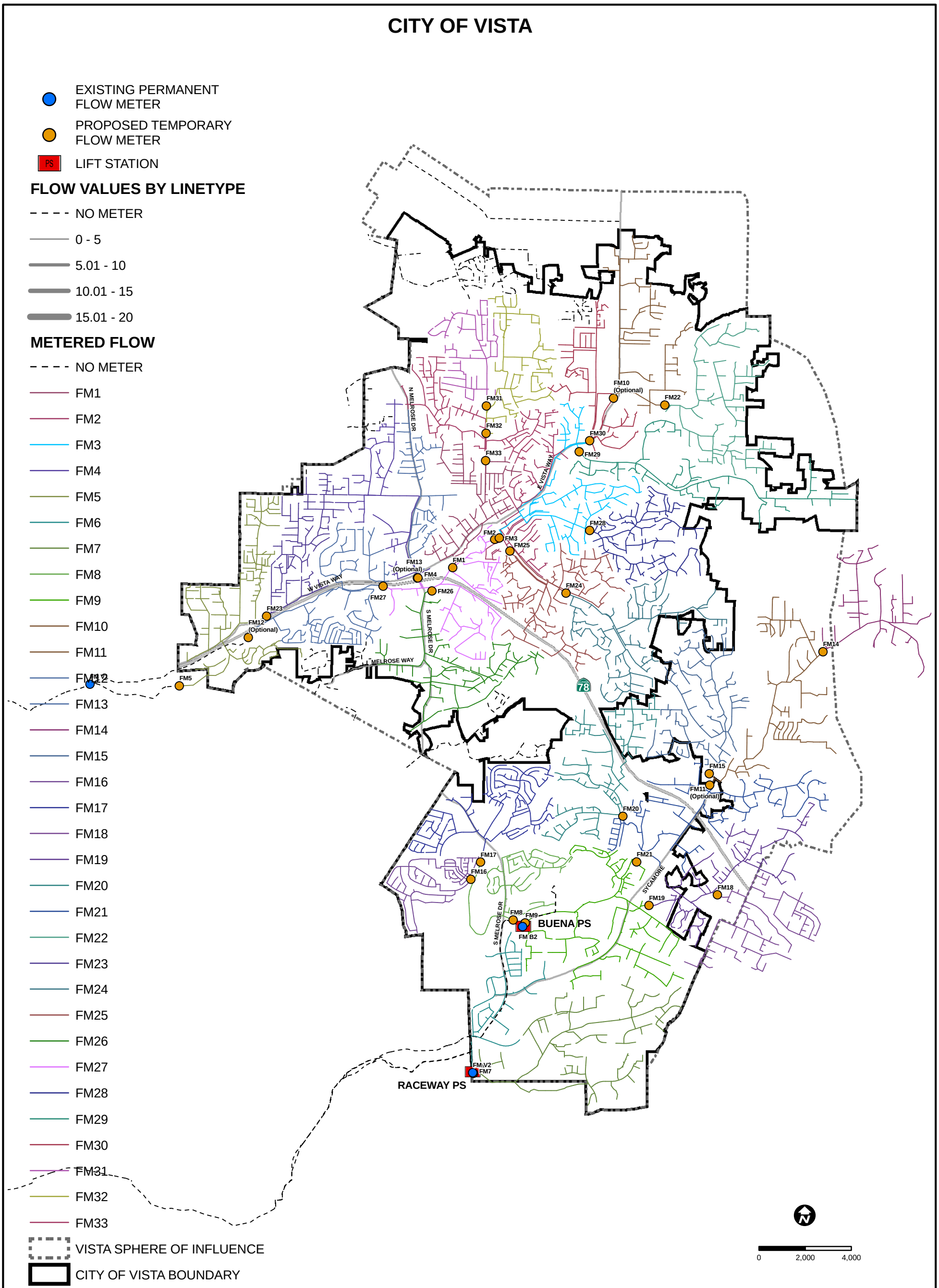


FIGURE 7-1 FLOW MEASUREMENT LOCATIONS

7.1.4 CONTRACTUAL FLOW MEASUREMENT CONSIDERATIONS

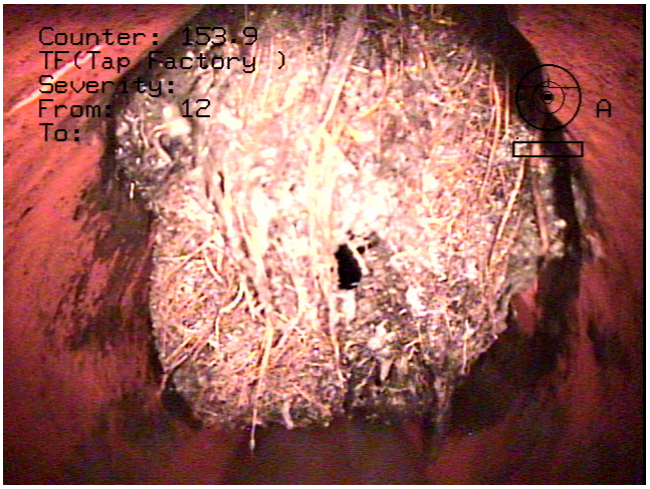
In addition to the use of flow measurement for the purposes of determining defect flows, flow measurement can also be used to remove uncertainty of flow based contractual limits. The Vallecitos Water District (VWD) Flow Transfer Agreement makes flow measurement optional. If the flow meters are installed, then the costs for installation and maintenance would be the responsibility of VWD. In the event that the flow meters are not installed, EDU based flows are used for billing purposes.

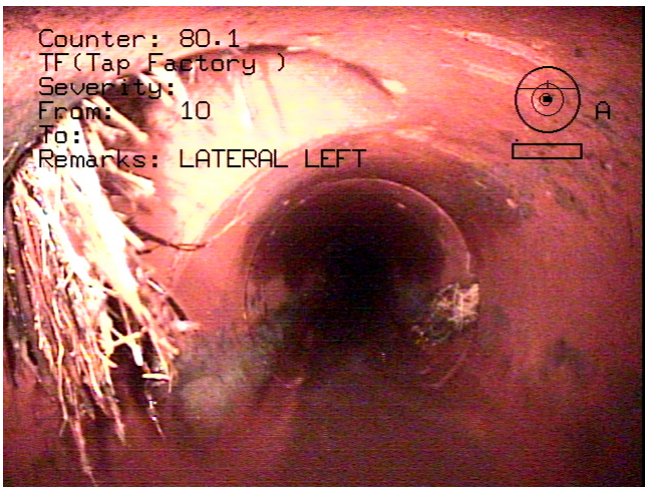
Another style of flow transfer agreement exists between Oceanside and Vista. In the current Oceanside/Vista agreement, flow measurement is again optional, but it is Vista's responsibility to install and maintain the OS1 flow meter. Oceanside is currently planning to install two flow meters in the OV5 basin. When no meters are installed, EDU based flow estimates are used.

7.1.5 CCTV SEWER INSPECTION PROGRAM

One of the primary tools in the investigation of operational considerations in the collection system is the closed circuit television (CCTV) inspection program. The City of Vista is aggressively pursuing updating its CCTV program to include connections between the Citywide GIS and the Accela Asset Management System. The City is implementing a modified PACP condition coding scheme that will allow accurate estimation of pipeline deterioration rates. This information will help prepare predictive maintenance scheduling. **Figure 7-2** shows a variety of problems that may be documented with the CCTV program.

Figure 7-2 Example Vista CCTV Captures





As shown, roots entering the pipe could potentially cause a blockage that may result in a spill. A CCTV program should be implemented that addresses the requirements of the WDR. Currently, the City's budget reports televising approximately 52,800 feet, or 10 miles, of sewer main per year. This includes acceptance reviews in newly installed mains (30 year review cycle). The CCTV database for the City reports that, since June 1992, over 217,791 feet, or 40 miles, of sewer main has been assessed for condition. In 15 years, this accounts for only 13% of the collection system. This would indicate that the actual CCTV program will inspect the entire system in about a hundred years.

Table 7-5 indicates the recorded results of the CCTV pipeline inspections.

Table 7-5 CCTV Pipe Inspection Results

Assessment Criteria	Length (Ft)	% of Inspected	% of Total
Bad	104,966	48%	6%
Good	112,825	52%	7%
Total CCTV	217,791	100%	13%
Unknown	1,454,444		87%
Total	1,672,235		100%

It is clear from this table that nearly 50% of inspected pipes are in bad condition. Furthermore, 85% of the system has not been inspected. Under the new WDRs, a complete condition assessment of the entire system is required.

Additionally, the CCTV database contains information on over 1,174 manhole inspections that were also conducted in the past 14 years. **Table 7-6** lists the findings of the manhole inspections.

Table 7-6 Manhole Inspection Results

Assessment Criteria	Number	% of Inspected	% of Total
Bad	419	35.7%	5%
Poor	3	0.3%	0%
Good	752	64.1%	10%
Total Inspected	1,174	100%	15%
Unknown	6,690		85%
Total	7,864		100%

Currently, the CCTV operations are being updated with the latest equipment, software and coding schemes. With these improvements, it is still likely that the City will need to contract CCTV inspections in order to complete a condition assessment of the entire system.

While not specifically stated in the WDR, many utilities are targeting a 10-year CCTV cycle for their systems, or 10% per year. Given the age and the observed condition of this collection system, Dudek recommends that the City/District implement a 5-year program for complete initial inspection of the system.

To review the system on a five year cycle would require video inspection of approximately 227,000 feet per year in Vista and 106,000 feet per year in Buena. **Table 7-7** shows the annual costs associated with the CCTV program.

Table 7-7 Estimated Annual CCTV Costs

	Vista	Buena	Total
Length of System (Ft)	1,135,724	532,691	1,668,415
CCTV Length/Year	227,145	106,538	333,683
CCTV Costs ($1.25/ft)	$ 283,931	$ 133,173	$ 417,104

7.2 SMOKE TESTING

Smoke testing of sewers is used to locate and identify inflow defects. Inflow defects are those that have a direct connection to the surface. When rainfall occurs, it quickly enters the collection system, taking up capacity that is needed to convey wastewater flows. Smoke testing involves the introduction of smoke into the collection system with low pressure blowers. Smoke then travels through the pipes and other openings to the surface. Smoke quickly identifies storm drain cross connections to the wastewater system, illegally connected roof, patio and area drains, broken lateral connections and other forms of direct connections. Defects are prioritized by reviewing photographs and observations taken during the course of the smoke testing.

Since smoke may enter the home through faulty plumbing, smoke testing requires significant public outreach. Affected homes and business are alerted during the smoke testing phase through the use of hand-bills or flyers. Additionally the fire, police and Public Works dispatchers are notified daily of the location of the smoke crews.

The photograph in **Figure 7-3** shows smoke coming from a roof drain and from the flower bed. These types of connections to the wastewater system create additional costs for pumping and treatment and should be eliminated.

Figure 7-3 Typical Smoke Testing

7.3 HOT SPOTS

As part of the Preventative Maintenance Program implemented by the City and District, certain pipelines have been identified as "Hot Spots". The total length of pipe in these high maintenance areas is 63,700 feet, or 3.8% of the system. These areas require maintenance more often to assure that the pipes flow freely. They are often associated with root intrusion and/or fats, oil and grease. The Hot Spot program is operationally separate from the remainder of the Preventative Maintenance Program. Separate processes identify, schedule and assign work associated with Hot Spots. Potential operational improvements could be made by consolidating work assignments through a single business process.

Figure 7-4 shows the locations of Hot Spots throughout the City/District.

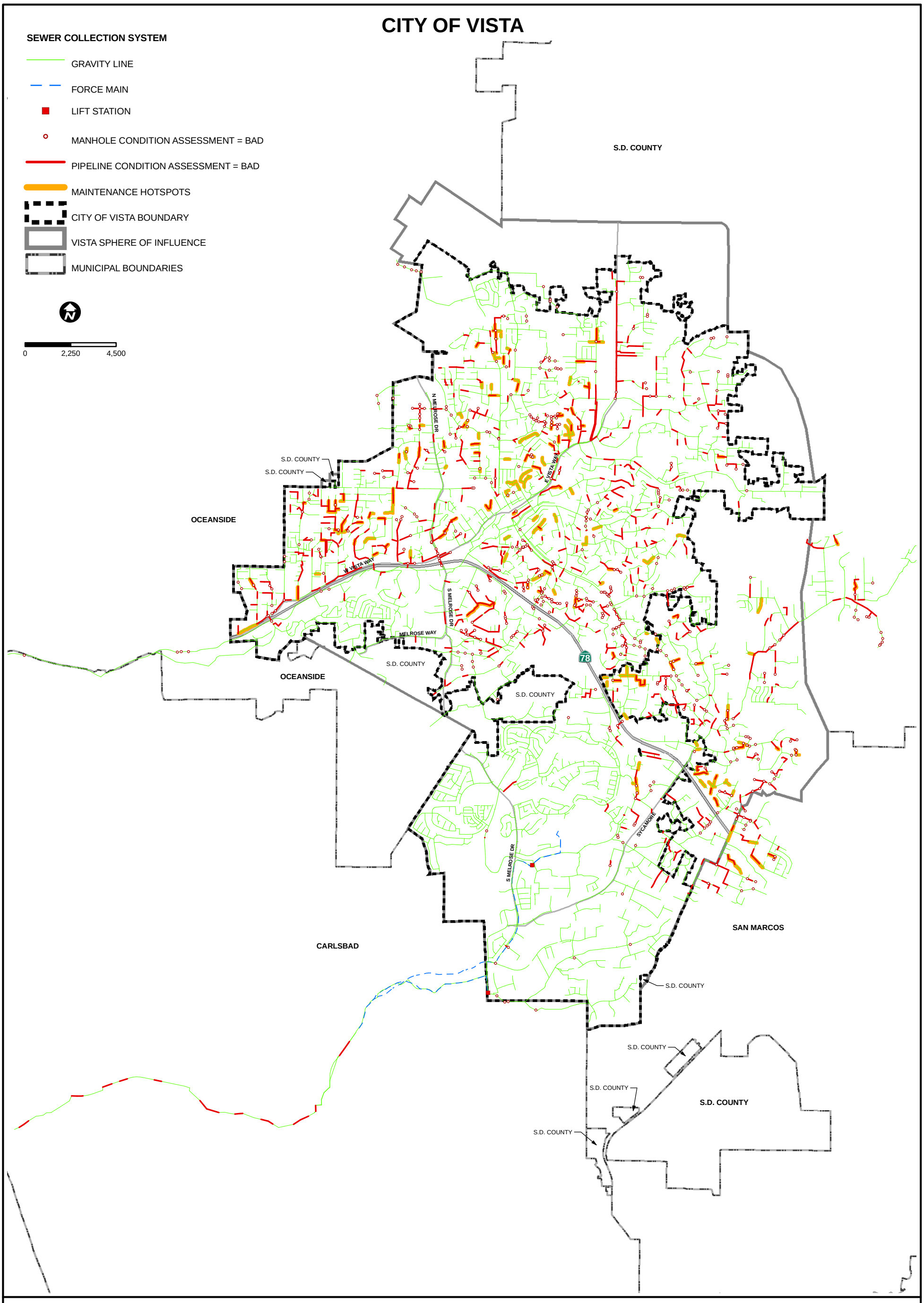


FIGURE 7-4 CONDITION ASSESSMENT- CCTV/HOT SPOTS

7.4 PIPELINE RELOCATION PROGRAM

As part of the WDR, agencies must prioritize the relocation of pipes from watercourses and difficult-to-maintain easements to more accessible/maintainable areas. There are some existing pipelines in both the City and District that fall into this category, but maintenance or replacement would have a significant environmental impact. Often times, pipes located in these areas are subject to high groundwater and root intrusion. Furthermore, substandard maintenance of these lines raises concerns that blockages caused by material buildup could result in a sewer spill. As many of these facilities are located on or near private property or waterways, the environmental and political consequences of an overflow would be high. These areas represent a major liability for the City/District.

Recommended CIP projects in this category have additional costs associated with the difficulty of relocation and environmental costs. These have been included in the cost estimates prepared for these projects.

The City/District should embark on an aggressive program of relocation of these pipelines. This would include the establishment of utility easements and negotiations with developing properties to prevent where and when possible.

7.5 PIPELINE MATERIAL

The construction of sanitary sewer systems has changed little in the past four thousand years. The earliest collection systems in the Indus civilization were drained by terra cotta pipes. These are the early ancestors of our vitrified clay pipe (VCP). The primary change over the last 100 years has been the introduction of a number of modern materials. The materials in use closely reflect the dominant manufacturing materials of the day. Today almost all sewer pipe installed in the collection system is plastic, made of polyvinyl chloride (PVC). Both VCP and PVC are considered inert materials that are not affected by corrosion and most chemicals. As a result VCP and PVC are both considered reliable pipeline materials. VCP installed prior to 1963 was installed with short lengths, open joints and two foot manholes. It was thought that flow entering the pipe from groundwater would cleanse the pipe. These joints are highly susceptible to root intrusion and offset joints.

In the early 1980's vast experimentation was done in pipeline materials. The authorization of the Clean Water Act and the subsequent EPA Grant program provided much funding and innovations in the sewer business. Plastic pipes were introduced and several years passed before there were accepted standards for pipeline design. Many in-situ experiments were conducted with installation of a variety of pipe materials. Notable were the Asbestos Cement Pipes (ACP), Reinforced Concrete Pipes (RCP), Reinforced Plastic Mortar (RPM) and a variety

of composite material pipes. These pipes failed frequently due to internal corrosion from hydrogen sulfide or from material failure due to poor manufacturing processes. This opens the door for metal pipeline suppliers to fill the void. Metal had been used for some years in the gas and oil industry with few problems other than corrosion due to galvanic action between the soil and the pipe surface. Plastic wrap or lining was used to address the galvanic response with marginal success. Additionally, concerns over strength in both plastics and clay pipe led to the introduction of metal pipes.

Over 85% of the sewer pipes in the entire collection system are made of VCP or PVC. Recent failures of Ductile Iron Pipe (DIP) in force mains have raised questions regarding the integrity of metallic pipes. As a result this report recommends replacement of all sewer pipes not constructed of VCP or PVC. Based on the concerns over metal pipe failure the DIP should be replaced first. Ductile Iron Pipe comprises just over 3.2% of the collection system.

Table 7-8 shows the distribution of pipe material and ownership by length of pipe. **Figure 7-5** shows the map of the collection system by material.

Table 7-8 Pipe Length by Material and Owner

Pipe Material	Vista	Buena	Unknown	Private	Total
ABS	103	5,152			5,255
ABSP	5,133				5,133
ACP	385	6,403			6,788
CIP	487	816			1,303
DIP	41,117	13,625			54,742
DIP/VCP		62			62
DIP/CL50	162				162
DIP/PVC		75			75
ESVCP	416				416
FM		159			159
HDPE	246	2,127			2,373
PE		498			498
PVC	352,682	120,286	1,567	124	474,659
PVC/DIP	2,357				2,357
PVC/VCP	848				848
RCP		996			996
RPVC		2,416			2,416
S4-5		320			320
S4-1		125			125
Steel		36			36
VCP	711,739	266,580	428		978,747
VCP/PVC		190			190
VCP/DIP	207		357		564
VCP/PVC	4,786	229			5,015
XVCP		949			949
Unknown	15,055	111,648	1,344		128,048
Total	**1,135,724**	**532,691**	**3,696**	**124**	**1,672,235**

While not specifically listed, there are materials that are of concern in the sewer system. These include Techite (a composite pipe with notable failure history), Spirolite, Asbestos Cement Pipe (ACP), and any form of metallic pipe subject to corrosion failure.

In addition to considerations regarding the materials in place, Section 7.6 discusses the age and useful life for sewer pipes.

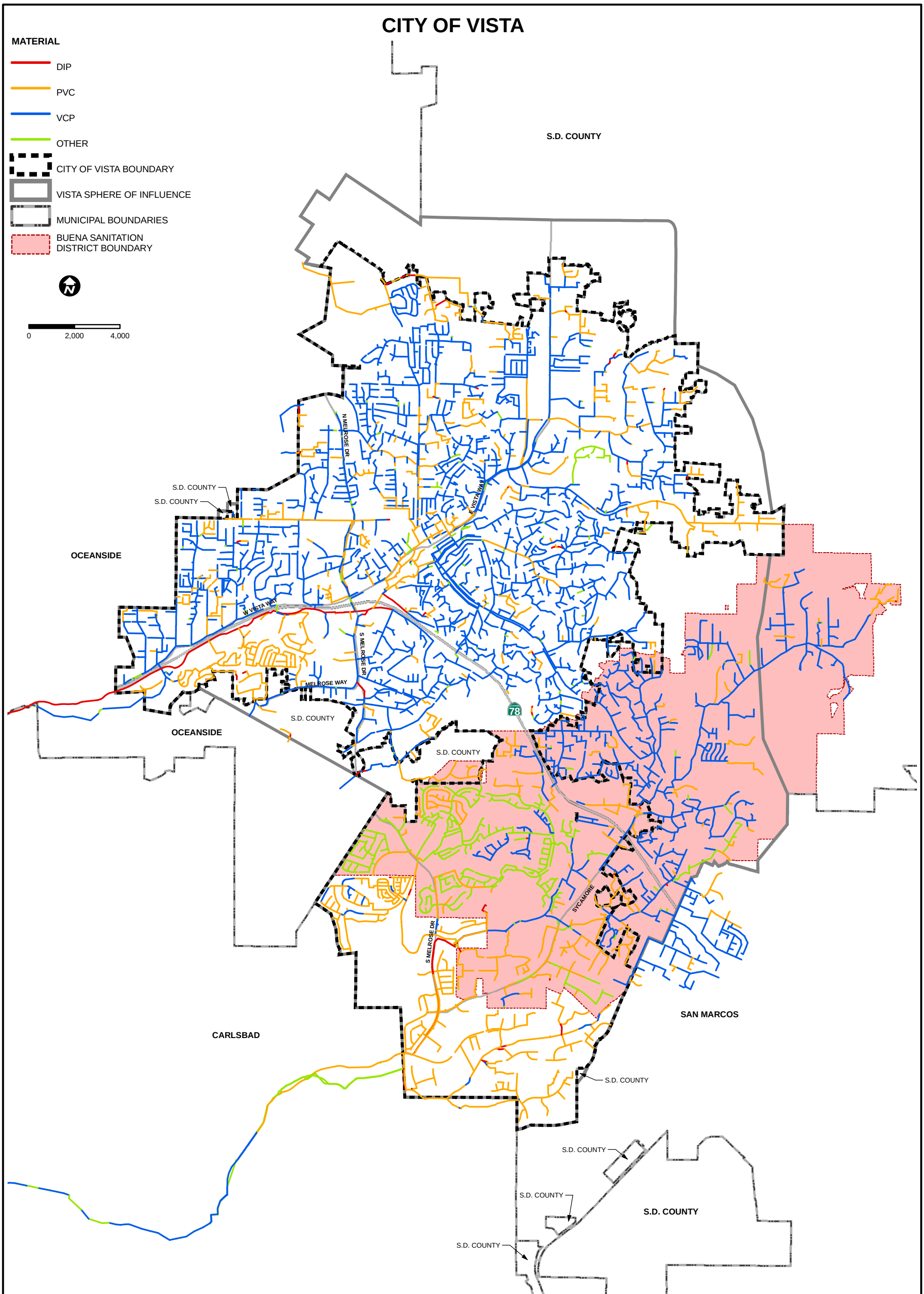


FIGURE 7-5 PIPELINE MATERIALS

7.6 PIPE AGE

Research into the useful life of sewer collection systems has revealed a broad range of opinions and techniques to evaluate the useful life of sewers. Some agencies use a 30 year pipe life as this coincides with the construction bond life. Many agencies use 50 years as a planning estimate even though they may have collection system pipes that are over 200 years old.

For the purposes of this discussion we will assume that the useful life for the sewer pipeline is 50 years. The EPA has accepted this estimate as a part of its discussions with the City of San Diego. The City of Vista and the Buena Sanitation District vary widely in the age distribution of pipe. In the City of Vista, approximately 37% of the collection system is over 40 years old. In the Buena Sanitation District, over 35% of the system is between 20 and 30 years old. **Table 7-8** shows the distribution of pipe age by Agency, and a graphical representation of pipeline age is shown in **Figure 7-6**.

Table 7-9 Pipe Age by Agency

Age Range	Vista	Buena	Unknown	Private	Total
0 to 10	90,815	39,009	796		130,620
11 to 20	228,324	95,212	772	124	324,431
21 to 30	256,843	187,206	210		444,259
31 to 40	133,825	35,726			169,551
41 to 50	361,626	171,250	575		533,451
Greater Than 50	58,608				58,608
Unknown	5,683	4,289	1,344		11,316
Total	**1,135,724**	**532,691**	**3,696**	**124**	**1,672,235**

Based on the assumption that useful pipe life may be successfully extended well beyond fifty years with rehabilitation, **Table 7-10** shows the length of pipe that should be rehabilitated each decade and each year. The final row shows an average rate that smoothes the investment requirements. On average, the City/District should plan to rehabilitate over 40,000 feet per year at an estimated annual cost of $3.45 Million.

Table 7-10 Rehabilitation Schedule and Cost Estimate

	10 Year		Annual		Annual Rehab. Cost Est.		
Year	Vista	Buena	Vista	Buena	Vista	Buena	Total
2040	319,139	134,220	31,914	13,422	$ 2,655,130	$1,116,669	$3,771,800
2030	256,843	187,206	25,684	18,721	$ 2,136,846	1,557,492	$3,694,339
2020	133,825	35,726	13,382	3,573	$ 1,113,379	$ 297,230	$1,410,610
2010	420,234	171,250	42,023	17,125	$ 3,496,209	$1,424,741	$4,920,950
Average	**282,510**	**132,101**	**28,251**	**13,210**	**$ 2,350,391**	**1,099,033**	**$3,449,424**

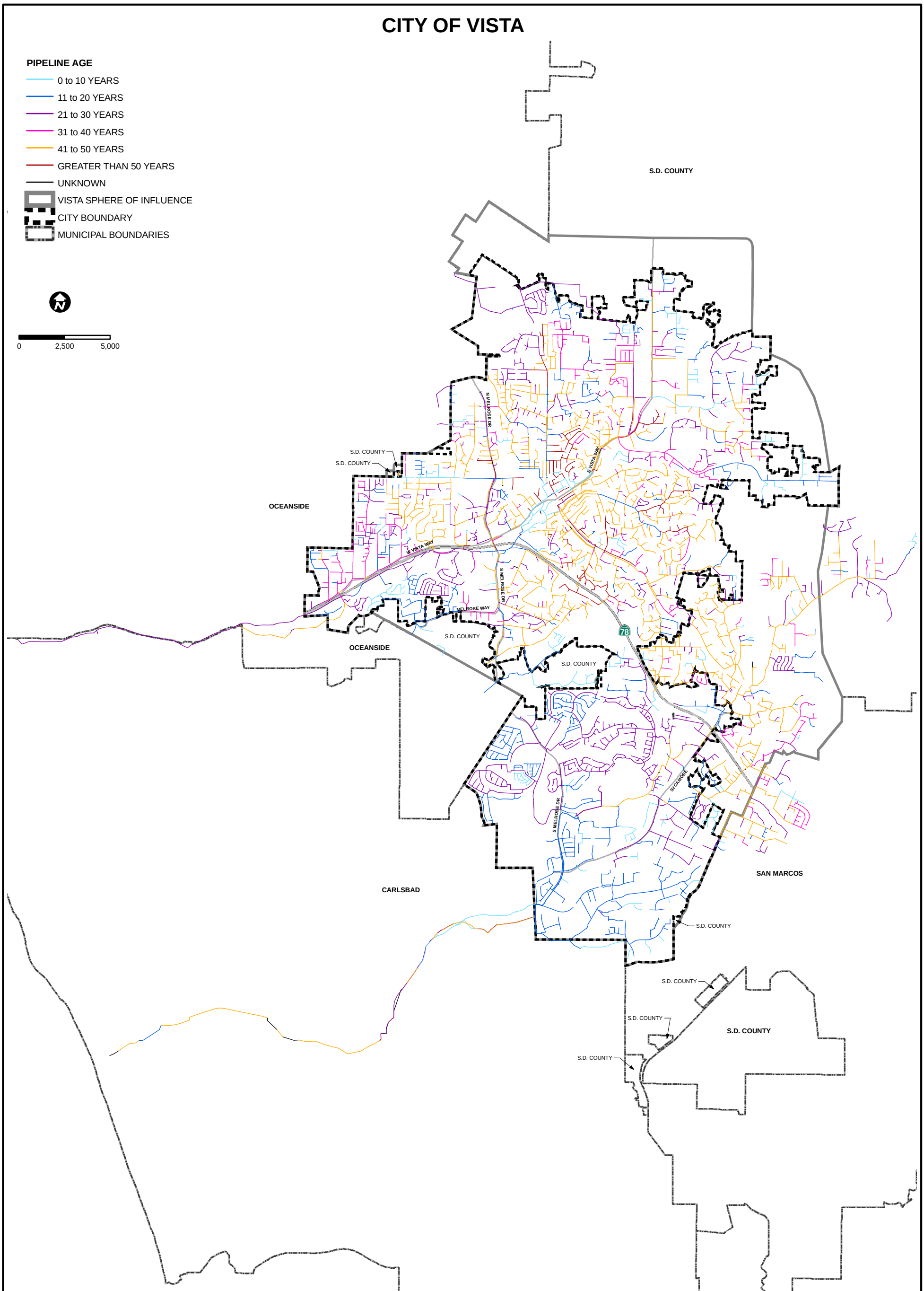


FIGURE 7-6 PIPELINE AGE

7.7 UPSIZING MINIMUM PIPE DIAMETERS

In many of the older parts of the City and in areas of high relief, six-inch sewer lines were installed. Current construction standards require a minimum diameter of eight inches. The large diameter is to increase the accessibility of the pipe to Closed Circuit TV inspection and other maintenance operations. The replacement of these pipes represents a lower priority unless they are associated with capacity, hot spots, and material or age considerations. **Figure 7-7** shows the full extent of all Minimum Size pipelines.

7.8 CONCLUSIONS

The City/District is currently transitioning from capacity expansion projects required for sustained growth to asset management projects. The key to successfully operate and maintain the collection system is to establish (1) A full condition assessment program and (2) schedule and plan the O&M program based on the findings of the program. The full condition assessment program will consist of (1) Revised Temporary Flow Measurement (TFM) Program (2) Field Investigations (CCTV, Smoke Testing and Field Reconnaissance) targeted based on Findings of the TFM (3) Expansion of the City's CCTV program into areas of older non-PVC/VCP pipe to prioritize the replacement program.

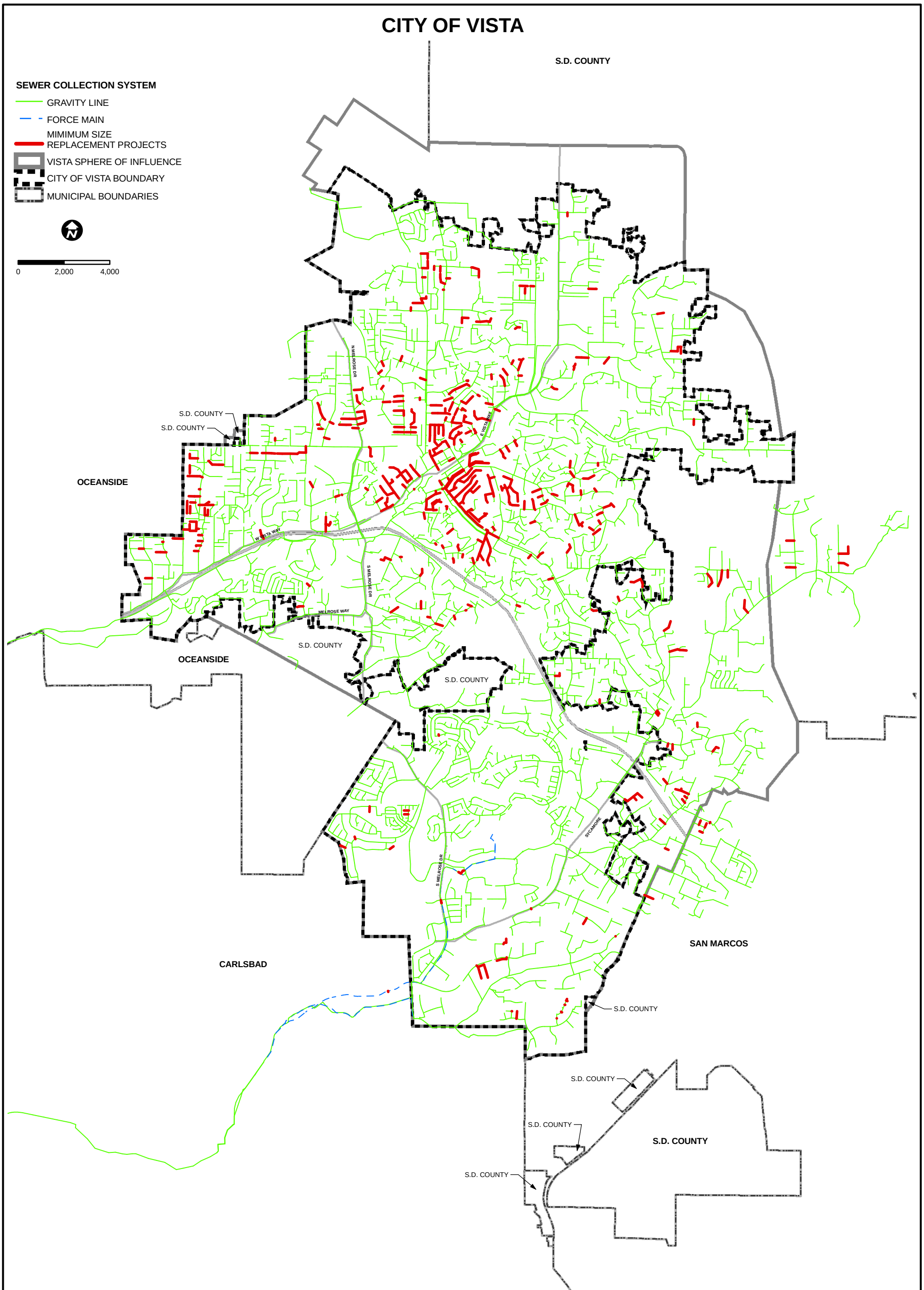


FIGURE 7-7 MINIMUM SIZE PIPELINES

8.0 RECOMMENDED CIP PROJECTS

A goal of the Sewer Master Plan Update is to define a financial program that provides a sustainable collection system with adequate capacity for current and future customers. This chapter describes the recommended CIP projects and their cost estimates. This constitutes a set of prioritized financial estimates for the City/District consideration.

8.1 PRIORITIZATION

Establishing the priority for projects identified in Chapter 6 and 7 provides the basis of timing for the Capital Improvements Program. The establishment of priorities is discussed in the following paragraphs.

The following table shows the matrix used to establish the priority for each replacement project. Since the overall intent of the program is to convey wastewater and defect flows without overflow, a project has a high priority if it addresses an existing capacity restriction. These projects would be constructed first, but would be constructed at the size required to handle anticipated future flows. Other factors that were considered in the assignment of priority were the material, age, relocation, known hot spot, CCTV Condition Assessment and pressure pipes. In other words if a replacement project additionally addresses other concerns, it is ranked higher for consideration. Priorities were established individually for the City and District.

Note that the scoring system allows the ranking to be “tied”. Ties were broken by assigning a priority based on peak flow rate. For example, a score of 0.789 resulted in a rank of 6 for several projects. The project with the highest peak flow rate would be assigned the Priority of 6, the second highest would be assigned a priority of 7, etc. In this way, projects with equal factors in all other categories are biased so that the largest potential problems are handled soonest.

Table 8-1 Priority Assignment

	Capacity Restriction											
Parameter	**Existing**	**Future**	**Material**	**Age**	**Relocation**	**Hot Spot**	**CCTV**	**FM**				
Weight	10	10	5	5	2	5	5	15				
Project	18%	18%	9%	9%	4%	9%	9%	26%	**Score**	**Flow Rate**	**Rank***	**Priority**
B1	1	1	1	3	1	0	0	0	0.737	6.74	4	4
B2	1	1	1	3	0	0	1	0	0.789	3.69	3	3
B3	0	1	1	3	0	0	1	0	0.614	0.789	6	7
B4	0	1	1	3	1	0	1	0	0.649	1.734	5	5
B5	1	1	1	3	1	1	1	0	0.912	4.989	2	2
OV2	0	1	1	3	0	0	1	0	0.614	11.215	6	6
Buena Outfall FM Ph3	1	1	1	3	1	0	1	1	1.088	11.215	1	1
V1	1	1	1	5	0	1	1	0	1.053	1.911	1	1
V2	1	1	4	1	0	0	0	0	0.789	16.709	4	4
V3	1	1	1	3	0	0	1	0	0.789	0.964	4	7
V4	1	1	1	3	0	0	0	0	0.702	6.459	8	8
V5	1	1	1	3	0	0	0	0	0.702	1.707	8	11
V6	0	1	4	3	0	0	0	0	0.789	1.063	4	6
V7	1	1	1	3	0	0	1	0	0.789	3.054	4	5
V8	1	1	1	3	1	0	1	0	0.825	1.337	3	3
V9	1	1	1	3	0	0	0	0	0.702	2.819	8	10
V10	1	1	1	3	1	1	1	0	0.912	0.757	2	2
V11	1	1	1	3	0	0	0	0	0.702	4.655	8	9
R1	0	1	0	0	0	0	0	0	0.175	0.729	13	13
OV1	0	1	4	1	0	0	0	0	0.614	20.444	12	12
	Yes = 1	Yes = 1	VCP = 1	<20=0	Yes = 1	Yes =1	Good = 0	Yes =1	* Ranked by Owner			
	No = 0	No = 0	PVC = 0	20-30=1	No = 0	No = 0	Bad = 1	No = 0				
			DIP = 4	30-40=2			Unk = 0					
			Other = 2	40-50=3								
				>50 = 5								

The lower portion of the matrix shows the values used for the specific parameter under consideration. These priorities become the basis of the scheduling of the projects. **Table 8-6** shows the project sorted by priority with estimated project costs.

Table 8-2 and **Table 8-3** summarize capacity deficient projects and estimated improvement costs for the existing system in the Buena Sanitation District and the City of Vista, respectively.

Table 8-2 Existing Capacity Deficient Projects in Buena Sanitation District

Project Name	Length (ft)	Cost ($)	Description
B1-Green Oak to BVPS Upsize	1,262	$755,528	Upsize existing 18" and 12" sewer lines along Green Oak and between the Buena lift station and Grand to 21" and 15".
B2-Thibodo to Watson Upsize and Realignment	709	$287,145	Upsize existing 15" sewer line along Watson to 18".
B5-Watson to Green Oak Upsize and Realignment	1,041	$548,287	Upsize existing 8" sewer line along Watson to 18".
B6 Buena Outfall Force Main Phase III	7,200	$4,786,800	Construct 24" of Force main and 18" and 15" of Gravity Sewer in Palomar Airport Rd and west of EL Camino Real to divert flows to Vallecitos Interceptor.
Total	**10,212**	**$6,377,760**	

Table 8-3 Existing Capacity Deficient Projects in the City of Vista

Project Name	Length (ft)	Cost ($)	Description
V1-West Vista Way Replacement and Upsize	5,249	$1,658,966	Upsize existing 12", 10", and 8" sewer lines along Sunset, Vista, and Huff between Via Centre, Nettleton, and Durian to 15" and 12".
V2-Hacienda / Vista Village Upsize	2,180	$1,760,657	Upsize existing 30" and 12" sewer lines along Hacienda to 36" and 18".
V3-North Melrose Upsize	2,737	$786,454	Upsize existing 10", and 8" sewer lines along Melrose between Hacienda and Ascot to 15" and 12".
V4- Main / Broadway / Santa Fe Upsize	2,916	$1,377,679	Upsize existing 18" along Santa Fe, Broadway, Citrus, Main and Vista Village between Santa Fe and Intersection of Vista Village/Escondido/Hillside/Vista to 21".
V5-Eucalyptus / Citrus Upsize	2,737	$905,514	Upsize existing 12" and 10" and 8" sewer lines along Citrus, Eucalyptus, and Escondido15" and 12".
V7-Mercantile Upsize	940	$358,203	Upsize existing 12", 8", and 6" sewer lines along Santa Fe and north-west of Guajome to 18", 15", and 12".
V8- MonteVista / South Santa Fe Realignment & Upsize	1,294	$383,616	Upsize existing 8" sewer line along Santa Fe between Escondido and Santa Anita to 15" and 12".
V9-North Santa Fe Upsize	1,801	$850,973	Upsize existing 18" sewer lines along Santa Fe between Orange and Nevada to 21".
V10-North Santa Fe / Cananea / Calera Upsize	2,190	$656,197	Upsize existing 10" and 8"sewer lines along Cananea and Calera to 12".
V11-East Vista Way / Vale Terrace Upsize	370	$124,875	Upsize 8" sewer line along Vale Terrace to 15".
Total	**22,414**	**$8,863,134**	

The total length of all the existing capacity related projects is 34,139 feet. The total estimated improvement cost of all the existing capacity related projects is $12,693,569. The existing recommended capacity deficient projects are shown in **Figure 8-1**.

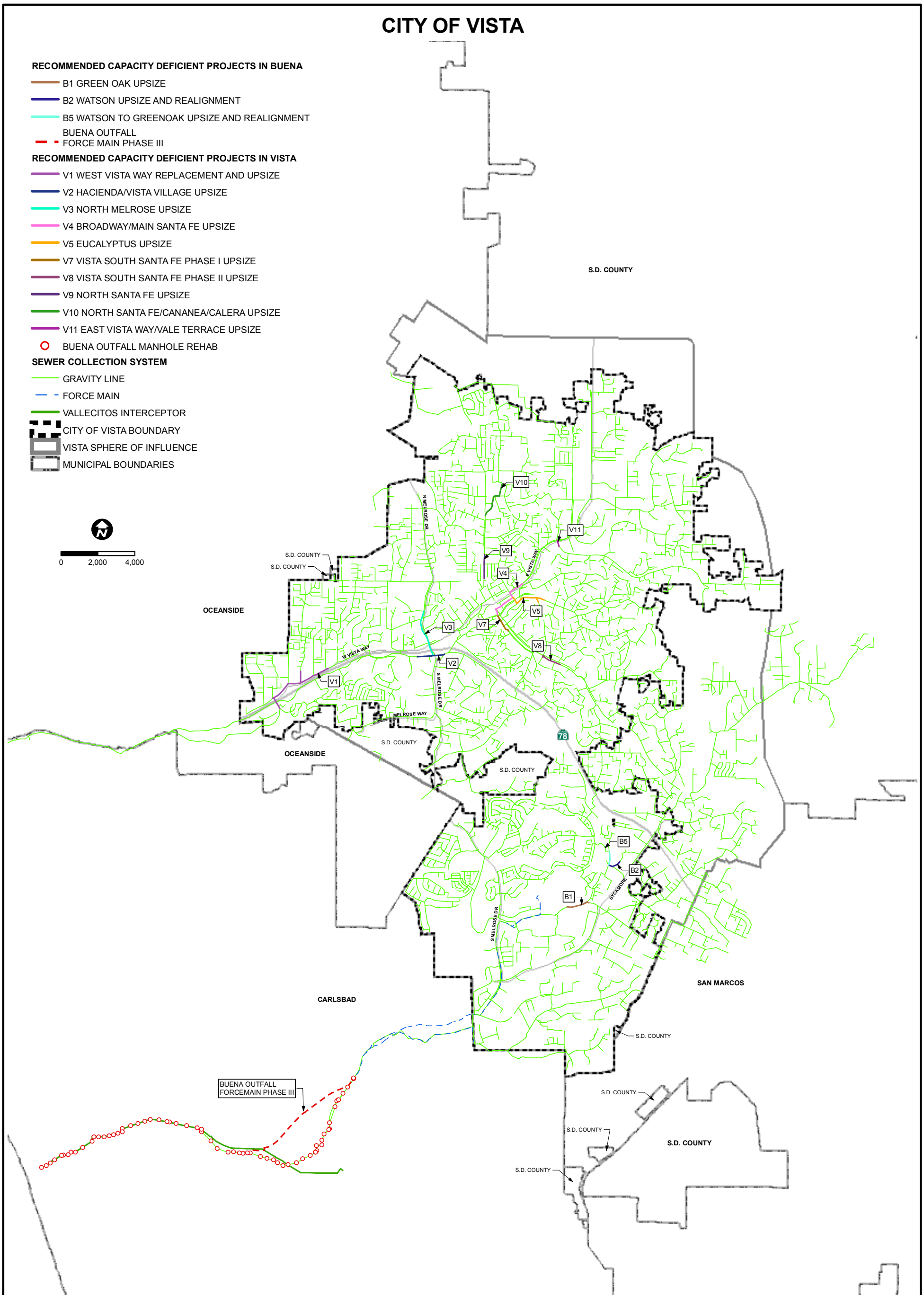


FIGURE 8-1 EXISTING RECOMMENDED CAPACITY DEFICIENT PROJECTS

Table 8-4 and **Table 8-5** summarize capacity deficient projects and estimated improvement costs for the future system in the Buena Sanitation District and the City of Vista respectively. The future recommended capacity deficient projects are shown in **Figure 8-2**.

Table 8-4 Future Capacity Deficient Projects in Buena Sanitation District

Project Name	Length (ft)	Cost ($)	Description
B1- Green Oak to BVPS Upsize	4,944	$3,595,899	Upsize existing 21", 18", and 12" sewer lines along Green Oak and between the Buena lift station and Grand to 27", 24", and 15".
B2- Thibodo to Watson Upsize and Realignment	3,019	$1,304,335	Upsize existing 15" and 8" sewer lines along Watson and Sycamore and between Watson and intersection of Thibodo/Plumosa to 21", 18", and 15".
B3-El Valle Opulento Upsize	918	$309,855	Upsize existing 10" sewer line along El Valle Opulento and between El Valle Opulento and El Copa to 15".
B4-Buena Creek / Robelini Upsize	4,724	$1,685,475	Upsize existing 12" sewer line along Robelini and Buena Creek and between intersection of Sycamore/Robelini and Lakeside to 15".
B5-Watson to Green Oak Upsize and Realignment	3,795	$2,382,086	Upsize and realign existing 18" and 8" sewer lines along Oleander and Watson between Green Oak and Lupine Hills to 24", 21", and 18".
OV2-Buena Outfall Phase IV	8,847	$4,560,640	Upsize existing 24", 21", and 18" Buena Interceptor to 27", 24", and 21".
B6-Buena Outfall Force Main Phase III	7,200	$4,786,800	Construct 24" of Force main and 18" and 15" of Gravity Sewer in Palomar Airport Rd and west of El Camino Real to divert flows to Vallecitos Interceptor.
Total	**33,447**	**$18,625,090**	

The hydraulic model of the collection system has been prepared and used to evaluate the capacity of the system. Additionally capacity related projects have been identified to overcome these restrictions. These projects are summarized in this chapter. Detailed project sheets have been prepared for each project (replacement and rehabilitation) and are included in the appendices. Detailed information related to project location are in Appendix 1.

Table 8-5 Future Capacity Deficient Projects in the City of Vista

Project Name	Length (ft)	Cost ($)	Description
V1-West Vista Way Replacement and Upsize	6,344	$1,954,616	Upsize existing 12", 10", and 8" sewer lines along Sunset, Vista, Huff, and Durian and between intersection of Via Centre/Sunset and Cedar and Hill to 15" and 12".
V2-Hacienda / Vista Village Upsize	4,026	$3,356,869	Upsize existing 33", 30", 24", 21", and 12" sewer lines along Hacienda and Vista Village and between La Tortuga and Lado De Loma to 42", 36", 30", 27", 21", 18" and 15".
V3-North Melrose Upsize	5,500	$1,615,217	Upsize existing 10" and 8" sewer lines along Melrose between Hacienda and Olive to 15" and 12".
V4- Main / Broadway / Santa Fe Upsize	3,347	$1,620,884	Upsize existing 18" along Santa Fe, Broadway, Citrus, Main and Vista Village between Santa Fe and Intersection of Escondido/Hillside to 24" and 21".
V5-Eucalyptus/ Citrus Upsize	3,037	$1,034,641	Upsize existing 12", 10", and 8" sewer lines along Citrus, Eucalyptus, and Escondido and between Broadway and Avalon to 18", 15", and 12".
V6-South Melrose Upsize	1,910	$644,623	Upsize existing 10" sewer line along Melrose between Hacienda and County Complex to 15".
V7-Mercantile Upsize	3,171	$960,556	Upsize existing 12", 8", and 6" sewer lines along Santa Fe, Mercantile, and Pala Vista and between Main and Rincon to 18", 15", and 12".
V8-MonteVista / South Santa Fe Realignment and Upsize	8,358	$2,794,418	Upsize existing 8" sewer line along Santa Fe, Service, and Monte Vista and between Escondido and Service to 15" and 12".
V9-North Santa Fe Upsize	3,979	$2,093,580	Upsize existing 18" and 15" sewer lines along Santa Fe and between Orange and intersection of Los Angeles/Townsite to 24" and 18".
V10- Cananea / Calera Upsize	2,830	$862,825	Upsize existing 10" and 8" sewer lines along Cananea and Calera, between Santa Fe and Bobier to 15" and 12".
V11-East Vista Way / Vale Terrace Upsize	1,853	$769,770	Upsize 18" and 8" sewer line along Vista and Vale Terrace and between Townsite and intersection of Bel Air/Williamston to 21", 18", and 15".
R1-Faraday Easement Sewer Upsize	1,431	$482,811	Upsize existing 12" sewer line west of Melrose and between the Raceway Pump Station and Faraday to 15".
OV1-VC3 Relief Sewer	2,837	$2,681,145	Upsize existing 36" Vista-Carlsbad Interceptor to 42".
Total	**48,621**	**$20,871,955**	

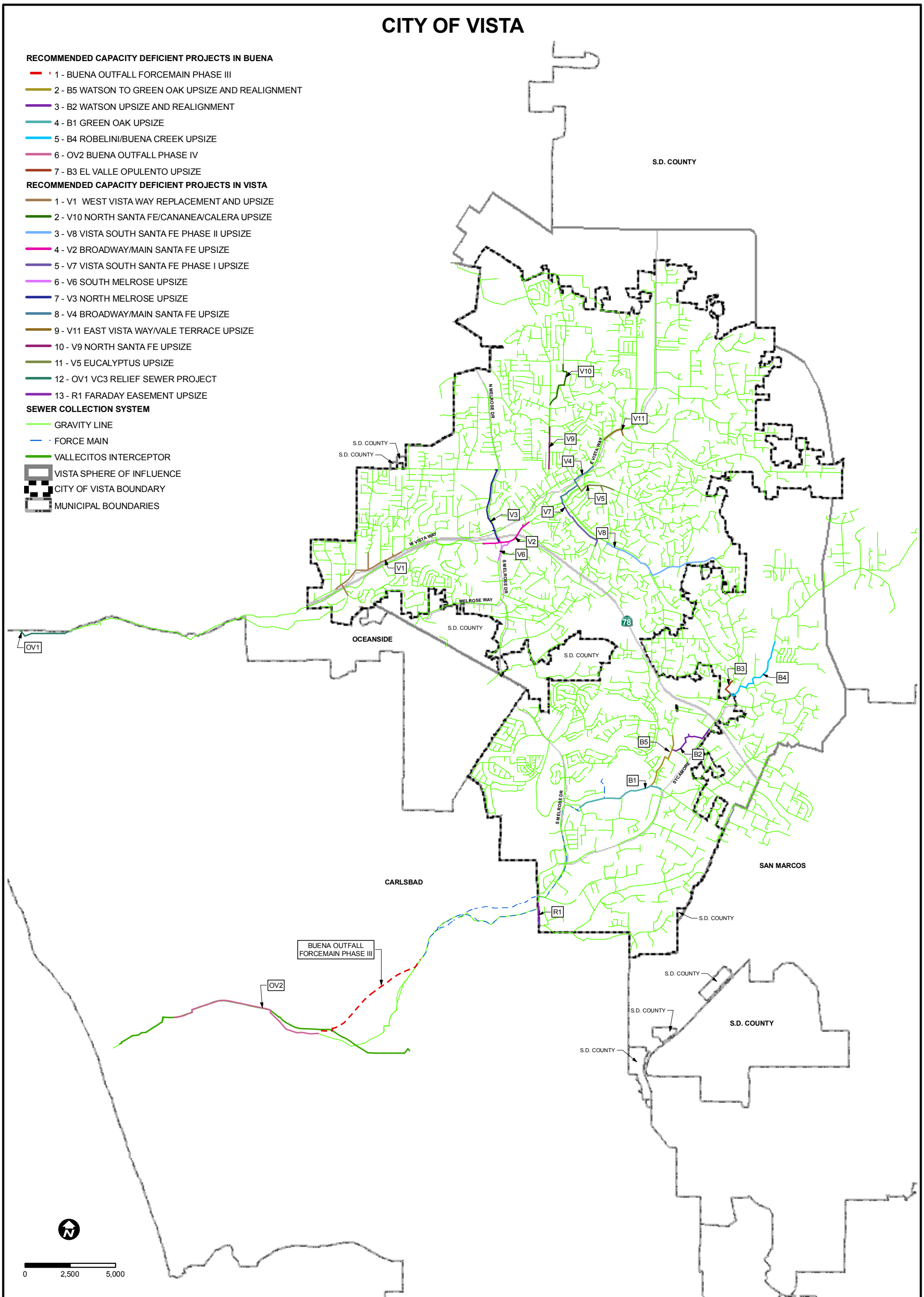


FIGURE 8-2 FUTURE RECOMMENDED CAPACITY DEFICIENT PROJECTS

Table 8-6 Replacement Projects By Priority with Estimates

Priority	Buena	Est. Cost
1*	B6 Buena Outfall FM Ph3	$4,786,800
2*	B5	$2,382,086
3*	B2	$1,304,335
4*	B1	$3,595,899
5	B4	$1,685,475
6	OV2	$4,560,640
7	B3	$309,855
	Subtotal	$18,625,090
Priority	**Vista**	**Est. Cost**
1*	V1	$1,954,616
2*	V10	$862,825
3*	V8	$2,794,418
4*	V2	$3,356,869
5*	V7	$960,556
6*	V6	$644,623
7*	V3	$1,615,217
8*	V4	$1,620,884
9*	V11	$769,770
10*	V9	$2,093,580
11*	V5	$1,034,641
12	OV1	$2,681,145
13	R1	$482,811
	Subtotal	$20,871,955
	Total	**$39,497,045**

* Projects found to have Existing Wet Weather Capacity Restrictions. It is important to facilitate construction on these projects as soon as possible.

In addition to the Capacity Related Replacement Projects, the City/District must address looming age, material, minimum size and condition related replacements or rehabilitation. The following sections discuss the scheduling of these improvements and additional Operations and Maintenance related activities that will insure compliance with the WDR through a well managed collection system. **Table 8-7** shows the estimated costs for addressing all noted areas of concern. It should be noted that a complete Condition Assessment program may limit these cost estimates. For instance, there may be a number of non-VCP/PVC pipes that do not need immediate rehabilitation. These estimated costs may be refined and/or deferred to some future date.

Table 8-7 Non-Capacity CIP Projects

Project Type	Vista	Buena	Unknown	Total
Material Related Force Main (DIP)	$0	$793,119	$0	$793,119
Material Related Gravity Main (DIP)	$24,248,766	$2,399,813	$0	$26,648,579
Age Related	$6,948,675	$0	$0	$6,948,675
Condition Related	$68,267,080	$22,622,933	$11,198	$90,901,211
Minimum Size	$20,013,301	$2,393,598	$24,183	$22,431,082
Total	**$119,477,822**	**$28,209,463**	**$35,381**	**$147,722,666**

Condition related projects also include prior capital improvement projects identified during the 2003 Master Plan Update. These projects should be scheduled for completion based in the listed order based on the funding made available through bonding and rates.

8.2 CONDITION ASSESSMENT PROGRAM

As noted in the previous discussion and in Chapter 7, the total extent and costs associated with the Non-Capacity Projects will be modified by a complete condition assessment program. The complete condition assessment program elements and associated costs are shown in **Table 8-8**. It is recommended that these projects be completed within the next five years of the CIP. The costs for flow measurement, physical inspection, CCTV and smoke testing are for the entire system. It is likely, based on the flow measurement program, that these amounts will be reduced. For that reason, the flow measurement program should be commenced as soon as rainfall is likely in the 2007/2008 wet season. Note that the 2007/2008 Flow Measurement Program has been increased over the previously prepared 2006/2007 Flow Measurement Plan. The Flow Measurement Plan was based on budget constraints in the 2006/2007 budget and had fewer flow measurement devices installed in the system. The 2006/2007 Flow Measurement Plan was not implemented due to unseasonably low rainfall amounts.

Table 8-8 Condition Assessment Costs

Component	Estimated Cost	Cost/Foot
Flow Measurement	$ 295,983	$ 0.18
Smoke Testing	$ 822,174	$ 0.50
Physical Inspection	$ 548,116	$ 0.33
CCTV	$ 2,055,435	$ 1.25
Program Mgmt	$ 558,256	$ 0.34
Total	**$ 4,279,964**	**$ 2.60**

8.3 PHASED CAPITAL IMPROVEMENT PROGRAM

Based on the considerations discussed in the previous section, a phased schedule of system condition assessment, capacity and non-capacity replacements has been developed. To develop the maximum estimated costs, this program combines the Condition Assessment Program, Capacity and Non-Capacity Replacement Projects. It is likely that as the results of the Condition Assessment Program are analyzed that some of the non-capacity replacement projects will be reduced.

The schedule for the CIP was developed to have full funding in the first year of the project. This approach is simplified but provides assured funding for the projects prior to their construction. In addition to the capacity replacement projects, there are periodic inspection and replacement projects included. For example the CCTV inspection program of the entire program is shown to be completed within the first five years, but costs continue at a reduced schedule (10% per year) throughout 2027. Other programs, such as DIP replacement and capacity related replacements, show completion with no expected returns. As a result, the overall annual spending declines on the average from $17 million dollars in the first five years to around $4 million in 2027. This is driven by ongoing age related replacements and the CCTV inspection program.

The developed CIP is based on priorities established on the need and impacts of the given project. The Condition Assessment Program is fundamental to determining the current “State of the System”. Replacement projects were developed on the criteria discussed in the previous section. Finally the maximum costs for material, age and non-capacity related replacements were derived but may be affected by the findings of the condition assessment program.

Table 8-9 describes the proposed scheduling of the CIP.

Table 8-9 Proposed CIP

Basin	Near Term CIP						Near Term Total	Long Term CIP			Total
	Year	1	2	3	4	5		10	15	20	
	Budget	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012		2017	2022	2027	
Complete Condition Assessment											
Buena	Flow measurement	$ 46,265	$ 46,265	$ 46,265			$ 138,795				$ 138,795
	Smoke Testing	$ 246,652					$ 246,652				$ 246,652
	Physical Inspection	$ 164,435					$ 164,435				$ 164,435
	CCTV Inspection	$ 123,326	$ 123,326	$ 123,326	$ 123,326	$ 123,326	$ 616,631	$ 308,315	$ 308,315	$ 308,315	$ 1,541,576
	Program Management	$ 93,481	$ 18,499	$ 18,499	$ 18,499	$ 18,499	$ 167,477				$ 167,477
	Buena SubTotal	$ 674,159	$ 188,090	$ 188,090	$ 141,825	$ 141,825	$ 1,333,989	$ 308,315	$ 308,315	$ 308,315	$ 2,258,935
Vista	Flow measurement	$ 207,188					$ 207,188				$ 207,188
	Smoke Testing	$ 575,522					$ 575,522				$ 575,522
	Physical Inspection	$ 383,681					$ 383,681				$ 383,681
	CCTV Inspection	$ 287,761	$ 287,761	$ 287,761	$ 287,761	$ 287,761	$ 1,438,805	$ 719,402	$ 719,402	$ 719,402	$ 3,597,011
	Program Management	$ 218,123	$ 43,164	$ 43,164	$ 43,164	$ 43,164	$ 390,779				$ 390,779
	Vista SubTotal	$ 1,672,275	$ 330,925	$ 330,925	$ 330,925	$ 330,925	$ 2,995,975	$ 719,402	$ 719,402	$ 719,402	$ 5,154,181
Condition Assessment SubTotal		$ 2,346,434	$ 519,015	$ 519,015	$ 472,750	$ 472,750	$ 4,329,964	$ 1,027,718	$ 1,027,718	$ 1,027,718	$ 7,413,116
Prioritized Capacity Related Replacements											
Buena	Buena Outfall FM Ph3	$ 4,786,800					$ 4,786,800				$ 4,786,800
	B5		$ 2,382,086				$ 2,382,086				$ 2,382,086
	B2			$ 1,304,335			$ 1,304,335				$ 1,304,335
	B1				$ 3,595,899		$ 3,595,899				$ 3,595,899
	B4						$ -	$ 1,685,475			$ 1,685,475
	OV2						$ -	$ 4,560,640			$ 4,560,640
	B3						$ -		$ 309,855		$ 309,855
	Buena SubTotal	$ 4,786,800	$ 2,382,086	$ 1,304,335	$ 3,595,899	$ -	$ 12,069,120	$ 6,246,115	$ 309,855	$ -	$ 18,625,090
Vista	V1	$ 1,954,616					$ 1,954,616				$ 1,954,616
	V10		$ 862,825				$ 862,825				$ 862,825
	V8		$ 2,794,418				$ 2,794,418				$ 2,794,418
	V2			$ 3,356,869			$ 3,356,869				$ 3,356,869
	V7			$ 960,556			$ 960,556				$ 960,556
	V3				$ 1,615,217		$ 1,615,217				$ 1,615,217
	V6				$ 644,623		$ 644,623				$ 644,623
	V4					$ 1,620,884	$ 1,620,884				$ 1,620,884
	V11					$ 769,770	$ 769,770				$ 769,770
	V9					$ 2,093,580	$ 2,093,580				$ 2,093,580
	V5					$ 1,034,641	$ 1,034,641				$ 1,034,641
	OV1						$ -	$ 2,681,145			$ 2,681,145
	R1						$ -		$ 482,811		$ 482,811
	Carlsbad	$ 11,115,884	$ 3,050,000	$ 1,336,812			$ 15,502,696				$ 18,866,399
	Vista SubTotal	$ 13,070,500	$ 6,707,243	$ 5,654,237	$ 2,259,840	$ 5,518,875	$ 33,210,695	$ 2,681,145	$ 482,811	$ -	$ 39,738,354
Capacity Related Replacement SubTotal		$ 17,857,300	$ 9,089,329	$ 6,958,572	$ 5,855,739	$ 5,518,875	$ 45,279,815	$ 8,927,260	$ 792,666	$ -	$ 58,363,444
Other Rehab or Replacements											
Buena	DIP FM	$ 793,119					$ 793,119				$ 793,119
	DIP Gravity - 10	$ 239,981	$ 239,981	$ 239,981	$ 239,981	$ 239,981	$ 1,199,906	$ 1,199,906	$ -	$ -	$ 2,399,813
	Age Related*	$ 1,424,741	$ 1,424,741	$ 1,424,741	$ 1,424,741	$ 1,424,741	$ 7,123,703	$ 1,486,152	$ 1,486,152	$ 7,787,461	$ 17,883,468
	Condition Related - 20**	$ 1,131,147	$ 1,131,147	$ 1,131,147	$ 1,131,147	$ 1,131,147	$ 5,655,733	$ 5,655,733	$ 5,655,733	$ 5,655,733	$ 22,622,933
	Upsize Minimum - 20	$ 119,680	$ 119,680	$ 119,680	$ 119,680	$ 119,680	$ 598,399	$ 598,399	$ 598,399	$ 598,399	$ 2,393,598
	Encina WA	$ 235,182	$ 876,338	$ 222,467	$ 352,427	$ 226,368	$ 1,912,782	$ 1,434,427	$ 1,456,574	$ 1,752,825	$ 6,556,608
	Buena SubTotal	$ 3,943,850	$ 3,791,887	$ 3,138,016	$ 3,267,975	$ 3,141,917	$ 17,283,644	$ 10,374,618	$ 9,196,858	$ 15,794,418	$ 52,649,539
Vista	DIP FM	$ -					$ -				$ -
	DIP Gravity - 10	$ 2,424,877	$ 2,424,877	$ 2,424,877	$ 2,424,877	$ 2,424,877	$ 12,124,383	$ 12,124,383	$ -	$ -	$ 24,248,766
	Age Related*	$ 3,449,424	$ 3,449,424	$ 3,449,424	$ 3,449,424	$ 3,449,424	$ 17,247,120	$ 5,566,897	$ 5,566,897	$ 10,684,232	$ 39,065,145
	Condition Related - 20**	$ 3,413,354	$ 3,413,354	$ 3,413,354	$ 3,413,354	$ 3,413,354	$ 17,066,770	$ 17,066,770	$ 17,066,770	$ 17,066,770	$ 68,267,080
	Upsize Minimum - 20	$ 1,000,665	$ 1,000,665	$ 1,000,665	$ 1,000,665	$ 1,000,665	$ 5,003,325	$ 5,003,325	$ 5,003,325	$ 5,003,325	$ 20,013,301
	Encina WA	$ 622,828	$ 2,320,793	$ 589,157	$ 933,326	$ 599,487	$ 5,065,591	$ 3,798,770	$ 3,857,422	$ 4,641,979	$ 17,363,761
	Vista SubTotal	$ 10,911,148	$ 12,609,113	$ 10,877,476	$ 11,221,645	$ 10,887,807	$ 56,507,189	$ 43,560,145	$ 31,494,414	$ 37,396,306	$ 168,958,054
Other Rehab or Replacement SubTotal		$ 14,854,998	$ 16,401,000	$ 14,015,492	$ 14,489,620	$ 14,029,724	$ 73,790,834	$ 53,934,763	$ 40,691,272	$ 53,190,724	$ 221,607,593
Buena Total		**$ 9,404,809**	**$ 6,362,063**	**$ 4,630,441**	**$ 7,005,699**	**$ 3,283,742**	**$ 30,686,753**	**$ 16,929,048**	**$ 9,815,029**	**$ 16,102,734**	**$ 73,533,564**
Vista Total		**$ 25,653,922**	**$ 19,647,281**	**$ 16,862,638**	**$ 13,812,410**	**$ 16,737,607**	**$ 92,713,859**	**$ 46,960,692**	**$ 32,696,627**	**$ 38,115,708**	**$ 213,850,589**
Grand Total		**$ 35,058,731**	**$ 26,009,344**	**$ 21,493,079**	**$ 20,818,110**	**$ 20,021,349**	**$ 123,400,612**	**$ 63,889,740**	**$ 42,511,656**	**$ 54,218,442**	**$ 287,384,153**
Carry Forward Amount Total		**$ 20,025,008**					***Avg. Annual***	***$ 12,777,948***	***$ 8,502,331***	***$ 10,843,688***	

* Average Annual Cost Chapter 8
** Includes previously identified condition, will be lowered with Complete Condition Assessment
Cost Note: All estimated costs are in 2007 dollars ENR CCI = 8555.3

Historically, the City/District has on average spent $3.5 million per year on CIP projects and an additional $1.7 million on projects managed by Encina. **Table 8-10** shows the recent CIP expenditures for the City/District. Additional resources will be required to accelerate to the level of spending recommended. This will likely include addition of staff and outsourcing of necessary functions.

Table 8-10 Historical CIP Spending

	Vista		Buena				
FY end	CIP Projects	Encina Projects	CIP Projects	Encina Projects	V+B	Encina Total	Grand Total
1999	$1,831,760	$715,000	$170,280	$285,000	$2,002,041	$1,000,000	$3,002,041
2000	$3,513,896	$900,933	$283,143	$349,356	$3,797,039	$1,250,289	$5,047,327
2001	$1,898,338	$404,266	$220,399	$147,756	$2,118,737	$552,022	$2,670,759
2002	$7,119,417	$713,882	$3,049,017	$220,741	$10,168,434	$934,624	$11,103,057
2003	$641,201	$489,330	$1,818,619	$188,779	$2,459,820	$678,109	$3,137,929
2004	$539,881	$1,628,028	$326,524	$656,945	$866,405	$2,284,973	$3,151,378
2005	$518,561	$4,270,558	$650,052	$592,302	$1,168,614	$4,862,861	$6,031,474
2006	$3,326,635	$1,098,161	$2,693,303	$962,372	$6,019,938	$2,060,533	$8,080,471
Average	***$2,423,711***	***$1,277,520***	***$1,151,417***	***$425,406***	***$3,575,128***	***$1,702,926***	***$5,278,055***
Totals	$19,389,689	$10,220,159	$9,211,338	$3,403,251	$28,601,027	$13,623,410	$42,224,437

In addition to the projects that are native to Vista or to Buena Sanitary District, there are long term shared projects in both Carlsbad and the Encina Wastewater Authority plans. **Table 8-11** from the Carlsbad Sewer Master Plan (2003) shows the Carlsbad projects with the Vista share based on percent capacity and their 2007 escalated estimated costs.

Table 8-11 Sub-Regional CIP Projects

Project	Vista CIP	Description	Category	Project Cost
Vista/Carlsbad Interceptor Reach VC3 - capacity upgrade upstream of the Buena Vista Lift Station		3,350' of 42" Pipeline	Interceptor Replacement	$2,615,648
Buena Vista Lift Station - capacity increase, control system upgrade, new back-up generator		Lift Station Capacity = 26 MGD	L.S. Rehab	$748,055
Buena Vista Lift Station Force Main (VC4) - replace existing 16" pipeline with 24" pipeline to provide dual 24" FMs & increase capacity		3,840' of 24" Force Main	New Force Main	$1,336,812
Vista/Carlsbad Interceptor Reach VC11B - upgrade capacity and construct new bridge crossing over the Agua Hedionda Lagoon	8129	915' of 54" Pipeline	Interceptor Replacement & New Bridge	$1,602,359
Agua Hedionda Lift Station and Force Main VC12 - rehab lift station and construct new force main	8125	Lift station capacity = 36 MGD 200' of 36" force main	L.S. Rehab & New Force Main	$5,513,525
V/C Interceptor Reaches VC13, VC14 & VC15 - Increase interceptor capacity from the AH Lift Station to Encina WPCF	8130	3510' of 54" Pipeline 6,831' of 60" Pipeline	Interceptor Replacement	$7,050,000
Total				**$18,866,399**

8.4 OTHER PROJECTS AND ANALYSES

8.4.1 BUENA OUTFALL FM PHASE III

Buena Interceptor is identified as capacity deficient during existing and future flow scenarios. **Table 8-12** summarizes the flows carried by the Buena Interceptor during various scenarios. These flows include the flows generated by the Buena Sanitation District, sub drainage basins V34 and V35 of the City of Vista and additional flows from the City of Carlsbad.

Table 8-12 Buena Interceptor Flows

Flow Scenarios	Exiting		Ultimate	
	Average Flow (MGD)	Peak Flow (MGD)	Average Flow (MGD)	Peak Flow (MGD)
Dry Weather Flow	3.67	5.32	5.54	7.89
Wet Weather Flow	6.44	8.78	8.46	11.54

The City of Vista owns 3.75 MGD capacity in the Vallecitos Interceptor which runs parallel to the Buena Interceptor. Special analysis was performed to determine the hydraulic restrictions in the Buena Interceptor by diverting 3.75 MGD to the Vallecitos Interceptor. The analysis was performed during existing and future wet weather conditions. Option C, recommended in the March 2002 Buena Interceptor Upgrade Route Selection and Flow Splitting Study, was utilized for diverting the flow to the Vallecitos Interceptor. Option C includes 3,200 feet of 24-inch force main, 3,200 feet of 18-inch gravity main, and 800 feet of 15-inch gravity main. It is referred to as *Buena Outfall Force Main Phase III Project* in this Master Plan. The force main would divert the flow at manhole V36T055 and follow the existing alignment of the Buena Interceptor, southwest across El Camino Real on Palomar Airport Road. It would transition from force main to gravity main at the intersection of Palomar Airport Road and Yarrow Drive.

Construction of Buena Outfall Force Main Phase III Project will provide sufficient capacity in the Buena Interceptor to handle the existing wet weather flows; however, it will still have hydraulic restrictions to deliver the ultimate wet weather flows. The results and recommendations of this analysis are summarized in **Table 8-13**.

Table 8-13 Buena Interceptor Analysis Recommendations

Flow Scenarios	Project Name	Project Description
Existing	**B6 - Buena Outfall Force Main Phase III**	Construct 24" of Force main and 18" and 15" of Gravity Sewer in Palomar Airport Rd and west of EL Camino Real to divert flows to Vallecitos Interceptor.
Ultimate	**OV2-Buena Outfall Phase IV**	Upsize existing 24", 21", 18" Buena Interceptor to 27", 24", and 21".

8.4.2 FUTURE OCEANSIDE FLOWS

Ultimate average dry weather and wet weather flows were calculated as a part or special analysis. The same methodology was followed to calculate and allocate the average dry weather flows in the hydraulic model as described in Chapter 5.

Defect flows and corresponding wet weather hydrographs calculated for the City of Vista using flow monitoring data at meters V1 and OV1 was applied in conjunction to ADWF at each manhole in the OV basins to account for the wet weather flows. Defect flows per manhole were calculated by dividing the total defect flows with the number of manholes. **Table 8-14** presents the flows determined by the hydraulic model for all the OV basins.

Table 8-14 Ultimate Oceanside Flows

Basins	Dry Weather Flow		Wet Weather Flow	
	Average Flow (MGD)	Peak Flow (MGD)	Average Flow (MGD)	Peak Flow (MGD)
OV1	0.23	0.35	0.34	0.55
OV2	0.15	0.23	0.22	0.35
OV3	0.003	0.005	0.007	0.011
OV4	0.06	0.09	0.10	0.16
OV5	0.32	0.50	0.54	0.86
OV6	0.23	0.36	0.27	0.43

8.4.3 BUENA PUMP STATION INFLUENT GRAVITY MAIN

There was a spill in the existing 18-inch Spirolite gravity main approximately 1,000 feet upstream of the Buena Pump Station and south of the intersection of Melrose Drive and Green Oak Road. As per the City staff, this gravity main is in bad condition and is identified as a condition related-rehabilitation project in the CIP. Generally, relining a pipeline reduces its diameter. Hydraulic analysis was performed to verify whether the gravity main will have sufficient capacity with reduced diameter during future wet weather conditions. The diameter of the existing gravity main was reduced to 16-inch and the pipeline capacity was analyzed during ultimate peak wet weather flow. The results of this analysis show that the gravity main will have enough capacity after relining. The results are presented in **Table 8-15**. It is recommended that this line be included in the near term CIP as a condition related rehabilitation project.

Table 8-15 Peak Ultimate Wet Weather Analysis

Condition	Diameter	Peak Flow (MGD)	(d/D)
Existing	18-Inch	1.64	0.55
After Relining	16-Inch	1.64	0.67

8.5 CONCLUSIONS

In this chapter, we have combined the results of the hydraulic model and the observations from the various pipe and condition databases to provide a set of projects necessary to improve and maintain the collection system. The priorities include addressing capacity based replacement projects that are existing deficiencies, and commencing with a multi-mode condition assessment program to update and verify conditions within the system. The condition assessment program will include a comprehensive wet-weather flow measurement plan and a fast track CCTV inspection program. The goal of the CCTV program is to evaluate the entire collection system within 5 years. The CCTV program will initially begin based on pipe age but may be redirected as results from the flow measurements indicate areas of high infiltration.

APPENDIX A

VISTA CIP DESCRIPTION

LOCATION MAP

LEGEND

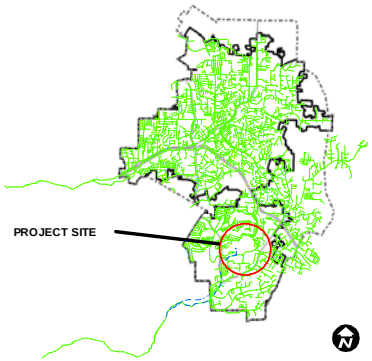
B1 GREEN OAK UPSIZE
- EXISTING LIMIT
- ULTIMATE LIMIT

SEWER COLLECTION SYSTEM
- GRAVITY MAIN
- FORCE MAIN
- MANHOLE
- RIGHT-OF-WAY ISSUES
- VISTA SPHERE OF INFLUENCE
- CITY OF VISTA BOUNDARY
- PARCELS

PROJECT TYPE	CAPACITY
PROJECT LENGTH	4,944 FT
CONSTRUCTION + OVERHEAD	$2,766,076
EASEMENT CONTINGENCY	$829,823
TOTAL PROJECT COST	$3,595,899

PROJECT DESCRIPTION
UPSIZE EXISTING 21", 18", AND 12" SEWER LINES ALONG GREEN OAK, BETWEEN THE BUENA LIFT STATION AND GRAND, TO 27", 24", AND 15".

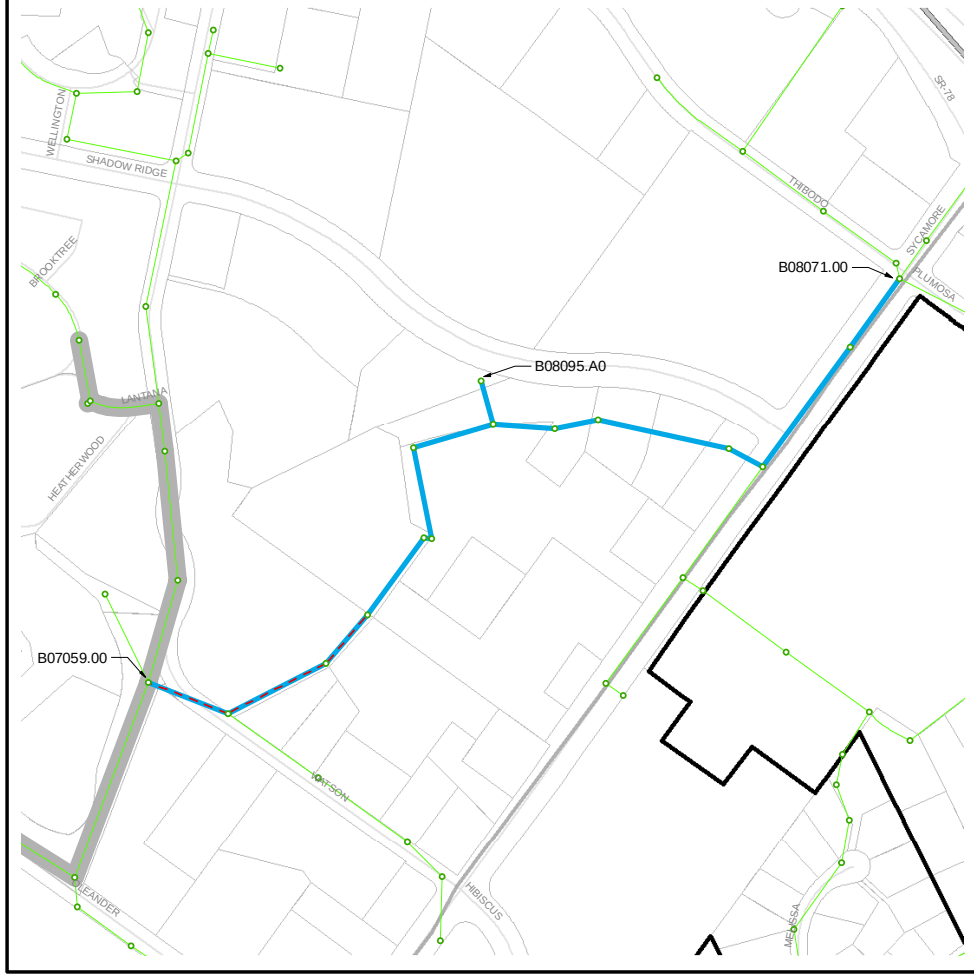
VICINITY MAP



RECOMMENDED CAPITAL IMPROVEMENT PROJECTS

B1 GREEN OAK TO BVPS UPSIZE

LOCATION MAP



LEGEND

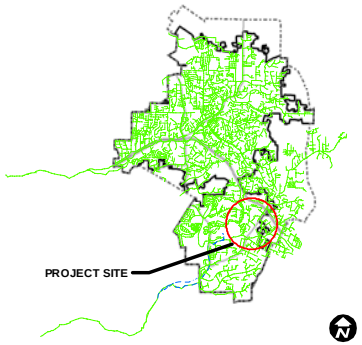
B2 WATSON UPSIZE AND REALIGNMENT
- EXISTING LIMIT
- ULTIMATE LIMIT

SEWER COLLECTION SYSTEM
- GRAVITY MAIN
- FORCE MAIN
- MANHOLE
- RIGHT-OF-WAY ISSUES
- VISTA SPHERE OF INFLUENCE
- CITY OF VISTA BOUNDARY
- PARCELS

PROJECT TYPE	CAPACITY/CONDITION
PROJECT LENGTH	3,019 FT
TOTAL PROJECT COST	$1,304,335

PROJECT DESCRIPTION
UPSIZE EXISTING 15" AND 8" SEWER LINES ALONG WATSON AND SYCAMORE, AND BETWEEN WATSON AND INTERSECTION OF THIBODO/PLUMOSA, TO 21", 18", AND 15".

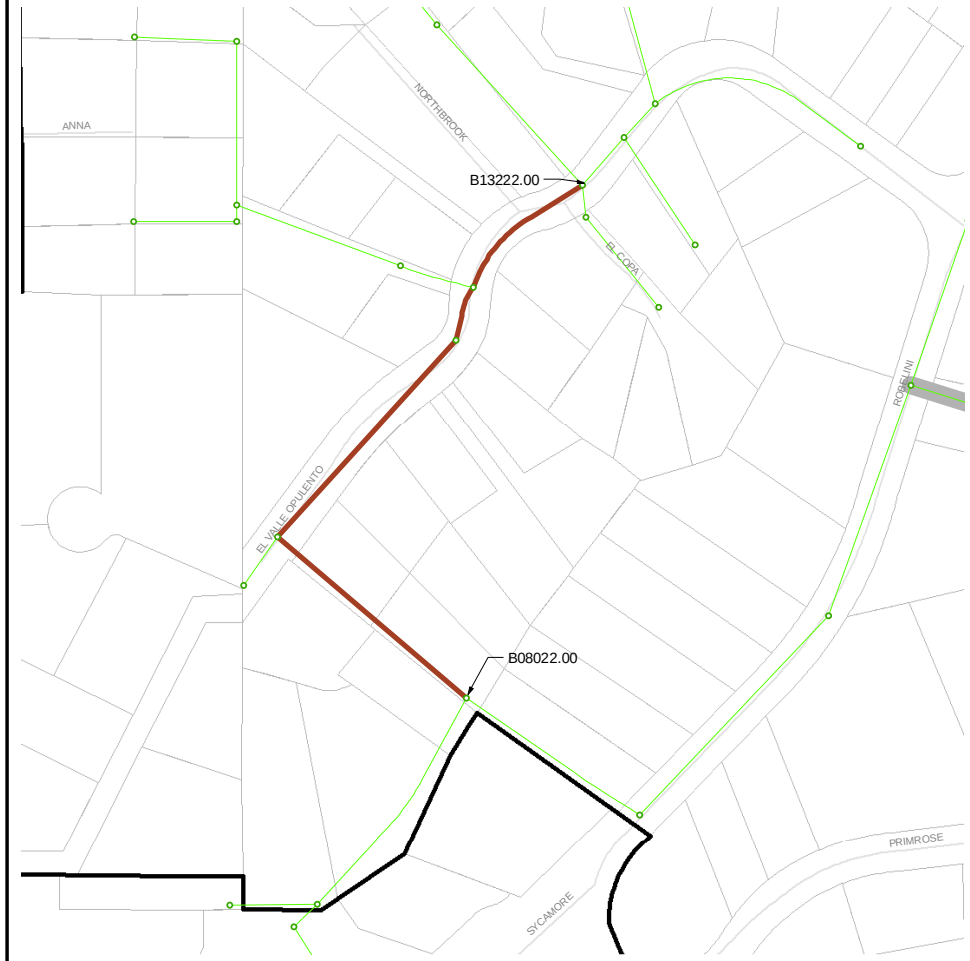
VICINITY MAP



RECOMMENDED CAPITAL IMPROVEMENT PROJECTS

B2 THIBODO TO WATSON UPSIZE AND REALIGNMENT

LOCATION MAP



LEGEND

- MANHOLE

B3 EL VALLE OPULENTO UPSIZE

- ULTIMATE LIMIT

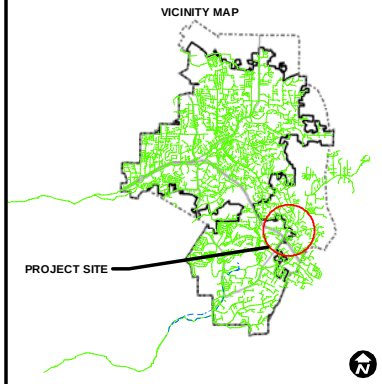
SEWER COLLECTION SYSTEM

- GRAVITY MAIN
- FORCE MAIN
- RIGHT-OF-WAY ISSUES
- VISTA SPHERE OF INFLUENCE
- CITY OF VISTA BOUNDARY
- PARCELS
- liVista_Roads

PROJECT TYPE	CAPACITY/CONDITION
PROJECT LENGTH	918 FT
TOTAL PROJECT COST	$309,855

PROJECT DESCRIPTION
UPSIZE EXISTING 10" SEWER LINE ALONG EL VALLE OPULENTO, BETWEEN EL VALLE OPULENTO AND EL COPA, TO 15".

VICINITY MAP



RECOMMENDED CAPITAL IMPROVEMENT PROJECTS

B3 EL VALLE OPULENTO UPSIZE

LOCATION MAP

LEGEND

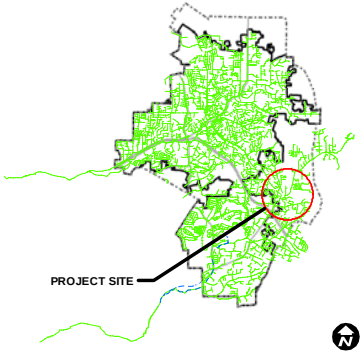
B4 ROBELINI / BUENA CREEK UPSIZE
- ULTIMATE LIMIT

SEWER COLLECTION SYSTEM
- GRAVITY MAIN
- FORCE MAIN
- MANHOLE
- RIGHT-OF-WAY ISSUES
- VISTA SPHERE OF INFLUENCE
- CITY OF VISTA BOUNDARY
- PARCELS

PROJECT TYPE	CAPACITY/CONDITION
PROJECT LENGTH	4,724 FT
CONSTRUCTION + OVERHEAD	$1,594,350
EASEMENT CONTINGENCY	$91,125
TOTAL PROJECT COST	$1,685,475

PROJECT DESCRIPTION
UPSIZE EXISTING 12" SEWER LINE ALONG ROBELINI AND BUENA CREEK, BETWEEN THE INTERSECTION OF SYCAMORE/ROBELINI AND LAKESIDE, TO 15".

VICINITY MAP



RECOMMENDED CAPITAL IMPROVEMENT PROJECTS

B4 BUENA CREEK / ROBELINI UPSIZE

LOCATION MAP

LEGEND

B5 WATSON TO GREEN OAK UPSIZE AND REALIGNMENT

- EXISTING LIMIT
- ULTIMATE LIMIT
- B5 REALIGNMENT

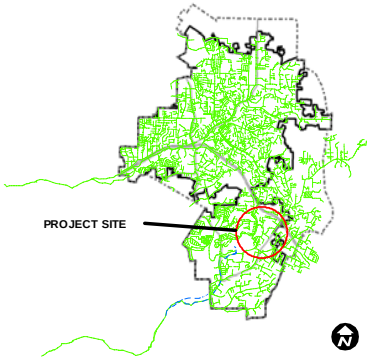
SEWER COLLECTION SYSTEM

- GRAVITY MAIN
- FORCE MAIN
- MANHOLE
- RIGHT-OF-WAY ISSUES
- VISTA SPHERE OF INFLUENCE
- CITY OF VISTA BOUNDARY
- PARCELS

PROJECT TYPE	CAPACITY/CONDITION
PROJECT LENGTH	3,795 FT
CONSTRUCTION + OVERHEAD	$1,832,374
EASEMENT CONTINGENCY	$549,712
TOTAL PROJECT COST	$2,382,086

PROJECT DESCRIPTION
UPSIZE AND REALIGN EXISTING 18" AND 8" SEWER LINES ALONG OLEANDER AND WATSON, BETWEEN GREEN OAK AND LUPINE HILLS, TO 24", 21", AND 18".

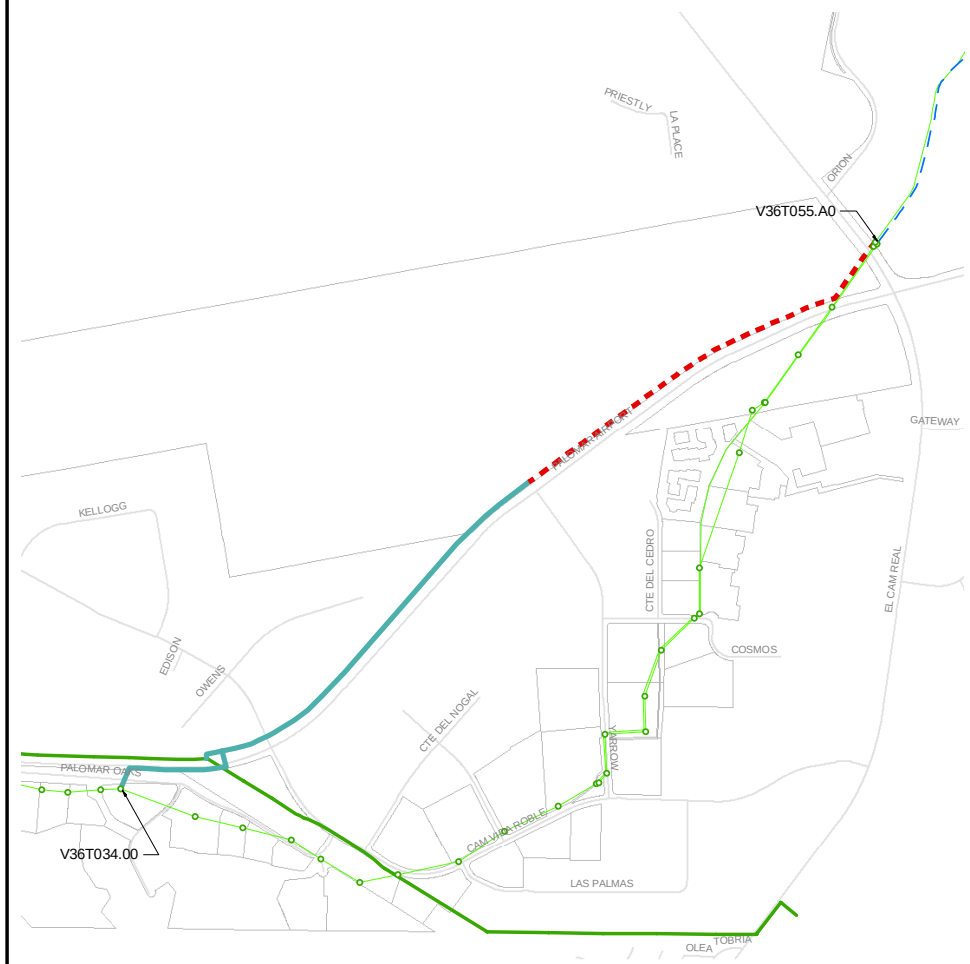
VICINITY MAP



RECOMMENDED CAPITAL IMPROVEMENT PROJECTS

B5 WATSON TO GREEN OAK UPSIZE AND REALIGNMENT

LOCATION MAP



LEGEND

BUENA OUTFALL FORCEMAIN PHASE III

- FORCEMAIN (3,200 FT)
- GRAVITY MAIN (4,000 FT)

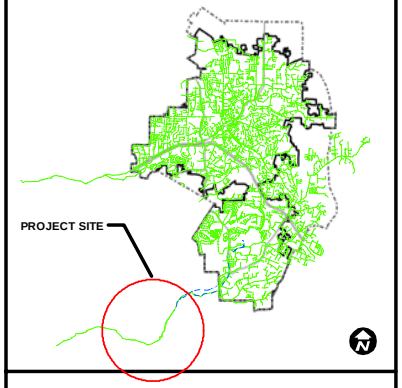
SEWER COLLECTION SYSTEM

- GRAVITY MAIN
- FORCE MAIN
- MANHOLE

PROJECT TYPE	CAPACITY
PROJECT LENGTH	7,200 FT
TOTAL PROJECT COST	$4,786,800

PROJECT DESCRIPTION
CONSTRUCT 24" OF FORCE MAIN AND 18" AND 15" OF GRAVITY SEWER IN PALOMAR AIRPORT RD AND WEST OF EL CAMINO REAL TO DIVERT FLOWS TO VALLECITOS INTERCEPTOR.

VICINITY MAP



RECOMMENDED CAPITAL IMPROVEMENT PROJECTS

B6 BUENA OUTFALL FM PHIII

LOCATION MAP

LEGEND

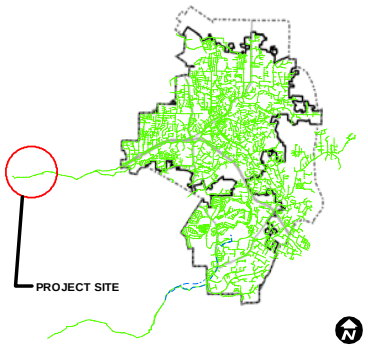
OV1 VC3 RELIEF SEWER PROJECT
- ULTIMATE LIMIT

SEWER COLLECTION SYSTEM
- GRAVITY MAIN
- FORCE MAIN
- MANHOLE
- RIGHT-OF-WAY ISSUES
- VISTA SPHERE OF INFLUENCE
- CITY OF VISTA BOUNDARY
- PARCELS

PROJECT TYPE	CAPACITY/MATERIAL
PROJECT LENGTH	2,837 FT
TOTAL PROJECT COST	$2,681,145

PROJECT DESCRIPTION
UPSIZE EXISTING 36" VISTA-CARLSBAD INTERCEPTOR TO 42".

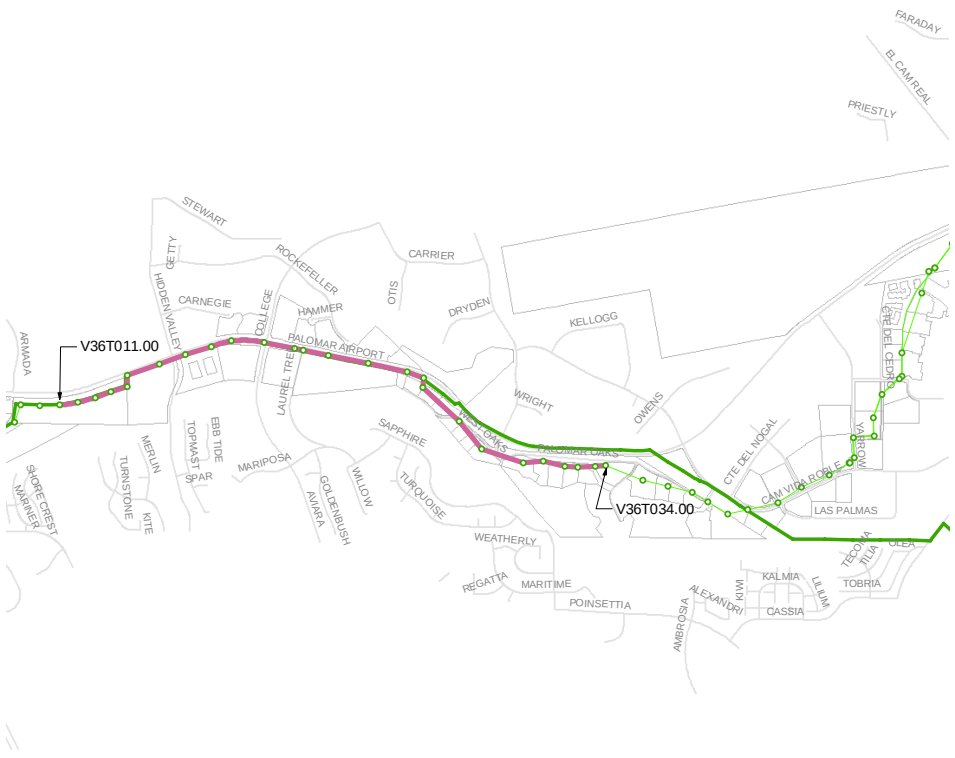
VICINITY MAP



RECOMMENDED CAPITAL IMPROVEMENT PROJECTS

OV1 VC3 RELIEF SEWER PROJECT

LOCATION MAP



LEGEND

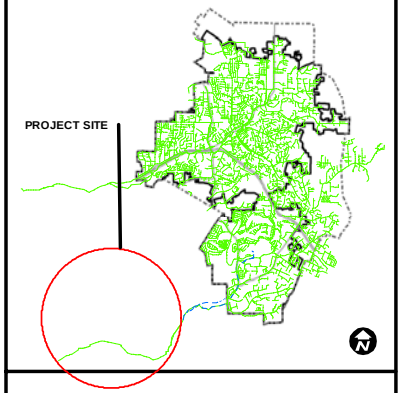
OV2 BUENA OUTFALL PHASE IV
- ULTIMATE LIMIT
- VALLECITOS INTERCEPTOR

SEWER COLLECTION SYSTEM
- GRAVITY MAIN
- FORCE MAIN
- MANHOLE
- RIGHT-OF-WAY ISSUES
- CITY OF VISTA BOUNDARY
- VISTA SPHERE OF INFLUENCE
- PARCELS

PROJECT TYPE	CAPACITY/CONDITION
PROJECT LENGTH	8,847 FT
TOTAL PROJECT COST	$4,560,640

PROJECT DESCRIPTION
UPSIZE EXISTING 24", 21", AND 18" BUENA INTERCEPTOR TO 27", 24", AND 21".

VICINITY MAP



RECOMMENDED CAPITAL IMPROVEMENT PROJECTS

OV2 BUENA OUTFALL PHASE IV

LOCATION MAP

LEGEND

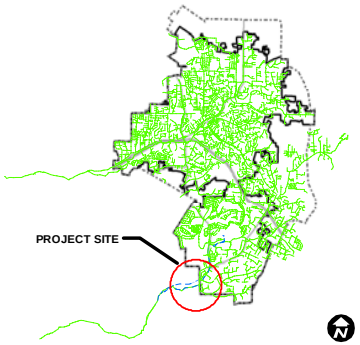
R1 FARADAY EASEMENT UPSIZE
- ULTIMATE LIMIT

SEWER COLLECTION SYSTEM
- GRAVITY MAIN
- FORCE MAIN
- MANHOLE
- RIGHT-OF-WAY ISSUES
- VISTA SPHERE OF INFLUENCE
- CITY OF VISTA BOUNDARY
- PARCELS

PROJECT TYPE	CAPACITY
PROJECT LENGTH	1,431 FT
TOTAL PROJECT COST	$482,811

PROJECT DESCRIPTION
UPSIZE EXISTING 12" SEWER LINE WEST OF MELROSE, BETWEEN THE RACEWAY PUMP STATION AND FARADAY, TO 15".

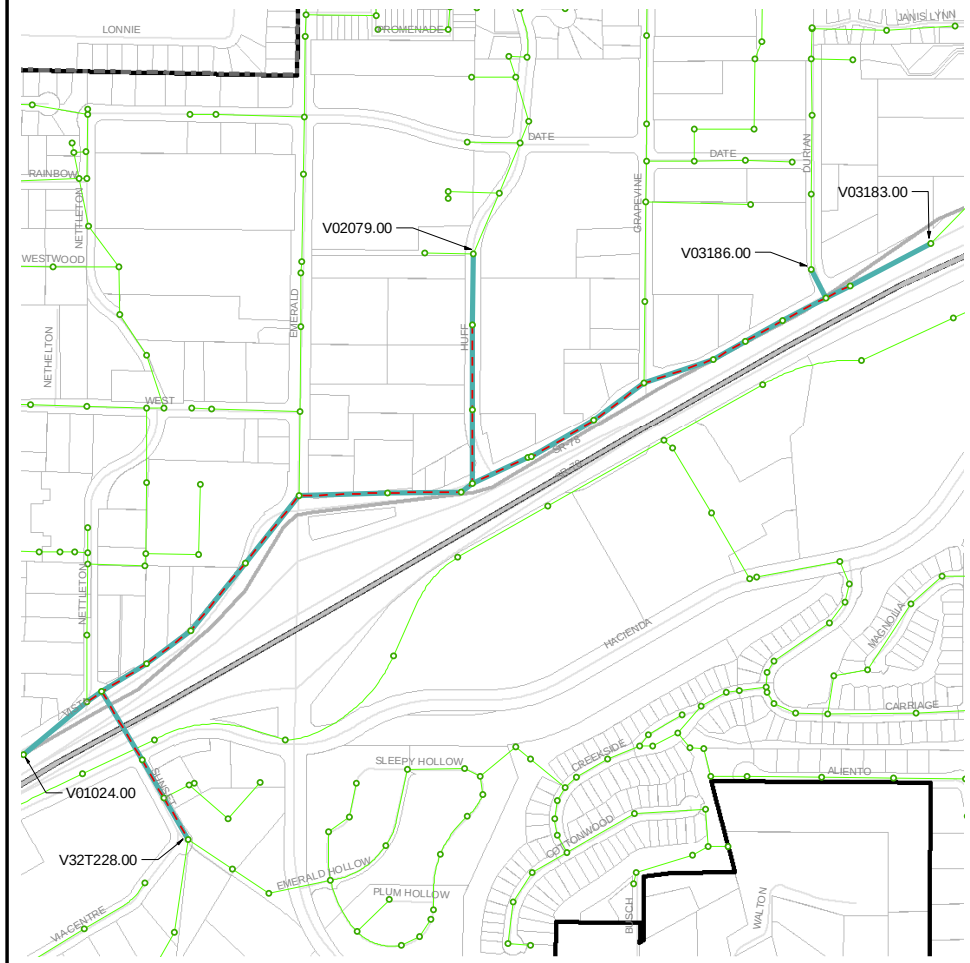
VICINITY MAP



RECOMMENDED CAPITAL IMPROVEMENT PROJECTS

R1 FARADAY EASEMENT SEWER UPSIZE

LOCATION MAP



LEGEND

V1 WEST VISTA WAY REPLACEMENT AND UPSIZE

- EXISTING LIMIT
- ULTIMATE LIMIT

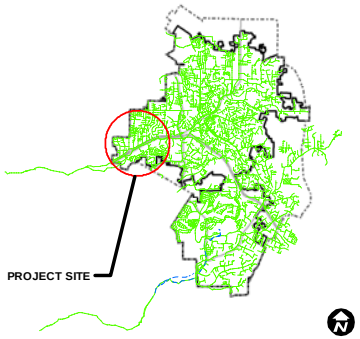
SEWER COLLECTION SYSTEM

- GRAVITY MAIN
- FORCE MAIN
- MANHOLE
- RIGHT-OF-WAY ISSUES
- VISTA SPHERE OF INFLUENCE
- CITY OF VISTA BOUNDARY
- PARCELS

PROJECT TYPE	CAPACITY/CONDITION
PROJECT LENGTH	6,344 FT
TOTAL PROJECT COST	$1,954,616

PROJECT DESCRIPTION
UPSIZE EXISTING 12", 10", AND 8" SEWER LINES ALONG SUNSET, VISTA, HUFF AND DURIAN, BETWEEN THE INTERSECTION OF VIA CENTRE/SUNSET, CEDAR, AND HILL, TO 15" AND 12".

VICINITY MAP



RECOMMENDED CAPITAL IMPROVEMENT PROJECTS

V1 WEST VISTA WAY REPLACEMENT AND UPSIZE

LOCATION MAP

LEGEND

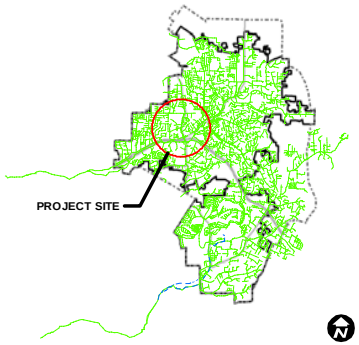
V2 HACIENDA / VISTA VILLAGE UPSIZE
- EXISTING LIMIT
- ULTIMATE LIMIT

SEWER COLLECTION SYSTEM
- GRAVITY MAIN
- FORCE MAIN
- MANHOLE
- RIGHT-OF-WAY ISSUES
- VISTA SPHERE OF INFLUENCE
- CITY OF VISTA BOUNDARY
- PARCELS

PROJECT TYPE	CAPACITY/MATERIAL
PROJECT LENGTH	4,026 FT
TOTAL PROJECT COST	$3,356,869

PROJECT DESCRIPTION
UPSIZE EXISTING 33", 30", 24", 21", AND 12" SEWER LINES ALONG HACIENDA AND VISTA VILLAGE, BETWEEN LA TORTUGA AND LADO DE LOMA, TO 42", 36", 30", 27", 21", 18", AND 15".

VICINITY MAP



RECOMMENDED CAPITAL IMPROVEMENT PROJECTS

V2 HACIENDA / VISTA VILLAGE UPSIZE

LOCATION MAP

LEGEND

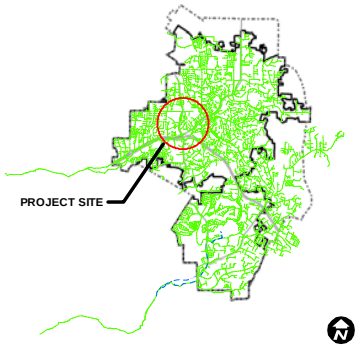
V3 NORTH MELROSE UPSIZE
- EXISTING LIMIT
- ULTIMATE LIMIT

SEWER COLLECTION SYSTEM
- GRAVITY MAIN
- FORCE MAIN
- MANHOLE
- RIGHT-OF-WAY ISSUES
- VISTA SPHERE OF INFLUENCE
- CITY OF VISTA BOUNDARY
- PARCELS

PROJECT TYPE	CAPACITY/CONDITION
PROJECT LENGTH	5,500 FT
TOTAL PROJECT COST	$1,615,217

PROJECT DESCRIPTION
UPSIZE EXISTING 10" AND 8" SEWER LINES ALONG MELROSE, BETWEEN HACIENDA AND OLIVE, TO 15" AND 12".

VICINITY MAP



RECOMMENDED CAPITAL IMPROVEMENT PROJECTS

V3 NORTH MELROSE UPSIZE

LOCATION MAP

LEGEND

V4 BROADWAY / MAIN SANTA FE UPSIZE

- EXISTING LIMIT
- ULTIMATE LIMIT

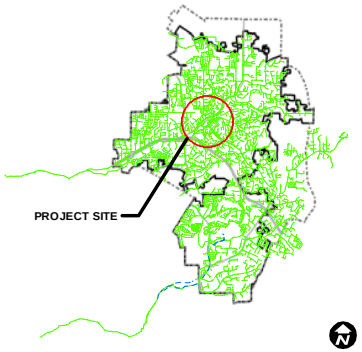
SEWER COLLECTION SYSTEM

- GRAVITY MAIN
- FORCE MAIN
- MANHOLE
- RIGHT-OF-WAY ISSUES
- VISTA SPHERE OF INFLUENCE
- CITY OF VISTA BOUNDARY
- PARCELS

PROJECT TYPE	CAPACITY
PROJECT LENGTH	3,347 FT
TOTAL PROJECT COST	$1,620,884

PROJECT DESCRIPTION
UPSIZE EXISTING 18" SEWER LINE ALONG SANTA FE, BROADWAY, CITRUS, MAIN AND VISTA VILLAGE, BETWEEN SANTA FE AND INTERSECTION OF ESCONDIDO/HILLSIDE, TO 24" AND 21".

VICINITY MAP



RECOMMENDED CAPITAL IMPROVEMENT PROJECTS

V4 MAIN / BROADWAY / SANTA FE UPSIZE

LOCATION MAP

LEGEND

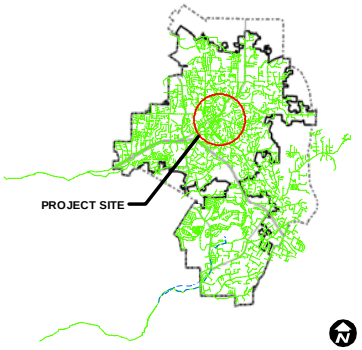
V5 EUCALYPTUS UPSIZE
- EXISTING LIMIT
- ULTIMATE LIMIT

SEWER COLLECTION SYSTEM
- GRAVITY MAIN
- FORCE MAIN
- MANHOLE
- RIGHT-OF-WAY ISSUES
- VISTA SPHERE OF INFLUENCE
- CITY OF VISTA BOUNDARY
- PARCELS

PROJECT TYPE	CAPACITY
PROJECT LENGTH	3,037 FT
TOTAL PROJECT COST	$1,034,641

PROJECT DESCRIPTION
UPSIZE EXISTING 12", 10", AND 8" SEWER LINES ALONG CITRUS, EUCALYPTUS, AND ESCONDIDO, BETWEEN BROADWAY AND AVALON, TO 18", 15", AND 12".

VICINITY MAP



RECOMMENDED CAPITAL IMPROVEMENT PROJECTS

V5 EUCALYPTUS / CITRUS UPSIZE

LOCATION MAP

LEGEND

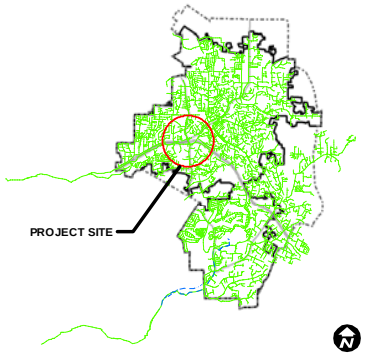
V6 SOUTH MELROSE UPSIZE
- ULTIMATE LIMIT

SEWER COLLECTION SYSTEM
- GRAVITY MAIN
- FORCE MAIN
- MANHOLE
- RIGHT-OF-WAY ISSUES
- VISTA SPHERE OF INFLUENCE
- CITY OF VISTA BOUNDARY
- PARCELS

PROJECT TYPE	CAPACITY/MATERIAL
PROJECT LENGTH	1,910 FT
TOTAL PROJECT COST	$644,623

PROJECT DESCRIPTION
UPSIZE EXISTING 10" SEWER LINE ALONG MELROSE, BETWEEN HACIENDA AND COUNTY COMPLEX, TO 15".

VICINITY MAP



RECOMMENDED CAPITAL IMPROVEMENT PROJECTS

V6 SOUTH MELROSE UPSIZE

LOCATION MAP

LEGEND

V7 VISTA SOUTH SANTA FE PHASE I UPSIZE

- EXISTING LIMIT
- ULTIMATE LIMIT

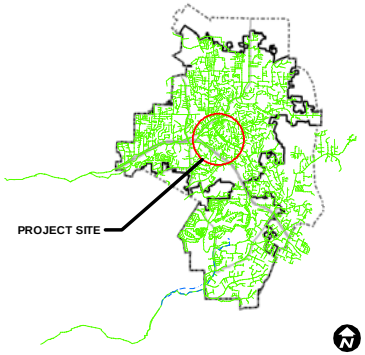
SEWER COLLECTION SYSTEM

- GRAVITY MAIN
- FORCE MAIN
- MANHOLE
- RIGHT-OF-WAY ISSUES
- VISTA SPHERE OF INFLUENCE
- CITY OF VISTA BOUNDARY
- PARCELS

PROJECT TYPE	CAPACITY/CONDITION
PROJECT LENGTH	3,171 FT
TOTAL PROJECT COST	$960,556

PROJECT DESCRIPTION
UPSIZE EXISTING 12", 8", AND 6" SEWER LINES ALONG SANTA FE, MERCANTILE, AND PALA VISTA, BETWEEN MAIN AND RINCON, TO 18", 15", AND 12".

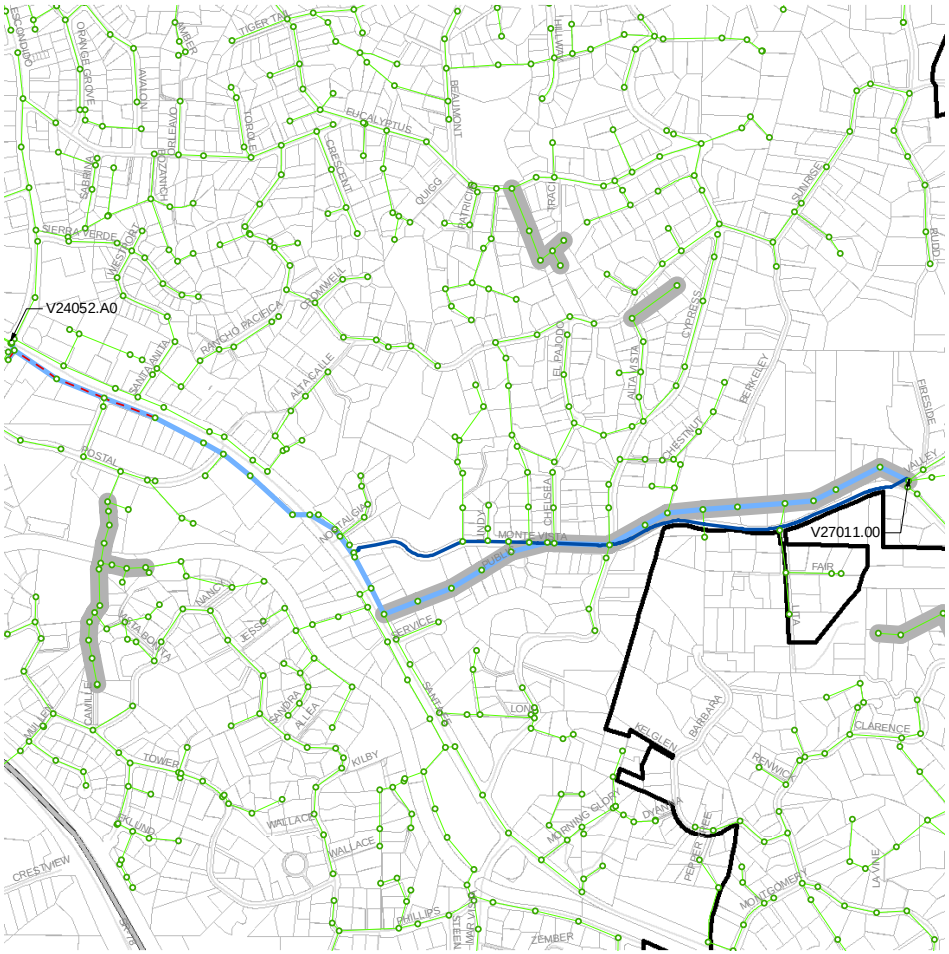
VICINITY MAP



RECOMMENDED CAPITAL IMPROVEMENT PROJECTS

V7 MERCANTILE UPSIZE

LOCATION MAP



LEGEND

V8 VISTA SOUTH SANTA FE PHASE II UPSIZE

- EXISTING LIMIT
- ULTIMATE LIMIT
- V8 REALIGNMENT

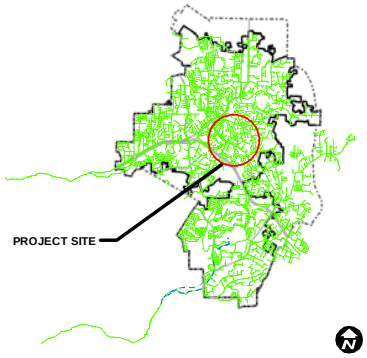
SEWER COLLECTION SYSTEM

- GRAVITY MAIN
- FORCE MAIN
- MANHOLE
- RIGHT-OF-WAY ISSUES
- VISTA SPHERE OF INFLUENCE
- CITY OF VISTA BOUNDARY
- PARCELS

PROJECT TYPE	CAPACITY/CONDITION
PROJECT LENGTH	8,358 FT
CONSTRUCTION + OVERHEAD	$2,491,964
EASEMENT CONTINGENCY	$302,454
TOTAL PROJECT COST	$2,794,418

PROJECT DESCRIPTION
UPSIZE EXISTING 8" SEWER LINE ALONG SANTA FE, SERVICE, AND MONTE VISTA, AND BETWEEN ESCONDIDO AND SERVICE, TO 15" AND 12".

VICINITY MAP



RECOMMENDED CAPITAL IMPROVEMENT PROJECTS

V8 MONTE VISTA / SOUTH SANTA FE REALIGNMENT AND UPSIZE

LOCATION MAP

LEGEND

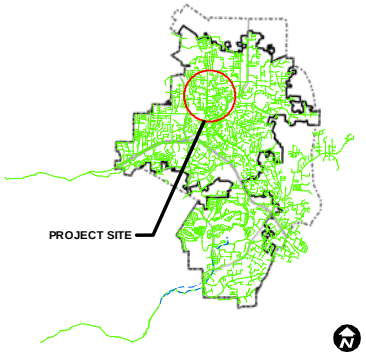
V9 NORTH SANTA FE UPSIZE
- EXISTING LIMIT
- ULTIMATE LIMIT

SEWER COLLECTION SYSTEM
- GRAVITY MAIN
- FORCE MAIN
- MANHOLE
- RIGHT-OF-WAY ISSUES
- VISTA SPHERE OF INFLUENCE
- CITY OF VISTA BOUNDARY
- PARCELS

PROJECT TYPE	CAPACITY
PROJECT LENGTH	3,979 FT
TOTAL PROJECT COST	$2,093,580

PROJECT DESCRIPTION
UPSIZE EXISTING 18" AND 15" SEWER LINES ALONG SANTA FE, BETWEEN ORANGE AND INTERSECTION OF LOS ANGELES/TOWNSITE, TO 24" AND 18".

VICINITY MAP



RECOMMENDED CAPITAL IMPROVEMENT PROJECTS

V9 NORTH SANTA FE UPSIZE

LOCATION MAP

LEGEND

V10 NORTH SANTA FE / CANANEA / CALERA UPSIZE

- EXISTING LIMIT
- ULTIMATE LIMIT

SEWER COLLECTION SYSTEM

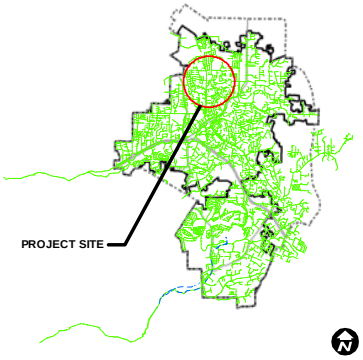
- GRAVITY MAIN
- FORCE MAIN
- MANHOLE
- RIGHT-OF-WAY ISSUES
- VISTA SPHERE OF INFLUENCE
- CITY OF VISTA BOUNDARY
- PARCELS

PROJECT TYPE	CAPACITY/CONDITION
PROJECT LENGTH	2,830 FT
CONSTRUCTION + OVERHEAD	$776,628
EASEMENT CONTINGENCY	$86,197
TOTAL PROJECT COST	$862,825

PROJECT DESCRIPTION

UPSIZE EXISTING 10" AND 8"SEWER LINES ALONG CANANEA AND CALERA, BETWEEN SANTA FE AND BOBIER, TO 15" AND 12".

VICINITY MAP



RECOMMENDED CAPITAL IMPROVEMENT PROJECTS

V10 NORTH SANTA FE / CANANEA / CALERA UPSIZE

LOCATION MAP

LEGEND

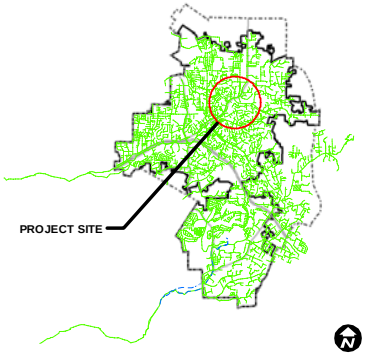
V11 EAST VISTA WAY / VALE TERRACE UPSIZE
- EXISTING LIMIT
- ULTIMATE LIMIT

SEWER COLLECTION SYSTEM
- GRAVITY MAIN
- FORCE MAIN
- MANHOLE
- RIGHT-OF-WAY ISSUES
- VISTA SPHERE OF INFLUENCE
- CITY OF VISTA BOUNDARY
- PARCELS

PROJECT TYPE	CAPACITY
PROJECT LENGTH	1,853 FT
TOTAL PROJECT COST	$769,770

PROJECT DESCRIPTION
UPSIZE 18" AND 8" SEWER LINES ALONG VISTA AND VALE TERRACE, BETWEEN TOWNSITE AND INTERSECTION OF BEL AIR/WILLIAMSTON, TO 21", 18", AND 15".

VICINITY MAP



RECOMMENDED CAPITAL IMPROVEMENT PROJECTS

V11 EAST VISTA WAY/ VALE TERRACE UPSIZE

APPENDIX B

INTERAGENCY AGREEMENTS

Appendix B, as provided by City staff, gives a brief summary of active Sewer Agreements for the City of Vista and Buena Sanitation District. A complete detail of the agreements is accessible on the City Clerk's Laser fiche Archive System. The system is available at http://www.cityofvista.com under Public Records. Documents may be found by searching on relevant dates, actions, or other key words.

Interagency Agreements / Actions (COV / BSD)

No.	Date	Title	BSD	COV	EWA	VWD	COC	COO	CSM	CSD	Other	Notes
1.0	6/28/1998	CC Res 98-104 A Resolution of the City Council of the City of Vista Requesting That the Board of Supervisors of the County of San Diego Designate the City Council of the City of Vista as the Board of Directors of the Buena County Sanitation District	X	X						X		Current Authorization for City Council to act as Board of Directors of BSD
2.0	10/20/1998	Resolution of the Board of Supervisors of the County of San Diego to Designate the City Council of the City of Vista as the Board of Directors of the Buena Sanitation District	X	X						X		County Resolution 98-289
2.1	6/23/1992	CC Res 92-91 A resolution of the City of Vista Terminating an Agreement Between the County of San Diego, the City of Vista and the Buena Sanitation District for the Performance of Services to the Sanitation District Effective June 30, 1993 and Authorizing the City Manager to Give Notice of Termination										2 members of Council and 1 member of County Board of Supervisors met as BSD Board until 1998.
3.0	1/22/1990	Agreement Between County of San Diego, the City of Vista and Buena Sanitation District Empowering County and City to Perform Services for the Sanitation District	X	X						X		Terminated by CC Res 92-91
4.0	9/12/1983	Minutes of the Regular Meeting of the Board of Directors of the Vista Sanitation District, Held on Monday, September 12, 1983. New Business item 81- Vista Sanitation District Newsletter No. 20	X									Last VSD Minutes, recognizing County approval of LAFCO reorganization of VSD to COVSD
4.1	9/14/1983	San Diego County Local Agency Formation Commission Certificate of Completion "Dissolution of the Vista Sanitation District (DT83-1)		X						X		Dissolves VSD
5.0	8/8/1989	Agreement Between the City of San Marcos and Buena Sanitation District Empowering District to Perform Services for City	X						X			Amendment in process so Buena can continue to bill directly - 2/26/7 (Detachment Area IV)
6.0	6/23/1980	Resolution 80-118, Resolution of the City Council of the City of Vista Declaring its Intent to Initiate Proceeding for the Reorganization of the Vista and Buena Sanitation Districts	X	X								started LAFCO proceedings for reorganization
7.0	3/22/1976	Agreement Between the City of Vista and the Buena Sanitation District of the County of San Diego for the Use of District's Sewer Lines and Authorizing the City to Collect Connection Fees and Sewer Service Charges	X	X								Functionally superseded by 1/22/1990 agreement.
8.0	7/28/1998	Memorandum of Understanding for Operation and Maintenance of Shadowridge Water Reclamation Facility and Buena Pump Station	X		X							Current. SWRF Mothballed since 2002
9.0	2/22/2006	Memorandum of Understanding for Operation and Maintenance of Raceway Pump Station		X	X							Current
10.0	1/26/1998	Memorandum of Understanding for Operation and Maintenance of Buena Vista Pump Station and Agua Hedionda Pump Station		X	X		X					Current
11.0	12/10/1990	Cancellation of City Sewage Capacity Lease to Buena Sanitation District	X	X								COV Res 90-208 Voids Treatment capacity lease in Article 9 of 5/20/1986 agreement Terminates 11/20/84 Agmt (Which was already expired).
12.0	5/20/1986	Agreement Between the Buena Sanitation district and the City of Vista for the Lease by Vista of Capacity in the Buena Pump Station, Force Main and Encinas Land Outfall and the Joint Use of the Melrose Sewer	X	X								Treatment capacity lease clause voided by Res 90-208. Article 2 requires COV to rebuild RPS and requires BSD to accept COV flows with COV cost participation in work on BSD outfall.
13.0	11/20/1984	Agreement Between the Buena Sanitation District and the City of Vista for the interim Use of the Buena Sanitation District's Encina Outfall Sewer Line	X	X								EXPIRED 6/30/1986. Limit of 2.5mgd from Raceway Basins, Vista to meter flow, County Contract 70667R.
14.0	12/15/1981	Agreement Between the Buena Sanitation District and City of Carlsbad for the Lease of Capacity in the Encina Outfall	X				X					Gives purchase option to COC for price of lease. Have they made all lease payments on time? If not it is voided.
15.0	12/15/1987	Lease of Additional Capacity in the Encina Outfall	X				X					75% trigger for negotiation. Add'l lease payments due ($7,500/yr)
16.0	1/8/1985	Palomar Joint Land Outfall Interceptor Interagency Agreement		X		X	X					VWD&COC have interest in renegotiation for ultimate flow mgmt.
17.0	2/26/2002	Agreement for Ownership, Operation, and Maintenance of the Vista / Carlsbad Interceptor Sewer		X			X					Current, need capacity improvement in VC3, Oceanside interested in ownership or lease
18.0	10/24/1984	An Agreement Between the City of Oceanside and the City of Vista for Transfer of Sewage Flows Between Agencies		X				X				Last invoice through 2000. New billing due, several connections not properly agreed upon…negotiating with Oside now 2/26/7
19.0	5/28/1991	Agreement for Exchange of Sewage Flows Between the Vallecitos Water District and the City of Vista (Raceway Basin Flow Agreement)		X		X						(Detachment Area IV) Billing system needs update to function
19.1	2/27/2007	First Amendment to Agreement for Exchange of Sewage Flows Between the Vallecitos Water District and the City of Vista (Raceway Basin Flow Agreement)		X		X						To add a portion of San Marcos Sunset Park
20.0	11/12/2002	Agreement for Transfer of Sewage Flows Between the City of Vista and Buena Sanitation District	X	X								to serve Gamboni Ranch Agreement. Limit of 40 EDUs. Second units have exceeded that. Need amendment for this reason, for Gamboni II development (application submitted 2/26/2007), and for Marine View Annexation if that develops
21.0	8/27/2002	Agreement for Exchange of Sewer Flows Between the Vallecitos Water District and Buena Sanitation District	X			X						Rancho Santalina - Billing system needs update to function
22.0	8/27/2002	Termination and Release Agreement between BSD and Rancho Santalina LP	X								X	Developer Agreement, terms and conditions satisfied.
23.0	1/28/1992	Agreement for Exchange of Sewer Flows Between the Vallecitos Water District and Buena Sanitation District	X			X						Terminated by Article 19 of 8/27/2002 Agreement for Rancho Santalina
24.0	2/11/2003	Agreement for Sewage Flows Between the City of Carlsbad and Buena Sanitation District	X				X					Accommodates Carlsbad Raceway And Forum with Vista's Raceway PS. Expecting one-time invoice in 2008 when Carlsbad El Fuerte LS is complete, thence Agmt. will be null.
25.0	2/8/2000	Revised Basic Agreement for Ownership, Operation and Maintenance of a Joint Sewage System as Amended February 8, 2000	X	X	X	X	X					Integrates responsibilities of EWA JPA in service to all 6 member agencies (BSD, COV, VWD, LWD, COC, and COE)
26.0	3/24/1992	EWA Flow Metering Policy	X	X	X	X	X					Will be replaced by new Policy soon. Draft due soon. 3/12/7
27.0	3/24/1992	Encina Centralized Flow Metering Program Operation and Maintenance Agreement (Ref. 2503.5	X	X	X	X	X					EWA is pursuing a comprehensive revision now (3/29/2007)
28.0	11/30/1981	San Marcos County Water District, Buena Sanitation District and the City of Carlsbad Agreement for the Operation and Maintenance of an Ocean Failsafe Treated Effluent Outfall Pipeline	X			X		X				Together with a "Consent to Common Use Agreement" for the easements to cover the "Excess Effluent" (EE) Failsafe Outfall line.

APPENDIX C

MODELING RESULTS

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B01001.00-B01003.00	86	507.0	8.0	0.010	0.781	0.013	0.090	0.014	0.094	0.013	0.090	0.014	0.094
B01002.00-B01003.00	3300	101.0	8.0	0.035	1.461	0.001	0.042	0.002	0.051	0.001	0.044	0.002	0.052
B01003.00-B01004.00	85	257.0	8.0	0.038	1.522	0.014	0.071	0.018	0.079	0.015	0.070	0.018	0.078
B01004.00-B01005.00	82	338.0	8.0	0.042	1.601	0.018	0.098	0.022	0.111	0.016	0.101	0.021	0.114
B01005.00-B01006.00	81	354.0	8.0	0.006	0.605	0.019	0.144	0.024	0.161	0.022	0.159	0.028	0.175
B01006.00-B01007.00	80	401.0	8.0	0.004	0.494	0.030	0.213	0.037	0.233	0.037	0.230	0.044	0.249
B01007.00-B01010.00	79	405.0	8.0	0.004	0.494	0.039	0.189	0.047	0.206	0.044	0.200	0.052	0.217
B01008.00-B01009.00	78	149.0	6.0	0.002	0.162	0.003	0.087	0.004	0.103	0.002	0.073	0.003	0.092
B01009.00-B01010.00	77	150.0	6.0	0.070	0.959	0.003	0.097	0.005	0.113	0.004	0.106	0.006	0.120
B01010.00-B01011.00	76	405.0	8.0	0.036	1.482	0.042	0.154	0.054	0.174	0.048	0.171	0.060	0.190
B01011.00-B01013.00	75	499.0	8.0	0.013	0.890	0.043	0.151	0.056	0.171	0.053	0.166	0.066	0.185
B01012.00-B01013.00	3301	139.8	8.0	0.078	2.181	0.002	0.068	0.004	0.077	0.002	0.068	0.003	0.077
B01013.00-B01014.00	71	428.0	8.0	0.082	2.236	0.058	0.142	0.073	0.158	0.061	0.141	0.076	0.158
B01014.00-B01020.00	70	125.0	8.0	0.019	1.077	0.059	0.158	0.075	0.177	0.066	0.167	0.082	0.186
B01015.00-B01016.00	299	400.0	8.0	0.072	2.096	0.006	0.047	0.008	0.050	0.006	0.051	0.007	0.055
B01016.00-B01017.00	298	350.0	8.0	0.064	1.976	0.010	0.052	0.013	0.057	0.016	0.066	0.019	0.070
B01017.00-B01018.00	161	350.0	8.0	0.076	2.153	0.010	0.062	0.014	0.073	0.020	0.091	0.023	0.098
B01018.00-B01020.00	156	350.0	8.0	0.014	0.924	0.011	0.109	0.015	0.126	0.025	0.139	0.030	0.153
B01019.00-B01020.00	153	476.5	8.0	0.005	0.552	0.005	0.107	0.007	0.120	0.009	0.127	0.010	0.138
B01020.00-B01021.00	140	350.0	8.0	0.047	1.693	0.075	0.290	0.098	0.328	0.100	0.330	0.123	0.363
B01021.00-B01024.00	130	350.0	8.0	0.001	0.247	0.079	0.306	0.105	0.348	0.105	0.348	0.130	0.385
B01021.A0-B01021.00	7650	46.0	8.0	0.006	0.605	0.003	0.242	0.004	0.273	0.005	0.275	0.006	0.303
B01022.00-B01023.00	121	235.0	8.0	0.085	2.277	0.001	0.027	0.004	0.037	0.005	0.036	0.007	0.044
B01022.A0-B01022.00	7648	6.0	8.0	0.000	0.000	0.001	0.038	0.003	0.050	0.003	0.053	0.004	0.062
B01023.00-B01024.00	289	225.0	8.0	0.078	2.181	0.005	0.105	0.008	0.124	0.006	0.120	0.010	0.137
B01024.00-B01025.00	700	350.0	8.0	0.049	1.729	0.085	0.151	0.115	0.174	0.112	0.173	0.142	0.194
B01025.00-B01026.00	691	250.0	8.0	0.110	2.590	0.087	0.137	0.118	0.160	0.116	0.158	0.147	0.178
B01026.00-B01050.00	690	176.0	8.0	0.055	1.832	0.088	0.180	0.121	0.212	0.119	0.214	0.153	0.241
B01026.A0-B01026.00	7649	36.0	8.0	0.005	0.552	0.000	0.081	0.001	0.102	0.003	0.109	0.005	0.123
B01027.00-B01028.00	3308	20.5	8.0	0.001	0.247	0.004	0.067	0.005	0.076	0.005	0.075	0.006	0.082
B01028.00-B01030.00	689	364.6	8.0	0.067	2.022	0.004	0.060	0.006	0.074	0.005	0.084	0.007	0.094
B01029.00-B01030.00	681	64.0	8.0	0.005	0.552	0.005	0.076	0.006	0.089	0.015	0.122	0.016	0.131
B01030.00-B01034.00	683	217.1	8.0	0.005	0.552	0.009	0.157	0.013	0.180	0.020	0.203	0.025	0.222
B01031.00-B01032.00	533	115.2	8.0	0.066	2.006	0.026	0.083	0.032	0.091	0.040	0.102	0.046	0.109
B01031.B0-B01031.E0	527	212.0	8.0	0.006	0.605	0.000	0.083	0.002	0.096	0.009	0.134	0.011	0.140
B01031.D0-B01031.E0	530	176.0	8.0	0.016	0.988	0.001	0.087	0.002	0.096	0.017	0.137	0.019	0.141
B01031.E0-B01031.F0	531	333.6	8.0	0.016	0.988	0.026	0.112	0.029	0.118	0.040	0.137	0.043	0.143
B01031.F0-B01031.00	532	101.6	8.0	0.060	1.913	0.026	0.076	0.031	0.083	0.040	0.093	0.045	0.099
B01032.00-B01033.00	680	240.1	8.0	0.071	2.081	0.033	0.088	0.040	0.096	0.049	0.106	0.056	0.113
B01033.00-B01034.00	684	293.0	8.0	0.103	2.507	0.037	0.156	0.045	0.174	0.053	0.188	0.061	0.203
B01034.00-B01035.00	679	334.0	8.0	0.007	0.653	0.052	0.188	0.066	0.211	0.077	0.227	0.091	0.247
B01035.00-B01036.00	675	263.0	8.0	0.022	1.158	0.055	0.174	0.070	0.195	0.081	0.208	0.096	0.226
B01036.00-B01037.00	674	325.0	10.0	0.006	1.097	0.058	0.163	0.074	0.184	0.083	0.193	0.099	0.211
B01037.00-B01038.00	673	326.0	10.0	0.005	1.001	0.061	0.168	0.078	0.190	0.086	0.199	0.103	0.219
B01038.00-B01039.00	672	253.0	10.0	0.005	1.001	0.061	0.175	0.081	0.201	0.088	0.208	0.107	0.231
B01038.A0-B01038.00	1834	27.0	6.0	0.057	0.866	0.001	0.146	0.002	0.171	0.002	0.178	0.003	0.198
B01039.00-B01047.00	671	115.4	10.0	0.004	0.896	0.061	0.202	0.082	0.236	0.088	0.247	0.108	0.276
B01040.00-B01041.00	3303	45.0	8.0	0.077	2.167	0.000	0.012	0.001	0.025	0.000	0.015	0.001	0.028
B01041.00-B01043.00	3304	180.0	8.0	0.021	1.132	0.001	0.029	0.003	0.043	0.002	0.035	0.004	0.047
B01043.00-B01044.00	670	309.0	8.0	0.055	1.832	0.004	0.050	0.007	0.070	0.005	0.062	0.009	0.082
B01044.00-B01045.00	669	306.0	8.0	0.004	0.494	0.004	0.070	0.009	0.093	0.006	0.077	0.011	0.101
B01045.00-B01046.00	3306	191.5	8.0	0.037	1.502	0.009	0.055	0.015	0.070	0.012	0.063	0.018	0.076
B01046.00-B01047.00	3307	168.4	8.0	0.173	3.248	0.009	0.158	0.016	0.188	0.023	0.202	0.029	0.226
B01047.00-B01048.00	668	232.7	10.0	0.006	1.097	0.071	0.173	0.099	0.204	0.110	0.215	0.139	0.241
B01048.00-B01049.00	667	344.0	10.0	0.025	2.239	0.071	0.122	0.100	0.144	0.110	0.151	0.140	0.169

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B01049.00-B01050.00	665	398.0	10.0	0.027	2.327	0.071	0.144	0.102	0.171	0.112	0.176	0.143	0.199
B01050.00-B01051.00	664	249.0	12.0	0.026	3.713	0.158	0.142	0.224	0.169	0.231	0.172	0.296	0.194
B01051.00-B01053.00	663	263.0	12.0	0.024	3.567	0.158	0.145	0.225	0.172	0.235	0.174	0.301	0.197
B01052.00-B01053.00	3309	26.0	8.0	0.004	0.494	0.005	0.142	0.006	0.166	0.004	0.160	0.005	0.181
B01053.00-B01055.00	528	500.0	12.0	0.024	3.567	0.163	0.147	0.232	0.174	0.238	0.176	0.307	0.199
B01054.00-B01055.00	3310	26.0	8.0	0.007	0.653	0.006	0.140	0.007	0.163	0.003	0.155	0.005	0.176
B01055.00-B01056.00	525	272.0	12.0	0.024	3.567	0.169	0.148	0.240	0.176	0.242	0.176	0.313	0.200
B01056.00-B01057.J0	524	235.5	12.0	0.024	3.567	0.169	0.169	0.241	0.203	0.242	0.212	0.314	0.240
B01057.00-B01058.00	523	320.0	12.0	0.114	7.775	0.169	0.304	0.254	0.403	0.293	0.307	0.378	0.476
B01057.A0-B01057.B0	8071	97.0	8.0	0.013	0.890	0.000	0.000	0.001	0.031	0.003	0.062	0.005	0.069
B01057.B0-B01057.C0	8072	226.8	8.0	0.016	0.988	0.000	0.000	0.002	0.043	0.013	0.081	0.015	0.091
B01057.C0-B01057.D0	8073	237.6	8.0	0.014	0.924	0.000	0.000	0.003	0.044	0.013	0.082	0.016	0.092
B01057.D0-B01057.E0	8074	168.3	8.0	0.051	1.764	0.000	0.000	0.005	0.045	0.024	0.092	0.028	0.101
B01057.E0-B01057.F0	8075	92.9	8.0	0.013	0.890	0.000	0.000	0.006	0.060	0.024	0.113	0.029	0.127
B01057.F0-B01057.G0	7818	300.0	8.0	0.009	0.741	0.000	0.000	0.007	0.072	0.024	0.154	0.031	0.168
B01057.G0-B01057.H0	7819	320.7	8.0	0.009	0.741	0.000	0.000	0.008	0.074	0.047	0.171	0.055	0.185
B01057.H0-B01057.I0	7836	335.0	8.0	0.012	0.856	0.000	0.000	0.009	0.075	0.047	0.163	0.056	0.178
B01057.I0-B01057.J0	7972	149.5	8.0	0.012	0.856	0.000	0.142	0.010	0.211	0.051	0.269	0.062	0.301
B01057.J0-B01057.00	8301	114.5	12.0	0.021	3.337	0.169	0.146	0.253	0.177	0.293	0.190	0.377	0.215
B01058.00-B01060.00	522	478.7	12.0	0.008	2.060	0.988	0.491	1.571	0.658	0.902	0.466	1.482	0.901
B01060.00-B01061.00	3283	112.0	12.0	0.009	2.184	0.987	0.601	1.572	0.817	0.902	0.726	1.484	1.000
B01061.00-B01062.00	519	404.0	18.0	0.007	5.680	2.716	0.562	4.678	0.805	4.586	0.792	6.449	1.000
B01062.00-B01063.00	3312	499.0	18.0	0.005	4.801	2.716	0.514	4.679	0.726	4.586	0.715	6.450	0.939
B01063.00-B01065.00	512	247.0	18.0	0.016	8.587	2.716	0.513	4.681	0.721	4.586	0.708	6.450	0.939
B01064.00-B01065.00	3313	21.2	8.0	0.001	0.247	0.011	1.000	0.012	1.000	0.031	1.000	0.039	1.000
B01065.00-B01068.00	506	278.0	21.0	0.002	4.580	2.748	0.527	4.715	0.756	4.586	0.739	6.472	1.000
B01066.00-B01068.00	3315	22.8	8.0	0.001	0.247	0.008	1.000	0.011	1.000	0.011	1.000	0.044	1.000
B01067.00-B01068.00	3314	20.9	8.0	0.001	0.247	0.008	1.000	0.011	1.000	0.011	1.000	0.044	1.000
B01068.00-B01093.00	505	502.0	21.0	0.003	5.609	2.748	0.519	4.718	0.767	4.586	0.752	6.461	1.000
B01069.00-B01070.00	504	111.0	8.0	0.017	1.018	0.001	0.026	0.002	0.038	0.010	0.072	0.011	0.077
B01070.00-B01071.00	503	167.0	8.0	0.018	1.048	0.001	0.030	0.003	0.047	0.012	0.098	0.014	0.104
B01071.00-B01075.00	500	122.0	8.0	0.018	1.048	0.002	0.057	0.006	0.076	0.033	0.131	0.036	0.139
B01072.00-B01073.00	206	206.0	8.0	0.038	1.522	0.003	0.041	0.004	0.047	0.002	0.039	0.003	0.046
B01073.00-B01074.00	199	296.0	8.0	0.039	1.542	0.007	0.056	0.009	0.064	0.007	0.057	0.010	0.064
B01074.00-B01075.00	493	306.0	8.0	0.033	1.419	0.012	0.073	0.015	0.086	0.012	0.102	0.015	0.112
B01075.00-B01076.00	488	292.0	8.0	0.019	1.077	0.014	0.081	0.022	0.101	0.046	0.144	0.054	0.155
B01076.00-B01079.00	483	292.0	8.0	0.021	1.132	0.016	0.085	0.025	0.107	0.053	0.153	0.062	0.166
B01077.00-B01078.00	478	182.0	8.0	0.044	1.638	0.001	0.013	0.002	0.026	0.004	0.039	0.005	0.044
B01078.00-B01079.00	471	226.0	8.0	0.063	1.960	0.001	0.051	0.003	0.070	0.007	0.101	0.009	0.111
B01079.00-B01080.00	466	164.0	8.0	0.038	1.522	0.019	0.079	0.032	0.100	0.064	0.140	0.076	0.152
B01080.00-B01082.00	459	247.0	8.0	0.077	2.167	0.021	0.110	0.034	0.167	0.068	0.231	0.082	0.263
B01081.00-B01082.00	449	123.0	8.0	0.023	1.184	0.002	0.092	0.025	0.173	0.048	0.238	0.071	0.279
B01081.A0-B01081.B0	7848	173.5	8.0	0.040	1.562	0.001	0.017	0.004	0.043	0.012	0.070	0.016	0.079
B01081.AA-B01081.AB	7849	325.0	8.0	0.013	0.890	0.001	0.020	0.002	0.032	0.007	0.064	0.008	0.069
B01081.AB-B01081.A0	7850	200.8	8.0	0.038	1.522	0.001	0.015	0.003	0.035	0.012	0.064	0.015	0.070
B01081.B0-B01081.CH	7839	51.6	8.0	0.011	0.819	0.001	0.024	0.005	0.063	0.013	0.085	0.018	0.102
B01081.C0-B01081.D0	7846	93.6	8.0	0.014	0.924	0.002	0.036	0.017	0.096	0.027	0.117	0.042	0.146
B01081.CA-B01081.CC	7855	203.7	8.0	0.005	0.552	0.000	0.025	0.001	0.051	0.002	0.048	0.003	0.065
B01081.CB-B01081.CC	7841	73.7	8.0	0.016	0.988	0.000	0.017	0.001	0.045	0.001	0.041	0.002	0.057
B01081.CC-B01081.CD	7856	156.4	8.0	0.005	0.552	0.001	0.032	0.004	0.074	0.003	0.067	0.007	0.093
B01081.CD-B01081.CE	7854	54.6	8.0	0.006	0.605	0.001	0.028	0.006	0.064	0.006	0.065	0.010	0.086
B01081.CE-B01081.CF	7853	79.2	8.0	0.040	1.562	0.001	0.020	0.007	0.043	0.008	0.047	0.014	0.060
B01081.CF-B01081.CG	7852	171.6	8.0	0.100	2.470	0.001	0.020	0.008	0.047	0.008	0.048	0.015	0.063
B01081.CG-B01081.CH	7851	67.9	8.0	0.033	1.419	0.002	0.026	0.010	0.064	0.011	0.074	0.019	0.094
B01081.CH-B01081.C0	7840	272.3	8.0	0.028	1.307	0.002	0.033	0.016	0.086	0.024	0.106	0.038	0.131

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B01081.D0-B01081.E0	7847	165.8	8.0	0.014	0.924	0.002	0.041	0.018	0.114	0.027	0.150	0.043	0.182
B01081.E0-B01081.F0	7845	163.1	8.0	0.015	0.957	0.002	0.035	0.019	0.098	0.038	0.135	0.055	0.161
B01081.F0-B01081.G0	7843	61.8	8.0	0.041	1.581	0.002	0.025	0.020	0.073	0.038	0.097	0.056	0.118
B01081.G0-B01081.H0	7844	265.8	8.0	0.042	1.601	0.002	0.034	0.022	0.100	0.038	0.137	0.058	0.166
B01081.H0-B01081.I0	7838	112.6	8.0	0.009	0.741	0.002	0.043	0.023	0.129	0.047	0.180	0.067	0.216
B01081.I0-B01081.00	7837	77.7	8.0	0.010	0.781	0.002	0.039	0.024	0.119	0.047	0.164	0.069	0.198
B01082.00-B01083.00	114	249.0	8.0	0.010	0.781	0.023	0.118	0.061	0.188	0.117	0.260	0.155	0.299
B01083.00-B01084.00	113	141.0	8.0	0.071	2.081	0.024	0.076	0.063	0.120	0.120	0.163	0.159	0.187
B01084.00-B01085.00	102	99.0	8.0	0.070	2.066	0.024	0.073	0.065	0.117	0.120	0.157	0.160	0.181
B01085.00-B01086.00	287	140.0	8.0	0.064	1.976	0.024	0.091	0.066	0.146	0.120	0.195	0.161	0.227
B01086.00-B01088.00	96	48.0	8.0	0.011	0.819	0.024	0.110	0.067	0.180	0.120	0.239	0.162	0.278
B01087.00-B01088.00	2127	5.0	8.0	0.000	0.000	0.002	0.117	0.001	0.191	0.010	0.254	0.002	0.296
B01088.00-B01089.00	95	204.0	8.0	0.022	1.158	0.025	0.101	0.069	0.166	0.120	0.218	0.165	0.255
B01089.00-B01090.00	93	58.0	8.0	0.023	1.184	0.025	0.085	0.070	0.142	0.120	0.183	0.166	0.215
B01090.00-B01091.00	92	96.0	8.0	0.037	1.502	0.025	0.098	0.071	0.165	0.120	0.212	0.167	0.250
B01091.00-B01092.00	91	78.0	8.0	0.014	0.924	0.025	0.113	0.073	0.193	0.120	0.246	0.168	0.293
B01092.00-B01093.00	90	86.0	8.0	0.012	0.856	0.024	0.116	0.074	0.199	0.120	0.253	0.169	0.346
B01093.00-B01096.00	89	53.5	21.0	0.002	4.580	2.772	0.605	4.792	0.863	4.705	0.852	6.627	1.000
B01094.00-B01096.00	3317	25.6	8.0	0.000	0.000	0.008	1.000	0.008	1.000	0.010	1.000	0.012	1.000
B01095.00-B01096.00	3316	32.0	8.0	0.000	0.000	0.008	1.000	0.008	1.000	0.009	1.000	0.012	1.000
B01096.00-B01097.00	88	440.0	21.0	0.002	4.580	2.772	0.481	4.795	0.649	4.705	0.642	6.621	0.726
B01097.00-B01099.00	69	383.0	21.0	0.024	15.865	2.772	0.384	4.796	0.533	4.705	0.526	6.620	0.726
B01098.00-B01099.00	68	12.7	8.0	0.000	0.000	0.014	1.000	0.009	1.000	0.011	1.000	0.037	1.000
B01099.00-B01100.00	67	524.0	21.0	0.003	5.609	2.772	0.511	4.798	0.745	4.705	0.733	6.625	1.000
B01100.00-B01101.00	66	521.0	21.0	0.002	4.580	2.772	0.530	4.799	0.754	4.705	0.743	6.624	0.932
B01101.00-B01127.00	65	446.0	21.0	0.005	7.241	2.772	0.405	4.800	0.545	4.705	0.539	6.623	0.662
B01102.00-B01103.00	3319	24.2	8.0	0.001	0.247	0.006	0.083	0.007	0.090	0.026	0.163	0.027	0.167
B01103.00-B01105.00	64	227.0	8.0	0.012	0.856	0.006	0.060	0.008	0.073	0.026	0.123	0.029	0.130
B01104.00-B01105.00	63	21.7	8.0	0.001	0.247	0.000	0.031	0.001	0.059	0.001	0.093	0.001	0.102
B01105.00-B01106.00	62	226.0	8.0	0.015	0.957	0.006	0.056	0.010	0.074	0.026	0.115	0.031	0.124
B01106.00-B01107.00	61	42.0	8.0	0.012	0.856	0.006	0.048	0.013	0.069	0.026	0.098	0.033	0.110
B01106.A0-B01106.00	60	19.3	8.0	0.001	0.247	0.000	0.025	0.001	0.056	0.001	0.075	0.001	0.086
B01107.00-B01111.A0	2121	20.0	8.0	0.006	0.605	0.006	0.057	0.014	0.087	0.026	0.116	0.034	0.133
B01108.00-B01109.00	58	296.0	8.0	0.023	1.184	0.005	0.064	0.007	0.070	0.007	0.080	0.009	0.085
B01109.00-B01110.00	57	160.0	8.0	0.011	0.819	0.007	0.064	0.009	0.074	0.012	0.084	0.014	0.091
B01110.00-B01111.00	56	29.0	8.0	0.011	0.819	0.007	0.070	0.010	0.093	0.012	0.113	0.015	0.128
B01111.00-B01113.A0	2124	95.7	8.0	0.014	0.924	0.015	0.104	0.031	0.143	0.052	0.180	0.068	0.205
B01111.A0-B01111.B0	2134	223.6	8.0	0.007	0.653	0.006	0.068	0.015	0.108	0.026	0.158	0.035	0.179
B01111.B0-B01111.C0	2122	202.0	8.0	0.007	0.653	0.006	0.073	0.016	0.113	0.040	0.170	0.050	0.190
B01111.C0-B01111.00	2123	50.5	8.0	0.005	0.552	0.009	0.084	0.020	0.122	0.040	0.162	0.051	0.184
B01113.00-B01114.00	55	97.0	8.0	0.132	2.838	0.018	0.072	0.039	0.104	0.055	0.122	0.076	0.143
B01113.A0-B01113.B0	2125	186.8	8.0	0.009	0.741	0.018	0.110	0.035	0.151	0.055	0.187	0.072	0.214
B01113.B0-B01113.C0	7828	230.1	8.0	0.013	0.890	0.018	0.099	0.037	0.138	0.055	0.169	0.074	0.194
B01113.C0-B01113.00	2126	24.6	8.0	0.010	0.781	0.018	0.071	0.038	0.100	0.055	0.120	0.075	0.139
B01114.00-B01115.00	54	157.0	8.0	0.014	0.924	0.018	0.097	0.040	0.143	0.055	0.177	0.077	0.205
B01115.00-B01116.00	53	205.0	8.0	0.014	0.924	0.018	0.100	0.041	0.148	0.071	0.193	0.094	0.222
B01116.00-B01123.00	52	97.0	8.0	0.033	1.419	0.018	0.078	0.042	0.116	0.071	0.148	0.095	0.171
B01117.00-B01118.00	51	285.0	8.0	0.050	1.746	0.004	0.046	0.005	0.053	0.005	0.054	0.007	0.060
B01118.00-B01119.00	50	281.0	8.0	0.016	0.988	0.004	0.048	0.007	0.059	0.008	0.062	0.010	0.070
B01119.00-B01120.00	49	120.0	8.0	0.036	1.482	0.004	0.044	0.008	0.057	0.009	0.065	0.013	0.074
B01120.00-B01121.00	194	183.0	8.0	0.040	1.562	0.007	0.048	0.012	0.063	0.017	0.073	0.022	0.083
B01121.00-B01122.00	193	188.0	8.0	0.040	1.562	0.007	0.053	0.013	0.071	0.017	0.079	0.023	0.092
B01122.00-B01123.00	192	221.0	8.0	0.021	1.132	0.007	0.056	0.014	0.079	0.017	0.091	0.024	0.107
B01123.00-B01124.00	3006	153.0	8.0	0.208	3.562	0.025	0.088	0.057	0.130	0.088	0.160	0.120	0.186
B01124.00-B01125.00	3005	193.0	8.0	0.025	1.235	0.025	0.098	0.059	0.147	0.088	0.179	0.121	0.209

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B01125.00-B01126.00	191	198.0	8.0	0.081	2.223	0.025	0.081	0.060	0.122	0.088	0.147	0.122	0.173
B01126.00-B01127.00	190	15.0	8.0	0.007	0.653	0.025	0.419	0.061	0.566	0.088	0.577	0.123	0.593
B01127.00-B01128.00	189	55.3	21.0	0.007	8.568	2.797	0.287	4.860	0.383	4.792	0.380	6.740	0.459
B02001.00-B01058.00	2977	324.8	12.0	0.022	3.415	0.819	0.419	1.316	0.555	0.604	0.382	1.101	0.595
B07074.00-B01061.00	3282	252.0	18.0	0.004	4.294	1.732	0.456	3.110	0.647	3.684	0.681	4.989	1.000
EE	276	126.1	16.0	-0.015	Adverse	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EE	277	25.7	16.0	-0.009	Adverse	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V33175.00-B01128.00	3318	140.0	18.0	0.004	4.294	1.212	0.354	1.866	0.446	0.990	0.318	1.644	0.416
B02002.00-B02003.00	183	116.0	8.0	0.029	1.330	0.000	0.022	0.001	0.036	0.000	0.025	0.001	0.038
B02003.00-B02004.00	182	162.8	8.0	0.064	1.976	0.007	0.045	0.010	0.051	0.007	0.044	0.010	0.050
B02004.00-B02027.00	181	134.6	8.0	0.093	2.382	0.010	0.387	0.014	0.506	0.007	0.324	0.011	0.451
B02005.00-B02006.00	48	280.0	8.0	0.010	0.781	0.000	0.015	0.001	0.035	0.000	0.027	0.001	0.044
B02006.00-B02007.00	47	300.0	8.0	0.036	1.482	0.002	0.043	0.005	0.054	0.008	0.068	0.011	0.075
B02007.00-B02008.00	46	330.0	8.0	0.023	1.184	0.007	0.077	0.011	0.093	0.017	0.115	0.020	0.126
B02008.00-B02009.00	45	270.0	8.0	0.016	0.988	0.009	0.068	0.014	0.082	0.021	0.100	0.026	0.110
B02009.00-B02010.00	6938	144.0	8.0	0.208	3.562	0.014	0.052	0.019	0.063	0.026	0.071	0.032	0.079
B02010.00-B02014.00	6937	30.0	8.0	0.011	0.819	0.014	0.092	0.021	0.105	0.026	0.092	0.033	0.105
B02011.00-B02012.00	6936	332.5	8.0	0.020	1.104	0.040	0.130	0.042	0.134	0.007	0.057	0.009	0.066
B02011.A0-B02011.00	7651	48.9	8.0	0.005	0.552	0.040	0.163	0.041	0.165	0.003	0.058	0.004	0.066
B02012.00-B02013.00	6935	360.0	8.0	0.058	1.881	0.040	0.101	0.043	0.106	0.007	0.046	0.011	0.057
B02013.00-B02014.00	6934	292.5	8.0	0.057	1.865	0.041	0.111	0.046	0.119	0.008	0.072	0.013	0.085
B02014.00-B02015.00	6933	295.7	8.0	0.058	1.881	0.057	0.132	0.069	0.145	0.036	0.105	0.049	0.121
B02015.00-B02016.B0	6939	400.0	8.0	0.066	2.006	0.060	0.119	0.073	0.131	0.039	0.097	0.053	0.112
B02016.00-B02024.00	6932	378.2	8.0	0.075	2.139	0.061	0.167	0.078	0.188	0.045	0.141	0.062	0.166
B02016.A0-B02016.B0	7294	267.0	8.0	-0.014	Adverse	0.006	0.546	0.007	0.552	0.005	0.540	0.006	0.546
B02016.B0-B02016.00	6940	400.0	8.0	0.031	1.375	0.060	0.104	0.076	0.117	0.044	0.090	0.060	0.104
B02017.00-B02018.00	6931	450.7	8.0	0.050	1.746	0.007	0.072	0.008	0.074	0.003	0.043	0.005	0.048
B02018.00-B02019.00	6930	268.0	8.0	0.080	2.209	0.044	0.102	0.046	0.105	0.013	0.062	0.015	0.068
B02019.00-B02022.00	6929	243.4	8.0	0.054	1.815	0.044	0.109	0.047	0.117	0.018	0.079	0.022	0.090
B02020.00-B02021.D0	2982	187.0	8.0	0.006	0.605	0.000	0.173	0.001	0.206	0.000	0.183	0.001	0.215
B02021.00-B02022.B0	7830	167.0	8.0	0.048	1.711	0.010	0.056	0.016	0.073	0.012	0.063	0.019	0.078
B02021.A0-B02021.C0	2980	307.4	8.0	0.009	0.741	0.005	0.059	0.006	0.065	0.005	0.055	0.006	0.062
B02021.B0-B02021.C0	2981	191.9	8.0	0.011	0.819	0.002	0.038	0.003	0.047	0.004	0.049	0.005	0.056
B02021.C0-B02021.D0	2979	74.0	8.0	0.044	1.638	0.008	0.195	0.012	0.216	0.010	0.207	0.013	0.226
B02021.D0-B02021.00	3047	69.0	8.0	-0.002	Adverse	0.008	0.200	0.014	0.225	0.012	0.213	0.017	0.236
B02022.00-B02023.00	6928	230.8	8.0	0.073	2.110	0.056	0.113	0.069	0.126	0.033	0.090	0.047	0.106
B02022.A0-B02022.B0	7829	280.0	8.0	0.011	0.819	0.002	0.049	0.003	0.062	0.002	0.053	0.004	0.065
B02022.B0-B02022.00	7293	159.6	8.0	0.047	1.693	0.012	0.086	0.021	0.101	0.015	0.076	0.024	0.093
B02023.00-B02024.00	6927	340.0	8.0	0.070	2.066	0.057	0.166	0.072	0.187	0.037	0.137	0.052	0.162
B02024.00-B02025.00	6926	210.0	8.0	0.044	1.638	0.119	0.182	0.152	0.206	0.083	0.153	0.116	0.180
B02025.00-B02026.00	6925	230.8	8.0	0.112	2.614	0.120	0.154	0.154	0.174	0.085	0.132	0.120	0.155
B02026.00-B02027.00	6924	195.8	12.0	0.048	5.045	0.125	0.297	0.160	0.381	0.091	0.250	0.127	0.340
B02027.00-B02001.00	2975	324.9	12.0	0.010	2.303	0.818	0.409	1.314	0.534	0.593	0.345	1.089	0.479
B02028.00-B02030.A0	7482	83.0	8.0	0.081	2.223	0.000	0.000	0.001	0.017	0.010	0.040	0.011	0.043
B02030.00-B02031.00	6923	130.0	8.0	0.010	0.781	0.000	0.362	0.004	0.524	0.010	0.342	0.014	0.492
B02030.A0-B02030.00	8208	30.2	8.0	0.030	1.353	0.000	0.000	0.002	0.034	0.010	0.060	0.012	0.068
B02031.00-B02027.00	2976	98.0	12.0	0.004	1.456	0.684	0.484	1.139	0.655	0.495	0.404	0.951	0.582
B02032.00-B02031.00	2973	380.0	15.0	0.028	6.986	0.684	0.298	1.135	0.404	0.485	0.250	0.937	0.361
B02033.00-B02032.00	2972	380.0	15.0	0.007	3.493	0.684	0.293	1.134	0.380	0.479	0.245	0.929	0.342
B02034.00-B02033.00	2971	380.0	15.0	0.007	3.493	0.648	0.332	1.097	0.435	0.431	0.274	0.880	0.389
B02035.00-B02036.00	2974	20.0	8.0	0.002	0.349	0.000	0.000	0.001	0.032	0.002	0.040	0.003	0.050
B02036.00-B02038.00	6922	220.0	8.0	0.023	1.184	0.000	0.000	0.002	0.035	0.002	0.030	0.004	0.043
B02037.00-B02038.00	3626	29.8	8.0	0.001	0.247	0.000	0.000	0.001	0.041	0.000	0.012	0.001	0.042
B02038.00-B02039.00	6921	200.0	8.0	0.069	2.052	0.000	0.309	0.005	0.425	0.002	0.262	0.006	0.382
B02039.00-B02034.00	2970	385.0	15.0	0.006	3.234	0.648	0.309	1.096	0.408	0.431	0.251	0.879	0.362

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B02040.00-B02041.00	6920	350.0	8.0	0.049	1.729	0.000	0.020	0.001	0.031	0.000	0.044	0.002	0.052
B02041.00-B02042.00	6919	350.0	8.0	0.048	1.711	0.003	0.032	0.005	0.044	0.020	0.081	0.022	0.086
B02042.00-B02043.00	6918	284.0	8.0	0.032	1.397	0.003	0.517	0.006	0.524	0.021	0.533	0.025	0.546
B02043.00-B02039.00	2969	42.0	15.0	-0.002	Adverse	0.648	0.468	1.090	0.589	0.429	0.395	0.871	0.532
B02044.00-B02043.00	2968	25.0	15.0	0.001	1.320	0.645	0.568	1.083	0.708	0.407	0.484	0.845	0.642
B02045.00-B02046.00	2978	246.0	8.0	0.081	2.223	0.001	0.017	0.002	0.028	0.001	0.023	0.003	0.031
B02046.00-B02048.00	6917	165.0	8.0	0.049	1.729	0.001	0.029	0.004	0.048	0.002	0.038	0.004	0.054
B02047.00-B02048.00	6916	255.0	8.0	0.051	1.764	0.000	0.024	0.001	0.042	0.001	0.036	0.003	0.050
B02048.00-B02049.00	6915	94.4	8.0	0.013	0.890	0.002	0.045	0.007	0.076	0.004	0.059	0.009	0.085
B02049.00-B02055.00	6914	95.6	8.0	0.004	0.494	0.003	0.066	0.008	0.112	0.004	0.075	0.010	0.117
B02050.00-B02051.00	6913	109.0	8.0	0.053	1.798	0.001	0.015	0.002	0.026	0.001	0.014	0.002	0.025
B02051.00-B02052.00	6912	119.0	8.0	0.066	2.006	0.001	0.018	0.003	0.032	0.001	0.017	0.003	0.032
B02052.00-B02053.00	6911	178.0	8.0	0.064	1.976	0.001	0.025	0.005	0.042	0.001	0.023	0.005	0.041
B02053.00-B02054.00	6910	163.0	8.0	0.043	1.620	0.003	0.031	0.007	0.049	0.002	0.025	0.006	0.045
B02054.00-B02055.00	6909	329.0	8.0	0.059	1.897	0.003	0.056	0.009	0.092	0.002	0.053	0.007	0.090
B02055.00-B02056.00	6908	120.0	8.0	0.004	0.494	0.007	0.084	0.019	0.143	0.007	0.081	0.019	0.138
B02056.00-B02063.00	6907	82.0	8.0	0.005	0.552	0.007	0.080	0.021	0.132	0.007	0.083	0.021	0.132
B02057.00-B02058.00	6906	143.0	8.0	0.065	1.991	0.001	0.014	0.002	0.025	0.001	0.011	0.002	0.023
B02058.00-B02059.00	6905	107.0	8.0	0.076	2.153	0.001	0.018	0.003	0.031	0.000	0.012	0.003	0.028
B02059.00-B02060.00	6904	142.0	8.0	0.076	2.153	0.002	0.024	0.005	0.039	0.001	0.017	0.004	0.036
B02060.00-B02061.00	6903	181.0	8.0	0.082	2.236	0.003	0.035	0.008	0.053	0.002	0.026	0.006	0.048
B02061.00-B02062.00	6902	293.0	8.0	0.024	1.210	0.004	0.049	0.010	0.071	0.002	0.054	0.008	0.075
B02062.00-B02063.00	6901	196.0	8.0	0.020	1.104	0.007	0.064	0.013	0.095	0.013	0.082	0.020	0.108
B02063.00-B02064.00	6900	163.0	8.0	0.028	1.307	0.014	0.073	0.036	0.113	0.020	0.086	0.042	0.122
B02064.00-B02065.00	6899	72.0	8.0	0.021	1.132	0.015	0.074	0.038	0.117	0.020	0.086	0.043	0.124
B02065.00-B02066.00	6898	191.0	8.0	0.027	1.283	0.015	0.090	0.039	0.142	0.020	0.103	0.044	0.151
B02066.00-B02067.00	2965	195.0	8.0	0.022	1.158	0.015	0.080	0.040	0.127	0.020	0.092	0.045	0.135
B02067.00-B02068.00	2966	23.0	8.0	0.017	1.018	0.015	0.261	0.041	0.352	0.020	0.216	0.047	0.316
B02068.00-B02044.00	2967	195.1	12.0	0.018	3.089	0.645	0.487	1.081	0.625	0.407	0.401	0.844	0.558
B02069.00-B02070.00	6897	289.0	8.0	0.090	2.343	0.001	0.018	0.002	0.030	0.002	0.032	0.003	0.039
B02070.00-B02071.00	6896	61.0	8.0	0.019	1.077	0.001	0.023	0.004	0.037	0.004	0.039	0.006	0.048
B02071.00-B02073.00	6895	104.0	8.0	0.063	1.960	0.002	0.039	0.005	0.063	0.005	0.066	0.008	0.081
B02072.00-B02073.00	6894	48.0	8.0	0.006	0.605	0.001	0.043	0.002	0.065	0.006	0.080	0.007	0.093
B02073.00-B02074.00	3322	178.0	8.0	0.015	0.957	0.003	0.042	0.009	0.068	0.011	0.075	0.017	0.091
B02074.00-B02075.00	3323	131.0	8.0	0.079	2.195	0.004	0.031	0.010	0.048	0.012	0.052	0.019	0.064
B02075.00-B02076.00	3324	48.0	8.0	0.034	1.440	0.005	0.032	0.013	0.050	0.015	0.053	0.023	0.065
B02076.00-B02077.A0	3325	122.0	8.0	0.095	2.407	0.005	0.034	0.014	0.056	0.016	0.059	0.025	0.073
B02077.00-B02079.00	6188	301.0	8.0	0.049	1.729	0.007	0.302	0.018	0.398	0.018	0.232	0.029	0.339
B02077.A0-B02077.00	3326	68.0	8.0	0.035	1.461	0.006	0.041	0.016	0.067	0.017	0.068	0.028	0.086
B02078.00-B02079.D0	8345	271.0	12.0	0.004	1.456	0.584	0.368	0.914	0.471	0.280	0.252	0.610	0.377
B02079.00-B02080.00	1968	221.0	12.0	0.008	2.060	0.592	0.403	0.939	0.521	0.301	0.284	0.648	0.424
B02079.A0-B02079.B0	8279	10.0	8.0	0.003	0.428	0.001	0.017	0.002	0.029	0.001	0.020	0.002	0.031
B02079.B0-B02079.C0	8346	263.0	8.0	0.050	1.746	0.001	0.021	0.003	0.035	0.001	0.026	0.004	0.039
B02079.C0-B02079.D0	8347	113.3	8.0	0.049	1.729	0.002	0.284	0.005	0.370	0.003	0.203	0.007	0.303
B02079.D0-B02079.00	3648	271.0	12.0	0.008	2.060	0.585	0.369	0.920	0.475	0.283	0.256	0.618	0.383
B02080.00-B02081.00	6178	300.0	12.0	0.007	1.927	0.592	0.370	0.941	0.475	0.302	0.262	0.650	0.388
B02081.00-B02082.00	5993	252.0	12.0	0.016	2.913	0.594	0.345	0.943	0.449	0.303	0.252	0.653	0.374
B02082.00-B02083.00	6156	251.0	12.0	0.007	1.927	0.608	0.447	0.995	0.586	0.345	0.331	0.733	0.492
B02082.A0-B02082.B0	3332	164.1	8.0	0.055	1.832	0.001	0.012	0.001	0.025	0.011	0.055	0.012	0.058
B02082.B0-B02082.C0	3331	205.0	8.0	0.071	2.081	0.001	0.014	0.003	0.030	0.011	0.056	0.014	0.061
B02082.C0-B02082.D0	3330	36.3	8.0	0.027	1.283	0.001	0.022	0.004	0.044	0.017	0.078	0.020	0.086
B02082.D0-B02082.E0	3329	248.8	8.0	0.027	1.283	0.002	0.027	0.006	0.050	0.018	0.082	0.022	0.091
B02082.E0-B02082.F0	3328	68.2	8.0	0.040	1.562	0.002	0.024	0.008	0.044	0.019	0.065	0.025	0.074
B02082.F0-B02082.G0	3327	102.2	8.0	0.070	2.066	0.003	0.027	0.009	0.049	0.020	0.067	0.027	0.077
B02082.G0-B02082.H0	3054	71.3	8.0	0.037	1.502	0.003	0.031	0.011	0.057	0.021	0.074	0.029	0.087

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B02082.H0-B02082.M0	3053	49.6	8.0	0.021	1.132	0.003	0.059	0.012	0.108	0.021	0.115	0.030	0.145
B02082.I0-B02082.J0	3048	73.7	8.0	0.008	0.699	0.004	0.056	0.012	0.093	0.005	0.064	0.014	0.098
B02082.IA-B02082.IB	348	266.0	8.0	0.072	2.096	0.002	0.024	0.003	0.031	0.002	0.026	0.003	0.033
B02082.IB-B02082.IF	349	86.5	8.0	0.044	1.638	0.002	0.039	0.005	0.059	0.003	0.044	0.005	0.063
B02082.IC-B02082.ID	350	134.7	8.0	0.070	2.066	0.001	0.019	0.002	0.027	0.001	0.021	0.002	0.029
B02082.ID-B02082.IE	920	116.8	8.0	0.075	2.139	0.002	0.026	0.004	0.042	0.002	0.030	0.004	0.045
B02082.IE-B02082.IF	921	74.7	8.0	0.011	0.819	0.002	0.043	0.005	0.069	0.002	0.048	0.006	0.072
B02082.IF-B02082.I0	922	44.2	8.0	0.006	0.605	0.004	0.054	0.011	0.088	0.005	0.061	0.012	0.092
B02082.J0-B02082.K0	3050	73.7	8.0	0.009	0.741	0.005	0.057	0.014	0.096	0.006	0.066	0.016	0.102
B02082.K0-B02082.L0	3051	73.7	8.0	0.009	0.741	0.005	0.059	0.015	0.100	0.007	0.069	0.017	0.106
B02082.L0-B02082.M0	3052	193.0	8.0	0.011	0.819	0.006	0.074	0.017	0.128	0.008	0.112	0.019	0.153
B02082.M0-B02082.N0	3334	282.4	8.0	0.012	0.856	0.010	0.074	0.031	0.130	0.030	0.127	0.052	0.166
B02082.N0-B02082.P0	3335	163.7	8.0	0.035	1.461	0.011	0.067	0.034	0.114	0.032	0.110	0.055	0.143
B02082.O0-B02082.P0	3337	111.1	8.0	0.017	1.018	0.001	0.048	0.002	0.079	0.001	0.072	0.002	0.095
B02082.P0-B02082.Q0	3336	85.2	8.0	0.029	1.330	0.012	0.063	0.037	0.109	0.033	0.103	0.058	0.135
B02082.Q0-B02082.R0	6870	84.7	8.0	0.045	1.657	0.012	0.055	0.038	0.095	0.033	0.089	0.059	0.118
B02082.R0-B02082.S0	6871	94.2	8.0	0.049	1.729	0.013	0.060	0.040	0.103	0.034	0.095	0.062	0.126
B02082.S0-B02082.T0	3338	89.7	8.0	0.036	1.482	0.013	0.086	0.042	0.148	0.035	0.134	0.063	0.180
B02082.T0-B02082.U0	3339	209.1	8.0	0.017	1.018	0.014	0.081	0.043	0.140	0.036	0.127	0.065	0.170
B02082.U0-B02082.V0	3340	182.7	8.0	0.069	2.052	0.014	0.060	0.045	0.106	0.038	0.100	0.069	0.132
B02082.V0-B02082.W0	3341	146.0	8.0	0.037	1.502	0.014	0.074	0.046	0.131	0.041	0.124	0.073	0.164
B02082.W0-B02082.X0	3342	21.5	8.0	0.005	0.552	0.014	0.093	0.047	0.165	0.042	0.155	0.075	0.207
B02082.X0-B02082.Y0	3343	71.0	8.0	0.007	0.653	0.014	0.101	0.048	0.182	0.042	0.169	0.076	0.228
B02082.Y0-B02082.Z0	3358	34.2	8.0	0.004	0.494	0.014	0.202	0.050	0.335	0.042	0.181	0.077	0.301
B02082.Z0-B02082.00	3423	46.0	8.0	0.003	0.428	0.014	0.442	0.051	0.628	0.042	0.314	0.078	0.511
B02083.00-B02084.00	6138	278.0	12.0	0.008	2.060	0.609	0.362	0.997	0.471	0.347	0.273	0.735	0.400
B02084.00-B02068.00	2964	115.0	12.0	0.048	5.045	0.630	0.263	1.039	0.343	0.387	0.207	0.796	0.300
B02085.00-B02084.00	3321	195.0	12.0	0.112	7.706	0.020	0.126	0.040	0.163	0.039	0.109	0.059	0.151
B02086.00-B02087.00	6122	362.0	8.0	0.018	1.048	0.009	0.085	0.010	0.088	0.013	0.106	0.014	0.108
B02087.00-B02088.00	6498	290.0	8.0	0.005	0.552	0.011	0.096	0.013	0.113	0.019	0.128	0.022	0.140
B02088.00-B02085.00	1845	244.0	12.0	0.039	4.547	0.020	0.048	0.039	0.065	0.039	0.065	0.057	0.079
B02089.00-B02088.00	1844	86.0	8.0	0.046	1.675	0.009	0.068	0.024	0.097	0.019	0.094	0.034	0.116
B02090.00-B02089.00	1843	287.0	8.0	0.076	2.153	0.009	0.047	0.023	0.073	0.017	0.065	0.031	0.086
B02091.00-B02090.00	1842	146.0	8.0	0.073	2.110	0.008	0.045	0.021	0.071	0.017	0.063	0.030	0.083
B02092.00-B02091.00	5896	185.0	8.0	0.050	1.746	0.007	0.046	0.019	0.073	0.015	0.066	0.026	0.086
B02093.00-B02092.00	1841	245.0	8.0	0.050	1.746	0.007	0.047	0.017	0.073	0.014	0.066	0.024	0.086
B02094.00-B02093.00	1840	152.0	8.0	0.029	1.330	0.007	0.050	0.016	0.076	0.012	0.068	0.021	0.089
B02095.00-B02094.00	1839	289.0	8.0	0.097	2.432	0.006	0.046	0.014	0.069	0.011	0.061	0.019	0.079
B02096.00-B02095.00	1838	42.0	8.0	0.021	1.132	0.005	0.037	0.012	0.054	0.010	0.049	0.017	0.063
B02097.00-B02096.00	1837	282.0	8.0	0.018	1.048	0.004	0.046	0.010	0.069	0.008	0.063	0.014	0.081
B02098.00-B02097.00	1836	348.0	8.0	0.021	1.132	0.003	0.048	0.008	0.072	0.006	0.064	0.010	0.083
B02099.00-B02098.00	186	175.0	8.0	0.042	1.601	0.002	0.032	0.005	0.050	0.003	0.043	0.007	0.057
B02100.00-B02099.00	187	160.0	8.0	0.010	0.781	0.001	0.023	0.003	0.044	0.003	0.041	0.005	0.055
B02101.00-B02100.00	1835	175.0	8.0	0.003	0.428	0.000	0.022	0.001	0.044	0.002	0.048	0.003	0.062
B03183.00-B02078.00	3643	253.2	8.0	0.024	1.210	0.473	0.497	0.677	0.626	0.106	0.291	0.310	0.458
B04106.00-B02078.00	3394	198.0	10.0	0.026	2.283	0.111	0.298	0.236	0.394	0.174	0.246	0.299	0.350
B03001.00-B03002.00	6481	295.0	8.0	0.004	0.494	0.005	0.105	0.007	0.114	0.010	0.156	0.011	0.162
B03002.00-B03003.00	4479	300.0	8.0	0.004	0.494	0.010	0.098	0.012	0.108	0.026	0.155	0.028	0.161
B03003.00-B03004.00	6477	425.0	8.0	0.032	1.397	0.010	0.090	0.013	0.104	0.026	0.150	0.030	0.158
B03004.00-B03010.00	6260	62.0	8.0	0.004	0.494	0.010	0.093	0.014	0.111	0.026	0.145	0.031	0.157
B03005.00-B03006.00	5661	130.0	8.0	0.050	1.746	0.002	0.026	0.003	0.034	0.000	0.000	0.001	0.024
B03006.00-B03007.00	6113	119.0	8.0	0.048	1.711	0.003	0.029	0.005	0.039	0.000	0.000	0.002	0.027
B03007.00-B03008.00	2417	170.0	8.0	0.113	2.625	0.004	0.043	0.007	0.057	0.000	0.000	0.003	0.039
B03008.00-B03009.00	4769	161.6	8.0	0.023	1.184	0.005	0.048	0.010	0.065	0.000	0.000	0.005	0.045
B03009.00-B03010.00	5760	186.7	8.0	0.062	1.945	0.005	0.051	0.011	0.069	0.000	0.042	0.006	0.069

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B03010.00-B03011.C0	7820	267.0	8.0	0.060	1.913	0.016	0.064	0.027	0.085	0.026	0.082	0.038	0.098
B03011.00-B03012.00	3016	188.0	8.0	0.065	1.991	0.017	0.069	0.033	0.095	0.026	0.083	0.042	0.106
B03011.A0-B03011.B0	7835	73.0	8.0	0.053	1.798	0.001	0.012	0.001	0.023	0.000	0.000	0.001	0.020
B03011.B0-B03011.C0	7868	296.0	8.0	0.089	2.330	0.001	0.040	0.003	0.058	0.000	0.040	0.002	0.061
B03011.C0-B03011.00	7821	267.0	8.0	0.062	1.945	0.017	0.065	0.032	0.088	0.026	0.080	0.041	0.100
B03013.00-B03014.00	4190	413.5	6.0	0.089	1.082	0.002	0.062	0.002	0.085	0.000	0.058	0.001	0.086
B03014.00-B03024.00	5743	387.5	8.0	0.049	1.729	0.019	0.165	0.037	0.231	0.026	0.165	0.045	0.232
B03015.00-B03016.00	4189	175.0	8.0	0.103	2.507	0.001	0.026	0.002	0.038	0.000	0.000	0.001	0.030
B03016.00-B03017.00	1107	166.0	8.0	0.018	1.048	0.002	0.029	0.004	0.044	0.000	0.000	0.002	0.034
B03017.00-B03018.00	5733	275.0	8.0	0.141	2.933	0.003	0.031	0.006	0.045	0.000	0.000	0.003	0.035
B03018.00-B03019.00	5716	330.0	8.0	0.028	1.307	0.004	0.044	0.008	0.064	0.000	0.000	0.005	0.048
B03019.00-B03021.00	4833	258.0	8.0	0.019	1.077	0.005	0.052	0.011	0.075	0.000	0.000	0.006	0.056
B03020.00-B03021.00	605	240.0	8.0	0.143	2.953	0.002	0.033	0.002	0.050	0.000	0.000	0.002	0.038
B03021.00-B03022.00	4816	74.1	8.0	0.016	0.988	0.007	0.056	0.015	0.083	0.000	0.000	0.008	0.063
B03022.00-B03023.00	5974	343.0	8.0	0.035	1.461	0.008	0.053	0.017	0.076	0.000	0.000	0.009	0.057
B03023.00-B03024.00	5868	352.0	8.0	0.092	2.369	0.011	0.153	0.021	0.214	0.000	0.122	0.010	0.200
B03024.00-B03025.00	5852	373.0	8.0	0.004	0.494	0.030	0.168	0.060	0.235	0.027	0.159	0.057	0.229
B03025.00-B03026.00	5395	349.0	8.0	0.108	2.567	0.032	0.131	0.063	0.182	0.028	0.123	0.059	0.175
B03026.00-B03027.00	5844	283.0	8.0	0.004	0.494	0.033	0.178	0.065	0.249	0.031	0.174	0.063	0.245
B03027.00-B03028.00	5831	322.0	8.0	0.004	0.494	0.033	0.176	0.067	0.249	0.034	0.183	0.068	0.254
B03028.00-B03067.00	5817	350.0	8.0	0.004	0.494	0.034	0.233	0.068	0.337	0.038	0.197	0.073	0.313
B03029.00-B03030.00	5641	317.9	8.0	0.104	2.519	0.002	0.033	0.003	0.042	0.000	0.000	0.001	0.028
B03030.00-B03031.00	5624	61.1	8.0	0.008	0.699	0.003	0.051	0.005	0.069	0.000	0.000	0.002	0.048
B03031.00-B03034.00	1015	225.1	8.0	0.005	0.552	0.004	0.077	0.007	0.110	0.000	0.000	0.003	0.081
B03032.00-B03033.00	595	197.7	8.0	0.105	2.531	0.001	0.018	0.002	0.025	0.000	0.000	0.001	0.019
B03033.00-B03034.00	5813	95.2	8.0	0.082	2.236	0.002	0.058	0.004	0.084	0.000	0.000	0.002	0.063
B03034.00-B03035.00	5796	256.1	8.0	0.006	0.605	0.006	0.071	0.013	0.102	0.000	0.000	0.007	0.076
B03035.00-B03036.00	5781	355.0	8.0	0.124	2.750	0.007	0.037	0.015	0.053	0.000	0.000	0.008	0.040
B03036.00-B03037.00	4723	47.5	8.0	0.075	2.139	0.008	0.515	0.017	0.521	0.000	0.000	0.009	0.516
B03038.00-B03039.00	1280	340.0	8.0	0.004	0.494	0.000	0.010	0.001	0.043	0.000	0.000	0.001	0.042
B03039.00-B03040.00	1262	373.0	8.0	0.004	0.494	0.000	0.024	0.003	0.059	0.000	0.000	0.002	0.055
B03040.00-B03041.00	5695	298.0	8.0	0.004	0.494	0.001	0.038	0.004	0.084	0.000	0.000	0.003	0.076
B03041.00-B03042.00	4811	290.0	8.0	0.004	0.494	0.001	0.037	0.006	0.075	0.000	0.000	0.005	0.066
B03042.00-B03043.A0	7295	401.0	8.0	0.020	1.104	0.002	0.512	0.008	0.523	0.000	0.000	0.006	0.520
B03043.00-B03044.00	4978	243.0	8.0	0.034	1.440	0.011	0.061	0.028	0.096	0.000	0.000	0.017	0.076
B03043.A0-B03043.00	7299	401.0	8.0	-0.003	Adverse	0.011	0.532	0.026	0.550	0.000	0.000	0.016	0.540
B03044.00-B03047.00	4547	106.0	8.0	0.042	1.601	0.012	0.062	0.030	0.096	0.000	0.000	0.018	0.076
B03045.00-B03046.00	4178	5.0	8.0	0.016	0.988	0.002	0.018	0.003	0.024	0.000	0.000	0.001	0.017
B03046.00-B03047.00	7296	215.6	8.0	0.065	1.991	0.002	0.046	0.005	0.068	0.000	0.000	0.002	0.052
B03047.00-B03048.00	5504	229.0	8.0	0.048	1.711	0.015	0.090	0.036	0.139	0.000	0.000	0.022	0.109
B03048.00-B03049.00	5495	428.0	8.0	0.017	1.018	0.016	0.087	0.039	0.133	0.000	0.000	0.023	0.103
B03049.00-B03062.00	5494	267.0	8.0	0.111	2.602	0.018	0.154	0.042	0.226	0.000	0.000	0.024	0.167
B03050.00-B03051.00	5493	190.0	8.0	0.005	0.552	0.001	0.026	0.002	0.041	0.000	0.000	0.001	0.034
B03051.00-B03053.00	3037	271.0	8.0	0.082	2.236	0.002	0.029	0.004	0.041	0.000	0.000	0.002	0.030
B03052.00-B03053.00	3456	213.0	8.0	0.002	0.349	0.002	0.054	0.003	0.067	0.000	0.000	0.001	0.042
B03053.00-B03060.A0	3462	240.0	8.0	0.055	1.832	0.005	0.036	0.009	0.049	0.000	0.000	0.005	0.036
B03054.00-B03055.00	2281	15.0	8.0	0.003	0.428	0.001	0.024	0.002	0.035	0.000	0.000	0.001	0.026
B03055.00-B03056.00	5492	130.0	8.0	0.042	1.601	0.002	0.027	0.004	0.038	0.000	0.000	0.002	0.029
B03056.00-B03059.00	5491	218.0	8.0	0.088	2.317	0.004	0.038	0.007	0.051	0.000	0.000	0.003	0.036
B03057.00-B03058.00	2275	15.0	8.0	0.003	0.428	0.002	0.029	0.003	0.039	0.000	0.000	0.001	0.027
B03058.00-B03059.00	5490	130.0	8.0	0.039	1.542	0.002	0.037	0.005	0.051	0.000	0.000	0.002	0.036
B03059.00-B03060.00	5489	151.0	8.0	0.064	1.976	0.008	0.097	0.015	0.134	0.000	0.000	0.007	0.095
B03060.00-B03061.00	5488	397.0	8.0	0.005	0.552	0.014	0.107	0.028	0.149	0.000	0.000	0.014	0.106
B03060.A0-B03060.00	3463	124.4	8.0	0.010	0.781	0.005	0.103	0.011	0.144	0.000	0.000	0.006	0.104
B03061.00-B03062.00	5486	379.0	8.0	0.049	1.729	0.015	0.158	0.030	0.228	0.000	0.000	0.015	0.166

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B03062.00-B03063.00	5485	340.0	8.0	0.004	0.494	0.034	0.172	0.074	0.253	0.000	0.000	0.040	0.187
B03063.00-B03066.00	5484	312.0	8.0	0.084	2.264	0.034	0.085	0.075	0.125	0.000	0.000	0.041	0.093
B03064.00-B03065.00	5483	296.0	8.0	0.085	2.277	0.003	0.042	0.004	0.049	0.000	0.000	0.001	0.027
B03065.00-B03066.00	5482	250.0	8.0	0.014	0.924	0.006	0.066	0.008	0.087	0.000	0.000	0.002	0.058
B03066.00-B03067.00	5481	127.6	8.0	0.129	2.805	0.041	0.181	0.086	0.263	0.000	0.102	0.045	0.221
B03067.00-B03068.00	5480	349.0	8.0	0.004	0.494	0.075	0.268	0.155	0.391	0.038	0.191	0.118	0.338
B03068.00-B03077.00	5479	343.0	8.0	0.005	0.552	0.077	0.279	0.158	0.392	0.039	0.205	0.121	0.341
B03069.00-B03070.00	5478	149.0	8.0	0.128	2.794	0.001	0.032	0.002	0.043	0.000	0.000	0.001	0.030
B03070.00-B03071.00	5477	297.2	8.0	0.007	0.653	0.003	0.051	0.005	0.066	0.000	0.000	0.002	0.044
B03071.00-B03072.00	4167	193.0	8.0	0.026	1.259	0.005	0.047	0.009	0.059	0.000	0.000	0.003	0.038
B03072.00-B03075.00	2366	171.0	8.0	0.080	2.209	0.006	0.050	0.011	0.066	0.000	0.000	0.005	0.046
B03073.00-B03074.00	5476	236.0	8.0	0.118	2.683	0.000	0.015	0.001	0.026	0.000	0.000	0.001	0.021
B03074.00-B03075.00	4948	158.0	8.0	0.062	1.945	0.002	0.041	0.004	0.058	0.000	0.000	0.002	0.042
B03075.00-B03076.00	4947	215.0	8.0	0.024	1.210	0.009	0.074	0.017	0.102	0.000	0.000	0.008	0.073
B03076.00-B03077.00	4946	313.0	8.0	0.005	0.552	0.009	0.198	0.018	0.272	0.000	0.115	0.009	0.228
B03077.00-B03078.00	4945	12.0	8.0	0.001	0.247	0.087	0.226	0.179	0.312	0.040	0.165	0.132	0.272
B03078.00-B03080.00	4944	237.1	8.0	0.066	2.006	0.088	0.151	0.181	0.216	0.041	0.104	0.134	0.186
B03079.00-B03080.00	4942	331.3	8.0	0.025	1.235	0.001	0.089	0.002	0.129	0.000	0.055	0.001	0.110
B03080.00-B03094.00	4941	246.3	8.0	0.042	1.601	0.089	0.247	0.184	0.614	0.041	0.139	0.136	0.260
B03081.00-B03082.00	4940	350.0	8.0	0.092	2.369	0.039	0.095	0.040	0.097	0.000	0.000	0.001	0.022
B03082.00-B03083.00	4939	213.0	8.0	0.054	1.815	0.039	0.105	0.041	0.108	0.000	0.000	0.002	0.031
B03083.00-B03084.00	4938	291.0	8.0	0.043	1.620	0.040	0.123	0.043	0.128	0.000	0.000	0.003	0.040
B03084.00-B03085.00	4937	288.0	8.0	0.022	1.158	0.040	0.128	0.044	0.134	0.000	0.000	0.005	0.046
B03085.00-B03086.00	4936	194.0	8.0	0.030	1.353	0.040	0.132	0.046	0.141	0.000	0.000	0.006	0.053
B03086.00-B03087.00	4935	256.0	8.0	0.020	1.104	0.040	0.129	0.047	0.140	0.000	0.000	0.007	0.056
B03087.00-B03088.00	4083	291.0	8.0	0.036	1.482	0.040	0.114	0.048	0.125	0.000	0.000	0.008	0.055
B03088.00-B03089.00	4158	174.0	8.0	0.032	1.397	0.040	0.120	0.049	0.133	0.000	0.000	0.009	0.064
B03089.00-B03090.00	4934	180.0	8.0	0.024	1.210	0.040	0.133	0.050	0.146	0.000	0.000	0.010	0.065
B03090.00-B03091.00	4070	205.0	8.0	0.043	1.620	0.071	0.168	0.082	0.181	0.000	0.000	0.011	0.071
B03091.00-B03092.00	4933	120.0	8.0	0.021	1.132	0.071	0.169	0.083	0.183	0.000	0.000	0.013	0.074
B03092.00-B03093.00	4932	335.0	8.0	0.041	1.581	0.071	0.154	0.084	0.169	0.000	0.000	0.014	0.072
B03093.00-B03094.00	4931	350.0	8.0	0.025	1.235	0.072	0.249	0.087	0.590	0.000	0.084	0.015	0.201
B03094.00-B03173.00	4930	155.6	8.0	0.007	0.653	0.161	0.648	0.272	1.000	0.041	0.269	0.152	0.511
B03107.00-B03108.00	3885	150.0	6.0	0.006	0.281	0.002	0.074	0.003	0.091	0.000	0.000	0.001	0.056
B03108.00-B03110.00	4919	235.0	8.0	0.004	0.494	0.004	0.082	0.007	0.099	0.000	0.000	0.002	0.059
B03109.00-B03110.00	3900	197.5	6.0	0.025	0.573	0.002	0.088	0.003	0.106	0.000	0.000	0.001	0.062
B03110.00-B03112.00	4918	287.6	8.0	0.004	0.494	0.010	0.109	0.014	0.130	0.000	0.000	0.005	0.075
B03111.00-B03112.00	3909	212.0	6.0	0.023	0.550	0.002	0.101	0.003	0.122	0.000	0.000	0.001	0.072
B03112.00-B03113.00	4917	257.0	8.0	0.004	0.494	0.015	0.159	0.022	0.176	0.000	0.074	0.007	0.121
B03113.00-B03114.00	4916	262.0	8.0	0.013	0.890	0.076	0.200	0.084	0.211	0.041	0.147	0.049	0.160
B03114.00-B03172.00	4915	271.2	8.0	0.013	0.890	0.078	0.317	0.087	0.353	0.041	0.151	0.050	0.213
B03115.00-B03117.00	741	265.2	8.0	0.008	0.699	0.003	0.058	0.005	0.064	0.000	0.000	0.001	0.030
B03116.00-B03117.00	744	300.0	8.0	0.034	1.440	0.001	0.045	0.002	0.051	0.000	0.000	0.001	0.025
B03117.00-B03118.00	4914	219.8	8.0	0.102	2.494	0.022	0.067	0.025	0.073	0.000	0.000	0.003	0.030
B03118.00-B03122.00	4913	217.0	8.0	0.102	2.494	0.023	0.129	0.028	0.145	0.000	0.000	0.005	0.073
B03119.00-B03121.00	3458	190.0	8.0	0.032	1.397	0.003	0.037	0.004	0.045	0.000	0.000	0.001	0.026
B03120.00-B03121.00	742	100.0	8.0	0.030	1.353	0.001	0.031	0.002	0.040	0.000	0.000	0.001	0.026
B03121.00-B03122.00	4912	231.2	8.0	0.072	2.096	0.006	0.115	0.009	0.132	0.000	0.000	0.003	0.072
B03122.00-B03123.00	5475	63.2	8.0	0.007	0.653	0.030	0.136	0.039	0.154	0.000	0.000	0.009	0.079
B03123.00-B03124.00	5474	336.0	8.0	0.128	2.794	0.041	0.095	0.051	0.104	0.000	0.000	0.010	0.046
B03124.00-B03125.00	5473	274.0	8.0	0.106	2.543	0.061	0.181	0.073	0.199	0.000	0.000	0.011	0.083
B03125.00-B03127.00	5472	113.1	8.0	0.003	0.428	0.061	0.259	0.074	0.285	0.000	0.000	0.013	0.120
B03126.00-B03127.00	5471	301.4	8.0	0.002	0.349	0.005	0.173	0.006	0.190	0.000	0.000	0.001	0.082
B03127.00-B03128.00	5470	352.0	8.0	0.004	0.494	0.066	0.241	0.081	0.266	0.000	0.000	0.015	0.116
B03128.00-B03129.00	5469	277.0	8.0	0.013	0.890	0.066	0.183	0.082	0.204	0.000	0.000	0.016	0.093

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B03129.00-B03130.00	5468	312.0	8.0	0.044	1.638	0.066	0.137	0.083	0.153	0.000	0.000	0.017	0.072
B03130.00-B03131.00	5467	333.0	8.0	0.060	1.913	0.066	0.133	0.084	0.150	0.000	0.000	0.018	0.073
B03131.00-B03166.M0	7622	355.0	8.0	0.042	1.601	0.067	0.210	0.086	0.243	0.000	0.000	0.019	0.124
B03132.00-B03133.00	746	87.0	8.0	0.020	1.104	0.003	0.040	0.004	0.046	0.000	0.000	0.001	0.025
B03133.00-B03134.00	5466	350.0	8.0	0.060	1.913	0.006	0.044	0.008	0.051	0.000	0.000	0.002	0.028
B03134.00-B03135.00	5465	195.2	8.0	0.085	2.277	0.010	0.051	0.013	0.059	0.000	0.000	0.003	0.031
B03135.00-B03136.00	5464	318.0	8.0	0.089	2.330	0.014	0.059	0.018	0.067	0.000	0.000	0.005	0.035
B03136.00-B03137.00	5463	350.2	8.0	0.088	2.317	0.018	0.086	0.024	0.097	0.000	0.000	0.006	0.048
B03137.00-B03140.00	5461	367.5	8.0	0.031	1.375	0.022	0.089	0.029	0.101	0.000	0.000	0.007	0.051
B03138.00-B03139.00	2061	106.0	8.0	0.036	1.482	0.002	0.032	0.003	0.040	0.000	0.000	0.001	0.026
B03139.00-B03140.00	5460	82.5	8.0	0.025	1.235	0.003	0.052	0.006	0.063	0.000	0.000	0.002	0.037
B03140.00-B03166.C0	5459	142.9	8.0	0.115	2.648	0.028	0.105	0.038	0.122	0.000	0.000	0.010	0.066
B03144.00-B03145.00	745	250.0	8.0	0.105	2.531	0.003	0.030	0.004	0.035	0.000	0.000	0.001	0.020
B03145.00-B03146.00	5457	209.5	8.0	0.107	2.555	0.006	0.044	0.008	0.051	0.000	0.000	0.002	0.027
B03146.00-B03150.00	5456	343.2	8.0	0.059	1.897	0.010	0.066	0.013	0.076	0.000	0.000	0.003	0.039
B03147.00-B03149.00	743	135.0	8.0	0.036	1.482	0.002	0.036	0.003	0.043	0.000	0.000	0.001	0.025
B03148.00-B03149.00	3457	220.0	8.0	0.016	0.988	0.003	0.043	0.004	0.050	0.000	0.000	0.001	0.027
B03149.00-B03150.00	5455	361.1	8.0	0.089	2.330	0.009	0.062	0.012	0.072	0.000	0.000	0.003	0.038
B03150.00-B03151.00	5454	268.1	8.0	0.059	1.897	0.024	0.078	0.032	0.090	0.000	0.000	0.008	0.047
B03151.00-B03156.00	5453	348.3	8.0	0.079	2.195	0.026	0.097	0.035	0.109	0.000	0.000	0.009	0.052
B03152.00-B03153.00	747	155.0	8.0	0.139	2.912	0.003	0.028	0.004	0.034	0.000	0.000	0.002	0.020
B03153.00-B03155.00	5452	366.0	8.0	0.081	2.223	0.004	0.041	0.007	0.049	0.000	0.000	0.002	0.029
B03154.00-B03155.00	5451	160.5	8.0	0.119	2.694	0.002	0.035	0.003	0.042	0.000	0.000	0.002	0.024
B03155.00-B03156.00	5450	303.0	8.0	0.072	2.096	0.011	0.084	0.016	0.094	0.000	0.000	0.005	0.045
B03156.00-B03157.00	5449	303.0	8.0	0.091	2.356	0.070	0.155	0.085	0.171	0.000	0.000	0.015	0.075
B03157.00-B03166.F0	8283	271.0	8.0	0.020	1.104	0.071	0.171	0.087	0.189	0.000	0.000	0.016	0.084
B03161.A0-B03161.B0	8058	75.0	8.0	0.061	1.929	0.000	0.000	0.001	0.018	0.000	0.000	0.001	0.018
B03161.B0-B03161.C0	8059	109.0	8.0	0.095	2.407	0.000	0.006	0.002	0.026	0.000	0.000	0.002	0.025
B03161.C0-B03161.D0	8060	122.1	8.0	0.075	2.139	0.001	0.013	0.004	0.035	0.000	0.000	0.003	0.033
B03161.D0-B03166.G0	8061	98.9	8.0	0.042	1.601	0.001	0.138	0.005	0.173	0.000	0.000	0.005	0.097
B03166.A0-B03166.B0	8313	290.0	8.0	0.055	1.832	0.003	0.035	0.004	0.042	0.000	0.000	0.001	0.025
B03166.B0-B03166.D0	8304	128.1	8.0	0.034	1.440	0.004	0.074	0.007	0.089	0.000	0.000	0.002	0.052
B03166.C0-B03166.D0	8305	37.5	8.0	0.005	0.552	0.029	0.125	0.040	0.147	0.000	0.000	0.011	0.081
B03166.D0-B03166.G0	8306	332.1	8.0	0.030	1.353	0.033	0.185	0.048	0.217	0.000	0.000	0.015	0.115
B03166.F0-B03166.G0	5448	145.0	8.0	0.037	1.502	0.072	0.205	0.090	0.236	0.000	0.000	0.017	0.116
B03166.G0-B03166.H0	8312	250.0	8.0	0.008	0.699	0.106	0.268	0.144	0.314	0.000	0.000	0.038	0.161
B03166.H0-B03166.I0	8311	275.0	8.0	0.008	0.699	0.106	0.262	0.145	0.307	0.000	0.000	0.039	0.159
B03166.I0-B03166.J0	5415	154.7	8.0	0.022	1.158	0.106	0.203	0.146	0.238	0.000	0.000	0.040	0.127
B03166.J0-B03166.K0	8310	90.0	8.0	0.043	1.620	0.106	0.180	0.147	0.212	0.000	0.000	0.041	0.115
B03166.K0-B03166.L0	5414	211.2	8.0	0.023	1.184	0.106	0.219	0.149	0.260	0.000	0.000	0.042	0.141
B03166.L0-B03166.M0	5413	200.3	8.0	0.013	0.890	0.106	0.258	0.150	0.305	0.000	0.000	0.044	0.161
B03166.M0-B03167.00	5412	411.0	8.0	0.017	1.018	0.174	0.289	0.238	0.338	0.000	0.000	0.064	0.171
B03167.00-B03168.00	5411	334.0	8.0	0.017	1.018	0.194	0.370	0.260	0.435	0.000	0.000	0.065	0.211
B03168.00-B03169.00	5113	186.0	8.0	0.004	0.494	0.194	0.495	0.261	0.587	0.000	0.000	0.066	0.290
B03169.00-B03170.00	5112	168.0	8.0	0.004	0.494	0.194	0.414	0.262	0.485	0.000	0.000	0.068	0.242
B03170.00-B03171.00	5111	280.0	8.0	0.029	1.330	0.225	0.287	0.293	0.330	0.000	0.000	0.069	0.160
B03171.00-B03172.00	5110	214.0	8.0	0.023	1.184	0.225	0.363	0.295	0.416	0.000	0.077	0.070	0.215
B03172.00-B03173.00	5109	505.0	8.0	0.010	0.781	0.303	0.698	0.383	0.747	0.041	0.262	0.121	0.482
B03173.00-B03174.00	2004	357.0	8.0	0.006	0.605	0.464	0.628	0.657	0.675	0.082	0.248	0.275	0.462
B03174.00-B03176.00	2003	333.0	8.0	0.043	1.620	0.466	0.373	0.659	0.454	0.085	0.158	0.278	0.285
B03175.00-B03176.00	1199	165.0	8.0	0.002	0.349	0.003	0.258	0.004	0.315	0.002	0.121	0.003	0.205
B03176.00-B03178.00	2002	276.0	8.0	0.020	1.104	0.469	0.545	0.665	0.703	0.088	0.218	0.284	0.403
B03177.00-B03178.00	1736	60.0	8.0	0.002	0.349	0.002	0.547	0.003	0.758	0.001	0.155	0.002	0.371
B03178.00-B03181.00	2001	142.0	8.0	0.008	0.699	0.471	0.606	0.669	0.787	0.090	0.246	0.288	0.452
B03179.00-B03180.00	4063	280.0	6.0	0.083	1.045	0.001	0.024	0.002	0.038	0.005	0.051	0.006	0.058

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B03180.00-B03181.00	2000	200.0	8.0	0.054	1.815	0.001	0.296	0.003	0.379	0.005	0.143	0.007	0.244
B03181.00-B03182.00	1999	271.0	8.0	0.013	0.890	0.472	0.511	0.674	0.638	0.096	0.220	0.297	0.394
B03182.00-B03183.00	1998	254.0	8.0	0.022	1.158	0.472	0.442	0.675	0.545	0.096	0.197	0.299	0.346
B04001.00-B04002.00	2877	65.0	8.0	0.020	1.104	0.000	0.016	0.001	0.028	0.001	0.021	0.002	0.030
B04002.00-B04003.00	1358	207.0	8.0	0.073	2.110	0.001	0.021	0.004	0.034	0.001	0.024	0.004	0.035
B04003.00-B04004.00	1335	214.0	8.0	0.079	2.195	0.002	0.025	0.005	0.040	0.003	0.034	0.006	0.046
B04004.00-B04006.00	2878	468.0	8.0	0.064	1.976	0.003	0.034	0.007	0.055	0.006	0.052	0.010	0.067
B04005.00-B04006.00	2879	169.0	8.0	0.128	2.794	0.001	0.028	0.002	0.044	0.002	0.044	0.004	0.055
B04006.00-B04008.00	2880	286.0	8.0	0.024	1.210	0.004	0.521	0.011	0.533	0.010	0.533	0.017	0.542
B04007.00-B04008.00	3460	270.0	8.0	0.064	1.976	0.001	0.509	0.002	0.512	0.003	0.514	0.004	0.516
B04008.00-B04009.F0	8266	84.5	8.0	-0.018	Adverse	0.007	0.530	0.014	0.554	0.014	0.556	0.023	0.572
B04009.00-B04032.00	1334	324.0	8.0	0.065	1.991	0.007	0.072	0.024	0.128	0.025	0.147	0.042	0.181
B04009.A0-B04009.B0	8268	15.0	8.0	0.002	0.349	0.001	0.022	0.002	0.035	0.002	0.035	0.003	0.044
B04009.B0-B04009.D0	8269	173.0	8.0	0.046	1.675	0.001	0.016	0.003	0.034	0.003	0.042	0.006	0.051
B04009.C0-B04009.D0	8270	25.0	8.0	0.003	0.428	0.000	0.017	0.001	0.034	0.006	0.060	0.007	0.065
B04009.D0-B04009.E0	8271	135.0	8.0	0.094	2.394	0.001	0.015	0.006	0.034	0.010	0.045	0.015	0.054
B04009.E0-B04009.F0	8272	35.5	8.0	0.036	1.482	0.001	0.036	0.007	0.071	0.010	0.076	0.016	0.097
B04009.F0-B04009.00	8267	121.1	8.0	0.025	1.235	0.006	0.051	0.022	0.093	0.024	0.096	0.040	0.123
B04030.00-B04032.00	2120	406.0	8.0	0.029	1.330	0.001	0.058	0.003	0.107	0.012	0.141	0.014	0.167
B04030.A0-B04030.00	3835	350.0	8.0	0.004	0.494	0.000	0.009	0.001	0.036	0.011	0.101	0.012	0.106
B04032.00-B04033.00	1330	160.3	8.0	0.007	0.653	0.009	0.080	0.029	0.143	0.042	0.172	0.063	0.208
B04033.00-B04036.00	1329	150.0	8.0	0.025	1.235	0.009	0.063	0.031	0.109	0.043	0.129	0.065	0.156
B04034.00-B04035.00	2128	194.0	8.0	0.005	0.552	0.002	0.044	0.003	0.055	0.007	0.082	0.009	0.088
B04035.00-B04036.00	1328	235.0	8.0	0.037	1.502	0.003	0.049	0.005	0.077	0.009	0.092	0.011	0.109
B04036.00-B04037.00	1326	417.0	8.0	0.035	1.461	0.012	0.066	0.038	0.111	0.053	0.133	0.078	0.159
B04037.00-B04038.00	1325	373.0	8.0	0.036	1.482	0.013	0.073	0.040	0.120	0.059	0.148	0.085	0.176
B04038.00-B04039.00	1324	400.0	8.0	0.025	1.235	0.016	0.110	0.043	0.168	0.068	0.207	0.096	0.243
B04039.00-B04041.00	1323	298.0	8.0	0.011	0.819	0.023	0.114	0.052	0.169	0.077	0.205	0.105	0.240
B04040.00-B04041.00	2129	160.0	8.0	0.024	1.210	0.001	0.053	0.002	0.079	0.002	0.093	0.003	0.110
B04041.00-B04042.00	1321	233.0	8.0	0.038	1.522	0.024	0.091	0.055	0.135	0.080	0.161	0.111	0.189
B04042.00-B04043.00	3479	191.0	8.0	0.031	1.375	0.025	0.107	0.057	0.158	0.083	0.191	0.115	0.224
B04043.00-B04044.00	3480	258.0	8.0	0.012	0.856	0.026	0.120	0.060	0.179	0.089	0.217	0.122	0.254
B04044.00-B04045.00	1318	208.0	8.0	0.012	0.856	0.027	0.122	0.062	0.182	0.090	0.218	0.124	0.257
B04045.00-B04046.00	3481	107.0	8.0	0.012	0.856	0.028	0.123	0.063	0.184	0.091	0.221	0.126	0.259
B04046.00-B04058.00	3109	148.0	8.0	0.012	0.856	0.028	0.154	0.065	0.220	0.091	0.219	0.128	0.270
B04047.00-B04048.00	1927	280.0	8.0	0.052	1.781	0.001	0.018	0.002	0.033	0.000	0.010	0.001	0.030
B04048.00-B04052.00	1317	238.0	10.0	0.012	1.551	0.001	0.028	0.003	0.043	0.001	0.021	0.003	0.039
B04051.00-B04052.00	1933	200.0	8.0	0.017	1.018	0.001	0.036	0.002	0.051	0.001	0.028	0.002	0.046
B04052.00-B04055.00	1316	205.0	10.0	0.012	1.551	0.004	0.070	0.008	0.092	0.002	0.026	0.006	0.067
B04053.00-B04054.00	1935	225.0	8.0	0.001	0.247	0.001	0.056	0.002	0.075	0.000	0.000	0.001	0.051
B04054.00-B04055.00	1315	30.0	8.0	0.032	1.397	0.033	0.098	0.053	0.124	0.000	0.016	0.019	0.081
B04054.A0-B04054.B0	4929	324.0	8.0	0.026	1.259	0.000	0.034	0.001	0.045	0.000	0.000	0.001	0.026
B04054.B0-B04054.C0	4928	310.0	8.0	0.039	1.542	0.009	0.055	0.011	0.061	0.000	0.000	0.002	0.030
B04054.C0-B04054.G0	4927	199.0	8.0	0.064	1.976	0.009	0.056	0.013	0.068	0.000	0.000	0.003	0.040
B04054.D0-B04054.E0	4926	116.0	8.0	0.056	1.848	0.000	0.004	0.001	0.023	0.000	0.000	0.001	0.022
B04054.E0-B04054.F0	4923	272.0	8.0	0.068	2.037	0.000	0.012	0.002	0.030	0.000	0.000	0.002	0.028
B04054.F0-B04054.G0	4922	381.0	8.0	0.074	2.125	0.001	0.040	0.005	0.057	0.000	0.000	0.003	0.040
B04054.G0-B04054.H0	4921	211.0	8.0	0.046	1.675	0.013	0.086	0.021	0.105	0.000	0.000	0.008	0.062
B04054.H0-B04054.IC	8178	231.0	8.0	0.011	0.819	0.021	0.134	0.030	0.158	0.000	0.000	0.009	0.088
B04054.I0-B04054.K0	4920	159.0	8.0	0.010	0.781	0.030	0.151	0.043	0.185	0.000	0.000	0.014	0.109
B04054.IA-B04054.IB	8176	233.5	8.0	0.026	1.259	0.008	0.059	0.009	0.064	0.000	0.000	0.001	0.028
B04054.IB-B04054.IC	8177	373.2	8.0	0.023	1.184	0.008	0.109	0.011	0.127	0.000	0.000	0.002	0.067
B04054.IC-B04054.I0	8179	63.0	8.0	0.006	0.605	0.030	0.146	0.042	0.173	0.000	0.000	0.013	0.097
B04054.J0-B04054.K0	3867	40.0	6.0	0.007	0.303	0.000	0.124	0.001	0.162	0.000	0.000	0.001	0.104
B04054.K0-B04054.L0	3850	365.0	8.0	0.004	0.494	0.030	0.172	0.046	0.212	0.000	0.000	0.016	0.127

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B04054.L0-B04054.00	3860	301.5	8.0	0.016	0.988	0.031	0.121	0.048	0.149	0.000	0.000	0.017	0.091
B04055.00-B04056.00	1314	242.0	10.0	0.016	1.791	0.038	0.100	0.063	0.127	0.002	0.027	0.027	0.086
B04056.00-B04057.00	1313	298.0	10.0	0.020	2.003	0.039	0.109	0.065	0.140	0.003	0.033	0.029	0.096
B04057.00-B04058.00	1312	130.0	10.0	0.008	1.267	0.039	0.134	0.067	0.181	0.003	0.105	0.031	0.166
B04058.00-B04089.00	25	103.0	10.0	0.011	1.485	0.067	0.277	0.133	0.382	0.094	0.331	0.160	0.422
B04059.00-B04060.00	3560	155.0	8.0	0.001	0.247	0.001	0.036	0.002	0.062	0.002	0.059	0.003	0.080
B04060.00-B04065.00	1310	109.0	8.0	0.002	0.349	0.001	0.037	0.003	0.065	0.002	0.056	0.004	0.079
B04061.00-B04065.00	3517	300.0	6.0	0.003	0.199	0.002	0.072	0.003	0.090	0.001	0.066	0.003	0.089
B04062.00-B04063.00	1936	195.0	8.0	0.005	0.552	0.001	0.032	0.002	0.045	0.002	0.046	0.003	0.056
B04063.00-B04064.00	1309	273.0	8.0	0.101	2.482	0.002	0.024	0.004	0.034	0.004	0.032	0.006	0.040
B04064.00-B04065.00	44	116.0	8.0	0.067	2.022	0.003	0.033	0.006	0.051	0.005	0.043	0.008	0.057
B04065.00-B04066.00	43	109.0	8.0	0.041	1.581	0.005	0.065	0.013	0.102	0.009	0.090	0.017	0.119
B04066.00-B04067.00	87	110.0	8.0	0.002	0.349	0.006	0.091	0.015	0.142	0.012	0.132	0.021	0.171
B04067.00-B04068.00	42	257.0	8.0	0.005	0.552	0.007	0.079	0.017	0.123	0.015	0.116	0.026	0.149
B04068.00-B04070.00	41	253.0	8.0	0.011	0.819	0.007	0.066	0.019	0.104	0.017	0.097	0.028	0.125
B04069.00-B04070.00	3602	158.0	8.0	0.148	3.005	0.002	0.039	0.003	0.062	0.002	0.056	0.003	0.074
B04070.00-B04071.00	40	111.0	8.0	0.005	0.552	0.008	0.072	0.022	0.115	0.018	0.105	0.032	0.139
B04071.00-B04072.00	39	179.0	8.0	0.018	1.048	0.009	0.064	0.023	0.103	0.018	0.092	0.033	0.122
B04072.00-B04074.00	38	323.0	8.0	0.064	1.976	0.009	0.050	0.026	0.080	0.020	0.076	0.036	0.097
B04073.00-B04074.00	3121	250.0	8.0	0.002	0.349	0.001	0.044	0.002	0.067	0.004	0.080	0.006	0.094
B04074.00-B04075.00	37	281.0	8.0	0.092	2.369	0.011	0.054	0.029	0.086	0.032	0.088	0.050	0.110
B04075.00-B04079.00	36	256.0	8.0	0.049	1.729	0.012	0.066	0.031	0.102	0.033	0.102	0.052	0.127
B04076.00-B04078.00	3363	225.0	6.0	0.002	0.162	0.001	0.096	0.002	0.119	0.001	0.087	0.003	0.118
B04077.00-B04078.00	3122	100.0	6.0	0.002	0.162	0.002	0.097	0.003	0.119	0.001	0.083	0.002	0.113
B04078.00-B04079.00	35	360.0	6.0	0.002	0.162	0.004	0.111	0.008	0.148	0.004	0.124	0.007	0.162
B04079.00-B04081.00	34	191.0	8.0	0.049	1.729	0.017	0.070	0.041	0.106	0.037	0.102	0.061	0.129
B04080.00-B04081.00	33	132.0	6.0	0.002	0.162	0.001	0.077	0.002	0.111	0.001	0.091	0.002	0.121
B04081.00-B04083.00	32	229.0	8.0	0.068	2.037	0.019	0.076	0.045	0.116	0.039	0.112	0.065	0.142
B04082.00-B04083.00	2051	195.0	6.0	0.071	0.966	0.001	0.068	0.002	0.104	0.003	0.106	0.004	0.131
B04083.00-B04088.00	31	207.0	8.0	0.031	1.375	0.020	0.083	0.048	0.128	0.043	0.120	0.071	0.154
B04084.00-B04085.00	30	103.0	8.0	0.010	0.781	0.001	0.027	0.002	0.038	0.001	0.025	0.002	0.037
B04085.00-B04086.00	29	204.0	8.0	0.080	2.209	0.002	0.028	0.005	0.038	0.002	0.024	0.004	0.035
B04086.00-B04087.00	28	170.0	8.0	0.071	2.081	0.004	0.032	0.007	0.044	0.002	0.027	0.006	0.041
B04087.00-B04088.00	27	351.0	8.0	0.088	2.317	0.005	0.058	0.009	0.086	0.003	0.071	0.008	0.095
B04088.00-B04089.00	26	100.0	8.0	0.040	1.562	0.024	0.296	0.059	0.413	0.046	0.362	0.080	0.461
B04089.00-B04092.00	927	109.0	10.0	0.000	0.000	0.092	0.277	0.193	0.386	0.141	0.334	0.242	0.428
B04090.00-B04091.00	24	421.0	8.0	0.030	1.353	0.002	0.032	0.003	0.038	0.002	0.030	0.003	0.037
B04091.00-B04092.00	23	306.0	8.0	0.098	2.445	0.005	0.109	0.007	0.152	0.004	0.128	0.007	0.166
B04092.00-B04093.B0	351	162.0	10.0	0.021	2.052	0.097	0.156	0.201	0.224	0.145	0.190	0.249	0.249
B04093.00-B04095.00	347	334.0	10.0	0.013	1.615	0.098	0.173	0.206	0.250	0.146	0.210	0.254	0.277
B04093.A0-B04093.B0	8300	75.0	8.0	0.011	0.819	0.000	0.103	0.001	0.162	0.000	0.125	0.001	0.178
B04093.B0-B04093.00	8299	125.0	10.0	0.014	1.675	0.098	0.166	0.204	0.239	0.146	0.202	0.252	0.266
B04094.00-B04095.00	346	299.5	10.0	0.002	0.633	0.002	0.108	0.003	0.152	0.002	0.127	0.003	0.167
B04095.00-B04097.00	345	241.0	10.0	0.013	1.615	0.100	0.170	0.210	0.244	0.148	0.205	0.258	0.271
B04096.00-B04097.00	3372	310.0	6.0	0.086	1.063	0.001	0.148	0.002	0.211	0.001	0.173	0.002	0.230
B04097.00-B04098.00	344	125.0	10.0	0.017	1.846	0.103	0.168	0.215	0.241	0.150	0.205	0.262	0.269
B04098.00-B04105.B0	22	138.0	10.0	0.012	1.551	0.103	0.177	0.217	0.256	0.160	0.219	0.274	0.288
B04099.00-B04100.00	19	360.8	8.0	0.100	2.470	0.001	0.023	0.002	0.031	0.003	0.035	0.005	0.040
B04100.00-B04101.00	3384	222.3	8.0	0.060	1.913	0.003	0.034	0.005	0.045	0.006	0.049	0.009	0.057
B04101.00-B04103.00	2680	336.0	8.0	0.027	1.283	0.004	0.039	0.007	0.054	0.007	0.055	0.011	0.066
B04102.00-B04103.00	2659	40.0	8.0	0.029	1.330	0.001	0.025	0.002	0.037	0.001	0.035	0.002	0.044
B04103.00-B04104.00	2667	229.5	8.0	0.052	1.781	0.005	0.038	0.010	0.055	0.010	0.054	0.016	0.067
B04104.00-B04105.00	2675	200.9	8.0	0.067	2.022	0.006	0.115	0.012	0.167	0.011	0.146	0.018	0.190
B04105.00-B04106.00	17	324.0	10.0	0.025	2.239	0.110	0.152	0.234	0.219	0.173	0.189	0.297	0.247
B04105.A0-B04105.B0	6869	249.0	8.0	-0.008	Adverse	0.014	0.613	0.042	0.663	0.021	0.639	0.043	0.683

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B04105.B0-B04105.00	18	168.0	10.0	0.015	1.734	0.105	0.167	0.220	0.241	0.161	0.207	0.277	0.271
B07001.00-B07002.00	1507	88.0	8.0	0.016	0.988	0.001	0.027	0.002	0.040	0.000	0.008	0.001	0.032
B07002.00-B07003.00	1506	191.0	8.0	0.016	0.988	0.002	0.040	0.005	0.053	0.000	0.019	0.003	0.041
B07003.00-B07004.00	1505	238.1	8.0	0.025	1.235	0.005	0.066	0.008	0.082	0.001	0.034	0.004	0.061
B07004.00-B07005.00	1504	447.0	8.0	0.005	0.552	0.009	0.114	0.013	0.134	0.002	0.062	0.007	0.095
B07005.00-B07010.00	1503	135.0	8.0	0.005	0.552	0.013	0.104	0.018	0.124	0.004	0.058	0.009	0.090
B07006.00-B07007.00	1502	80.0	8.0	0.004	0.494	0.000	0.009	0.001	0.035	0.000	0.007	0.001	0.035
B07007.00-B07008.00	1501	177.0	8.0	0.029	1.330	0.001	0.035	0.003	0.059	0.000	0.025	0.003	0.054
B07008.00-B07009.00	1500	176.0	8.0	0.008	0.699	0.002	0.039	0.005	0.062	0.001	0.025	0.004	0.055
B07009.00-B07010.00	1499	179.0	8.0	0.085	2.277	0.002	0.046	0.007	0.064	0.001	0.027	0.005	0.052
B07010.00-B07011.00	1498	61.0	8.0	0.029	1.330	0.015	0.063	0.027	0.082	0.005	0.036	0.016	0.064
B07011.00-B07012.00	1497	382.0	8.0	0.101	2.482	0.016	0.058	0.029	0.077	0.005	0.033	0.017	0.061
B07012.00-B07013.00	1496	410.0	8.0	0.095	2.407	0.016	0.075	0.030	0.102	0.005	0.043	0.019	0.082
B07013.00-B07022.00	1495	253.0	8.0	0.014	0.924	0.016	0.097	0.031	0.131	0.005	0.067	0.020	0.112
B07014.00-B07017.00	1494	466.0	8.0	0.024	1.210	0.003	0.056	0.004	0.067	0.001	0.030	0.002	0.048
B07015.00-B07016.00	1493	162.0	8.0	0.018	1.048	0.003	0.038	0.004	0.045	0.001	0.020	0.002	0.033
B07016.00-B07017.00	1492	90.0	8.0	0.034	1.440	0.004	0.058	0.006	0.070	0.001	0.031	0.003	0.051
B07017.00-B07019.00	1491	223.0	8.0	0.019	1.077	0.009	0.065	0.014	0.079	0.002	0.035	0.007	0.057
B07018.00-B07019.00	1490	129.0	8.0	0.017	1.018	0.001	0.038	0.002	0.049	0.000	0.020	0.001	0.038
B07019.00-B07022.00	1489	138.0	8.0	0.078	2.181	0.012	0.077	0.019	0.101	0.003	0.054	0.010	0.085
B07020.00-B07021.00	1488	198.0	8.0	0.020	1.104	0.001	0.019	0.002	0.031	0.009	0.064	0.010	0.068
B07021.00-B07022.00	1487	245.0	8.0	0.047	1.693	0.001	0.059	0.003	0.084	0.009	0.067	0.012	0.090
B07022.00-B07023.00	1486	175.0	8.0	0.037	1.502	0.029	0.096	0.054	0.130	0.017	0.076	0.043	0.116
B07023.00-B07024.00	2245	105.0	8.0	0.048	1.711	0.029	0.129	0.055	0.176	0.017	0.103	0.044	0.158
B07024.00-B07028.00	2246	196.0	8.0	0.010	0.781	0.030	0.134	0.058	0.183	0.019	0.107	0.046	0.165
B07025.00-B07026.00	1485	160.0	8.0	0.020	1.104	0.001	0.030	0.002	0.041	0.000	0.017	0.002	0.034
B07026.00-B07027.00	1484	120.0	8.0	0.019	1.077	0.002	0.038	0.005	0.052	0.001	0.022	0.003	0.042
B07027.00-B07028.00	1483	142.0	8.0	0.020	1.104	0.004	0.071	0.007	0.098	0.001	0.051	0.004	0.085
B07028.00-B07029.00	1482	178.0	8.0	0.046	1.675	0.035	0.100	0.067	0.136	0.020	0.077	0.052	0.121
B07029.00-B07038.00	1481	178.0	8.0	0.055	1.832	0.037	0.114	0.071	0.154	0.021	0.084	0.054	0.134
B07030.00-B07031.00	1480	139.0	8.0	0.044	1.638	0.001	0.024	0.002	0.033	0.000	0.013	0.001	0.027
B07031.00-B07033.00	1479	140.0	8.0	0.054	1.815	0.003	0.041	0.005	0.055	0.001	0.026	0.003	0.045
B07032.00-B07033.00	1478	121.0	8.0	0.050	1.746	0.001	0.038	0.002	0.050	0.001	0.025	0.002	0.042
B07033.00-B07034.00	1476	257.0	8.0	0.015	0.957	0.006	0.078	0.010	0.102	0.002	0.050	0.007	0.084
B07034.00-B07037.00	1244	214.0	8.0	0.004	0.494	0.008	0.086	0.013	0.112	0.003	0.054	0.009	0.091
B07035.00-B07036.00	1243	174.0	8.0	0.050	1.746	0.001	0.025	0.002	0.033	0.001	0.014	0.002	0.026
B07036.00-B07037.00	1242	90.0	8.0	0.044	1.638	0.003	0.050	0.005	0.065	0.001	0.030	0.003	0.052
B07037.00-B07038.00	1241	242.0	8.0	0.024	1.210	0.012	0.100	0.021	0.133	0.004	0.068	0.013	0.112
B07038.00-B07043.00	1240	103.0	8.0	0.031	1.375	0.050	0.210	0.094	0.286	0.026	0.149	0.069	0.244
B07039.00-B07040.00	1239	180.0	8.0	0.004	0.494	0.002	0.050	0.003	0.064	0.000	0.028	0.002	0.050
B07040.00-B07041.00	1238	200.0	8.0	0.004	0.494	0.003	0.074	0.006	0.095	0.001	0.042	0.003	0.074
B07041.00-B07042.00	1237	138.0	8.0	0.004	0.494	0.005	0.067	0.008	0.088	0.001	0.038	0.005	0.069
B07042.00-B07043.00	1236	153.0	8.0	0.032	1.397	0.006	0.168	0.010	0.229	0.002	0.115	0.006	0.193
B07043.00-B07044.00	1235	171.0	8.0	0.004	0.494	0.057	0.225	0.106	0.307	0.027	0.158	0.077	0.261
B07044.00-B07051.00	1234	217.0	8.0	0.018	1.048	0.057	0.163	0.107	0.224	0.027	0.114	0.078	0.191
B07045.00-B07046.00	1233	82.8	8.0	0.010	0.781	0.001	0.034	0.002	0.047	0.000	0.019	0.002	0.038
B07046.00-B07047.00	1232	83.5	8.0	0.010	0.781	0.002	0.041	0.004	0.058	0.001	0.023	0.003	0.049
B07047.00-B07050.00	1231	153.3	8.0	0.010	0.781	0.003	0.049	0.006	0.071	0.001	0.028	0.004	0.059
B07048.00-B07049.00	1230	138.7	8.0	0.004	0.494	0.001	0.043	0.002	0.059	0.000	0.024	0.002	0.048
B07049.00-B07050.00	1229	54.1	8.0	0.003	0.428	0.002	0.051	0.005	0.073	0.001	0.029	0.003	0.060
B07050.00-B07051.00	1228	147.5	8.0	0.017	1.018	0.006	0.111	0.012	0.155	0.002	0.073	0.009	0.131
B07051.00-B07055.00	1227	131.1	8.0	0.017	1.018	0.063	0.183	0.122	0.254	0.029	0.133	0.088	0.221
B07052.00-B07053.00	2256	149.0	8.0	0.148	3.005	0.000	0.020	0.002	0.037	0.008	0.063	0.009	0.070
B07053.00-B07054.00	8005	256.0	8.0	0.004	0.494	0.001	0.044	0.003	0.069	0.008	0.092	0.011	0.106
B07054.00-B07055.00	1226	53.2	8.0	0.003	0.428	0.003	0.126	0.006	0.178	0.009	0.122	0.012	0.177

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B07055.00-B07057.00	1225	215.5	8.0	0.010	0.781	0.066	0.237	0.129	0.330	0.038	0.180	0.101	0.291
B07056.00-B07057.00	1224	195.1	8.0	0.004	0.494	0.002	0.162	0.003	0.221	0.001	0.118	0.002	0.191
B07057.00-B07058.00	1223	216.2	8.0	0.010	0.781	0.070	0.200	0.135	0.277	0.039	0.151	0.105	0.244
B07058.00-B07074.00	1222	125.5	8.0	0.071	2.081	0.070	0.542	0.138	0.584	0.039	0.546	0.107	0.574
B07058.A0-B07058.00	7959	104.6	8.0	0.007	0.653	0.000	0.061	0.001	0.100	0.000	0.046	0.001	0.090
B07059.00-B07065.00	2118	570.0	18.0	0.002	3.036	1.658	0.487	2.954	0.679	3.592	0.750	4.851	0.884
B07059.A0-B07059.00	2243	265.0	8.0	0.064	1.976	0.007	0.522	0.009	0.524	0.027	0.541	0.028	0.542
B07060.00-B07061.00	2250	105.0	8.0	0.010	0.781	0.001	0.031	0.002	0.048	0.013	0.105	0.014	0.111
B07061.00-B07062.00	8032	440.0	8.0	0.015	0.957	0.002	0.030	0.004	0.046	0.017	0.093	0.020	0.098
B07062.00-B07063.00	1160	305.0	8.0	0.177	3.286	0.002	0.021	0.005	0.035	0.025	0.073	0.029	0.078
B07063.00-B07064.00	1475	247.0	8.0	0.071	2.081	0.002	0.024	0.006	0.044	0.030	0.086	0.034	0.093
B07064.00-B07065.00	2249	79.8	8.0	0.033	1.419	0.002	0.379	0.008	0.523	0.030	0.545	0.035	0.549
B07065.00-B07066.00	2251	220.0	18.0	0.011	7.120	1.660	0.337	2.962	0.462	3.623	0.521	4.858	0.884
B07066.00-B07069.00	2252	344.0	18.0	0.009	6.441	1.660	0.410	2.963	0.581	3.645	0.695	4.882	1.000
B07067.00-B07069.00	2255	22.8	18.0	0.000	0.000	0.045	0.457	0.019	0.667	0.009	0.834	0.064	1.000
B07068.00-B07069.00	2254	26.3	18.0	0.001	2.147	0.041	0.455	0.018	0.665	0.008	0.832	0.064	1.000
B07069.00-B07070.00	2253	255.0	18.0	0.003	3.718	1.659	0.497	2.966	0.727	3.644	0.886	4.890	1.000
B07070.00-B07071.00	1474	226.0	18.0	0.002	3.036	1.660	0.520	2.967	0.747	3.644	0.872	4.890	1.000
B07071.00-B07072.00	2247	213.0	18.0	0.003	3.718	1.660	0.444	2.969	0.612	3.644	0.695	4.889	1.000
B07072.00-B07073.00	2248	378.0	18.0	0.007	5.680	1.661	0.363	2.971	0.505	3.644	0.578	4.890	1.000
B07073.00-B07074.00	1473	296.0	18.0	0.003	3.718	1.662	0.393	2.973	0.557	3.644	0.635	4.895	1.000
B08108.00-B07059.00	1069	233.0	15.0	0.049	9.242	0.967	0.498	1.916	0.654	2.750	0.687	3.690	0.719
B14302.00-B07059.00	2244	291.5	8.0	0.012	0.856	0.686	0.841	1.031	1.000	0.815	1.000	1.141	1.000
B08001.00-B08002.00	1997	18.0	8.0	0.001	0.247	0.000	0.023	0.001	0.044	0.003	0.063	0.005	0.072
B08002.00-B08004.00	748	50.0	8.0	0.063	1.960	0.001	0.012	0.003	0.042	0.003	0.050	0.006	0.063
B08003.00-B08004.00	1140	23.0	8.0	0.001	0.247	0.000	0.010	0.001	0.057	0.004	0.080	0.005	0.097
B08004.00-B08005.00	1141	243.0	8.0	0.004	0.494	0.000	0.040	0.005	0.081	0.007	0.087	0.012	0.110
B08005.00-B08006.00	2302	363.0	8.0	0.005	0.552	0.004	0.061	0.010	0.096	0.009	0.116	0.015	0.138
B08006.00-B08007.00	2301	346.0	8.0	0.004	0.494	0.004	0.069	0.011	0.105	0.022	0.144	0.028	0.164
B08007.00-B08020.00	2300	346.0	8.0	0.006	0.605	0.007	0.188	0.015	0.234	0.027	0.339	0.035	0.367
B08008.00-B08009.00	2299	40.0	8.0	0.004	0.494	0.021	0.117	0.022	0.121	0.019	0.123	0.020	0.127
B08009.00-B08010.00	2298	309.0	8.0	0.009	0.741	0.021	0.123	0.024	0.130	0.029	0.137	0.031	0.143
B08010.00-B08011.00	2297	266.0	8.0	0.010	0.781	0.021	0.112	0.025	0.121	0.029	0.130	0.032	0.137
B08011.00-B08012.00	2296	336.0	8.0	0.024	1.210	0.021	0.092	0.026	0.101	0.037	0.121	0.042	0.128
B08012.00-B08014.00	2295	266.0	8.0	0.030	1.353	0.022	0.290	0.028	0.310	0.042	0.411	0.047	0.424
B08013.00-B08014.00	2294	222.0	8.0	0.019	1.077	0.011	0.281	0.012	0.297	0.064	0.434	0.066	0.444
B08014.00-B08015.00	2293	78.0	8.0	-0.003	Adverse	0.033	0.301	0.041	0.321	0.106	0.438	0.114	0.451
B08015.00-B08016.00	2292	296.0	8.0	0.044	1.638	0.042	0.186	0.051	0.204	0.109	0.295	0.118	0.307
B08016.00-B08019.00	2291	296.0	8.0	0.004	0.494	0.042	0.194	0.052	0.216	0.109	0.313	0.119	0.328
B08017.00-B08019.00	2290	101.0	8.0	-0.024	Adverse	0.007	0.564	0.011	0.573	0.024	0.606	0.026	0.611
B08018.00-B08019.00	1146	337.0	8.0	0.008	0.699	0.005	0.093	0.010	0.113	0.038	0.184	0.043	0.194
B08018.A0-B08018.B0	1142	296.0	8.0	0.013	0.890	0.000	0.020	0.002	0.034	0.004	0.059	0.005	0.065
B08018.B0-B08018.00	1143	288.0	8.0	0.028	1.307	0.001	0.041	0.003	0.059	0.012	0.113	0.015	0.120
B08018.C0-B08018.00	1144	36.0	8.0	0.007	0.653	0.004	0.052	0.005	0.066	0.022	0.130	0.023	0.136
B08019.00-B08020.00	2289	340.0	10.0	0.030	2.453	0.053	0.170	0.070	0.202	0.153	0.297	0.170	0.316
B08020.00-B08021.00	2288	275.0	10.0	0.003	0.776	0.060	0.179	0.086	0.214	0.180	0.306	0.207	0.328
B08021.00-B08028.00	2287	245.0	10.0	0.027	2.327	0.070	0.239	0.097	0.342	0.180	0.436	0.208	0.512
B08022.00-B08024.00	2768	344.0	15.0	0.004	2.640	0.520	0.301	1.233	0.472	1.815	0.588	2.527	0.727
B08023.00-B08024.00	909	112.0	8.0	0.010	0.781	0.000	0.221	0.001	0.348	0.002	0.429	0.003	0.520
B08024.00-B08025.A0	2766	42.2	15.0	0.004	2.640	0.521	0.239	1.236	0.374	1.817	0.464	2.532	0.565
B08025.00-B08028.00	2286	172.0	15.0	0.002	1.867	0.521	0.330	1.239	0.507	1.817	0.628	2.534	0.763
B08025.A0-B08025.00	2285	85.0	15.0	0.008	3.734	0.521	0.336	1.237	0.523	1.817	0.645	2.533	0.789
B08026.00-B08027.00	3243	149.0	8.0	0.026	1.259	0.102	0.194	0.208	0.278	0.353	0.366	0.460	0.423
B08027.00-B08028.00	3242	112.0	8.0	0.024	1.210	0.102	0.322	0.209	0.480	0.353	0.612	0.461	0.713
B08028.00-B08030.00	3241	218.0	15.0	0.017	5.443	0.692	0.277	1.546	0.421	2.348	0.537	3.202	0.653

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B08029.00-B08030.00	1147	51.0	8.0	0.039	1.542	0.000	0.294	0.001	0.458	0.002	0.511	0.003	0.513
B08030.00-B08032.00	3239	365.0	15.0	0.009	3.961	0.692	0.278	1.549	0.425	2.356	0.540	3.213	0.658
B08030.A0-B08030.00	1148	116.0	8.0	0.025	1.235	0.000	0.294	0.001	0.462	0.005	0.523	0.006	0.526
B08031.00-B08032.00	3238	80.0	8.0	0.021	1.132	0.018	0.270	0.044	0.410	0.029	0.486	0.056	0.571
B08031.A0-B08031.B0	1152	59.0	8.0	0.023	1.184	0.017	0.111	0.037	0.163	0.023	0.127	0.043	0.174
B08031.B0-B08031.C0	1153	105.0	8.0	0.012	0.856	0.017	0.097	0.039	0.143	0.023	0.112	0.045	0.154
B08031.C0-B08031.D0	1059	75.0	8.0	0.104	2.519	0.017	0.080	0.040	0.121	0.025	0.099	0.048	0.135
B08031.D0-B08031.E0	1060	174.0	8.0	0.006	0.605	0.018	0.131	0.042	0.199	0.028	0.163	0.052	0.221
B08031.E0-B08031.00	1061	143.0	8.0	0.006	0.605	0.018	0.114	0.043	0.175	0.028	0.142	0.053	0.194
B08032.00-B08050.00	3237	268.0	15.0	0.017	5.443	0.710	0.344	1.594	0.547	2.385	0.719	3.269	0.779
B08033.00-B08034.00	3236	373.0	8.0	0.045	1.657	0.003	0.034	0.005	0.044	0.002	0.033	0.005	0.043
B08033.A0-B08033.00	7652	160.0	8.0	0.100	2.470	0.001	0.023	0.002	0.031	0.001	0.021	0.002	0.030
B08034.00-B08043.00	3235	416.0	8.0	0.060	1.913	0.005	0.101	0.009	0.140	0.005	0.108	0.008	0.145
B08035.00-B08036.00	1062	171.0	8.0	0.005	0.552	0.001	0.039	0.002	0.054	0.004	0.061	0.005	0.072
B08036.00-B08038.00	3234	196.0	8.0	0.006	0.605	0.002	0.045	0.004	0.066	0.004	0.067	0.007	0.082
B08037.00-B08038.00	1063	231.0	8.0	0.156	3.085	0.002	0.032	0.003	0.046	0.003	0.047	0.004	0.058
B08038.00-B08040.00	3233	108.0	8.0	0.024	1.210	0.003	0.038	0.008	0.057	0.007	0.055	0.012	0.069
B08039.00-B08040.00	1065	98.0	8.0	0.024	1.210	0.001	0.025	0.002	0.038	0.001	0.029	0.002	0.040
B08040.00-B08041.00	1066	184.0	8.0	0.154	3.065	0.005	0.031	0.011	0.047	0.008	0.039	0.015	0.053
B08041.00-B08042.00	1067	280.0	8.0	0.135	2.870	0.006	0.035	0.014	0.053	0.009	0.043	0.017	0.058
B08042.00-B08043.00	3232	200.0	8.0	0.105	2.531	0.007	0.100	0.016	0.144	0.010	0.112	0.019	0.152
B08043.00-B08048.00	1068	213.0	8.0	0.003	0.428	0.012	0.112	0.026	0.159	0.015	0.124	0.029	0.167
B08044.00-B08045.00	3459	90.0	8.0	0.052	1.781	0.001	0.022	0.002	0.030	0.001	0.028	0.003	0.034
B08045.00-B08047.00	3231	119.0	8.0	0.108	2.567	0.002	0.083	0.005	0.115	0.005	0.110	0.008	0.133
B08046.00-B08047.00	3230	150.0	8.0	0.162	3.143	0.002	0.076	0.002	0.106	0.002	0.097	0.002	0.121
B08047.00-B08048.00	1150	186.0	8.0	0.000	0.000	0.004	0.102	0.008	0.142	0.007	0.127	0.011	0.159
B08048.00-B08031.A0	1151	282.0	8.0	0.066	2.006	0.017	0.066	0.036	0.096	0.023	0.076	0.042	0.103
B08050.00-B08051.00	3229	28.0	15.0	0.001	1.320	0.710	0.461	1.595	0.734	2.390	0.971	3.275	1.000
B08051.00-B08052.00	3228	371.9	15.0	0.003	2.287	0.710	0.364	1.596	0.564	2.390	0.722	3.276	0.790
B08052.00-B08054.00	3227	307.6	15.0	0.015	5.113	0.715	0.273	1.603	0.421	2.393	0.530	3.281	0.790
B08054.00-B08071.00	3226	359.0	15.0	0.010	4.175	0.717	0.280	1.606	0.426	2.395	0.533	3.287	1.000
B08055.00-B08056.00	4317	350.0	8.0	0.010	0.781	0.002	0.035	0.003	0.044	0.006	0.064	0.007	0.069
B08056.00-B08058.00	4316	280.0	8.0	0.037	1.502	0.003	0.043	0.006	0.054	0.013	0.075	0.015	0.082
B08057.00-B08058.00	4314	220.0	8.0	0.007	0.653	0.001	0.041	0.002	0.053	0.005	0.073	0.006	0.080
B08058.00-B08061.00	4313	171.0	8.0	0.035	1.461	0.007	0.057	0.012	0.074	0.022	0.100	0.027	0.110
B08059.00-B08060.00	4312	340.0	8.0	0.005	0.552	0.000	0.027	0.001	0.041	0.000	0.026	0.001	0.046
B08060.00-B08061.00	4311	350.0	8.0	0.039	1.542	0.003	0.050	0.006	0.064	0.008	0.084	0.011	0.093
B08061.00-B08062.00	4310	350.0	8.0	0.027	1.283	0.011	0.090	0.019	0.123	0.036	0.164	0.044	0.184
B08062.00-B08063.00	4309	360.7	8.0	0.004	0.494	0.012	0.106	0.021	0.140	0.038	0.188	0.047	0.209
B08063.00-B08064.00	4308	221.0	8.0	0.015	0.957	0.018	0.110	0.028	0.131	0.049	0.156	0.060	0.171
B08064.00-B08066.00	4307	484.0	8.0	0.018	1.048	0.035	0.211	0.046	0.232	0.050	0.197	0.061	0.218
B08065.00-B08066.00	4306	318.0	8.0	0.015	0.957	0.055	0.230	0.056	0.242	0.007	0.153	0.008	0.168
B08066.00-B08067.00	4305	274.0	8.0	0.004	0.494	0.092	0.376	0.106	0.404	0.063	0.341	0.077	0.635
B08067.00-B08068.00	4304	275.0	8.0	0.002	0.349	0.092	0.320	0.107	0.345	0.085	0.308	0.141	1.000
B08068.00-B08071.00	4303	30.0	8.0	0.010	0.781	0.092	0.342	0.108	0.470	0.085	0.543	0.187	1.000
B08069.00-B08070.00	4302	126.0	8.0	0.053	1.798	0.003	0.036	0.005	0.044	0.004	0.039	0.005	0.046
B08070.00-B08071.00	4301	270.0	8.0	0.021	1.132	0.003	0.269	0.006	0.394	0.004	0.475	0.006	0.527
B08071.00-B08072.00	4300	231.4	15.0	0.016	5.281	0.812	0.290	1.720	0.439	2.484	0.546	3.384	1.000
B08072.00-B08091.00	4299	403.0	15.0	0.008	3.734	0.812	0.315	1.722	0.472	2.484	0.588	3.385	1.000
B08073.00-B08074.00	1252	280.0	6.0	0.120	1.256	0.001	0.084	0.002	0.090	0.002	0.037	0.003	0.046
B08074.00-B08076.00	1073	218.0	6.0	0.085	1.057	0.049	0.178	0.052	0.183	0.004	0.176	0.006	0.184
B08075.00-B08076.00	1254	207.0	6.0	0.159	1.446	0.001	0.116	0.002	0.123	0.002	0.169	0.003	0.175
B08076.00-B08077.00	1255	337.0	6.0	0.040	0.725	0.051	0.180	0.056	0.187	0.113	0.266	0.117	0.272
B08077.00-B08085.00	4298	137.2	6.0	0.083	1.045	0.052	0.161	0.057	0.175	0.114	0.258	0.120	0.266
B08078.00-B08079.00	4297	196.0	8.0	0.025	1.235	0.001	0.022	0.002	0.031	0.001	0.028	0.002	0.035

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B08079.00-B08080.00	4296	155.0	8.0	0.107	2.555	0.002	0.029	0.005	0.039	0.004	0.085	0.007	0.090
B08080.00-B08081.00	4295	228.0	8.0	0.046	1.675	0.004	0.034	0.007	0.047	0.053	0.122	0.056	0.125
B08081.00-B08082.00	4294	117.0	8.0	0.072	2.096	0.005	0.038	0.009	0.052	0.055	0.116	0.060	0.121
B08082.00-B08083.00	4293	106.0	8.0	0.065	1.991	0.006	0.036	0.012	0.050	0.057	0.106	0.062	0.111
B08083.00-B08084.00	4292	83.0	8.0	0.099	2.457	0.006	0.044	0.013	0.064	0.058	0.126	0.064	0.134
B08084.00-B08085.00	4291	137.0	8.0	0.014	0.924	0.006	0.093	0.014	0.114	0.058	0.194	0.066	0.204
B08085.00-B08086.00	4236	283.0	8.0	0.048	1.711	0.058	0.126	0.073	0.140	0.172	0.214	0.187	0.223
B08086.00-B08087.00	4235	350.0	8.0	0.053	1.798	0.058	0.126	0.074	0.143	0.172	0.215	0.188	0.225
B08087.00-B08090.00	4234	64.8	8.0	0.024	1.210	0.058	0.173	0.075	0.190	0.172	0.242	0.189	0.255
B08088.00-B08089.00	1072	51.0	8.0	0.020	1.104	0.060	0.192	0.061	0.189	0.000	0.050	0.001	0.065
B08089.00-B08090.00	4538	356.0	8.0	0.005	0.552	0.066	0.233	0.068	0.237	0.011	0.182	0.014	0.193
B08090.00-B08091.00	4537	369.0	8.0	0.024	1.210	0.126	0.405	0.146	0.548	0.185	0.632	0.206	0.639
B08091.00-B08092.00	4536	100.0	15.0	0.010	4.175	0.937	0.325	1.868	0.473	2.668	0.587	3.591	1.000
B08092.00-B08093.00	3974	369.0	15.0	0.009	3.961	0.943	0.337	1.876	0.492	2.672	0.614	3.596	1.000
B08093.00-B08094.00	3972	120.0	15.0	0.008	3.734	0.944	0.348	1.878	0.511	2.673	0.812	3.600	1.000
B08094.00-B08095.00	4957	120.0	15.0	0.007	3.493	0.945	0.383	1.880	0.570	2.673	1.000	3.602	1.000
B08095.00-B08096.00	5674	225.0	15.0	0.004	2.640	0.952	0.410	1.889	0.617	2.707	1.000	3.636	1.000
B08095.A0-B08095.00	5380	122.0	8.0	0.009	0.741	0.005	0.415	0.007	0.534	0.054	1.000	0.128	1.000
B08096.00-B08097.00	5366	258.0	15.0	0.004	2.640	0.952	0.441	1.891	0.647	2.711	1.000	3.641	1.000
B08097.00-B08098.00	5355	113.0	15.0	0.000	0.000	0.955	0.437	1.895	0.639	2.713	1.000	3.644	1.000
B08098.00-B08099.00	5609	249.0	15.0	0.005	2.952	0.955	0.421	1.896	0.650	2.721	1.000	3.654	1.000
B08099.00-B08100.00	5600	176.0	15.0	0.003	2.287	0.962	0.534	1.904	0.800	2.721	1.000	3.655	1.000
B08100.00-B08108.00	5589	300.0	15.0	0.003	2.287	0.963	0.422	1.906	0.605	2.728	0.687	3.663	0.719
B08104.00-B08105.00	1070	150.0	8.0	0.032	1.397	0.003	0.032	0.004	0.040	0.007	0.053	0.008	0.058
B08105.00-B08106.00	5542	134.0	8.0	0.040	1.562	0.003	0.033	0.005	0.045	0.010	0.060	0.012	0.066
B08106.00-B08107.00	5261	298.4	8.0	0.040	1.562	0.004	0.037	0.007	0.051	0.012	0.074	0.016	0.082
B08107.00-B08108.00	5257	300.0	8.0	0.033	1.419	0.004	0.223	0.008	0.317	0.021	0.392	0.025	0.457
B09089.00-B08026.00	2192	218.0	8.0	0.027	1.283	0.102	0.191	0.207	0.273	0.344	0.358	0.449	0.413
B10094.00-B08022.00	2765	264.0	12.0	0.012	2.522	0.280	0.346	0.696	0.548	1.319	0.718	1.734	0.805
B13231.00-B08022.00	2767	317.0	10.0	0.004	0.896	0.238	0.456	0.534	0.720	0.492	0.764	0.789	0.934
B09001.00-B09002.00	5256	188.0	8.0	0.006	0.605	0.001	0.030	0.002	0.043	0.006	0.071	0.008	0.077
B09002.00-B09003.00	5252	269.0	8.0	0.059	1.897	0.002	0.030	0.004	0.043	0.010	0.089	0.012	0.094
B09003.00-B09006.00	5246	386.0	8.0	0.027	1.283	0.003	0.040	0.006	0.060	0.044	0.139	0.048	0.146
B09004.00-B09005.00	2771	5.0	8.0	0.000	0.000	0.000	0.027	0.001	0.051	0.001	0.040	0.002	0.058
B09005.00-B09006.00	5242	196.0	8.0	0.203	3.519	0.000	0.025	0.003	0.045	0.003	0.086	0.005	0.095
B09006.00-B09007.00	5240	55.0	8.0	0.013	0.890	0.004	0.040	0.011	0.065	0.048	0.135	0.055	0.144
B09007.00-B09010.00	5236	125.0	8.0	0.044	1.638	0.004	0.037	0.012	0.064	0.048	0.118	0.056	0.128
B09008.00-B09009.00	2770	130.0	8.0	0.002	0.349	0.000	0.016	0.001	0.053	0.002	0.063	0.003	0.079
B09009.00-B09010.00	8055	370.0	8.0	0.002	0.349	0.001	0.035	0.003	0.066	0.003	0.093	0.006	0.109
B09010.00-B09011.00	3420	156.0	8.0	0.053	1.798	0.005	0.041	0.016	0.070	0.052	0.131	0.064	0.142
B09011.00-B09039.00	3415	351.0	8.0	0.047	1.693	0.006	0.065	0.019	0.107	0.077	0.181	0.090	0.200
B09012.00-B09013.00	5521	95.0	8.0	0.015	0.957	0.000	0.018	0.001	0.032	0.014	0.084	0.015	0.088
B09013.00-B09015.00	5442	243.0	8.0	0.047	1.693	0.001	0.025	0.004	0.040	0.016	0.072	0.018	0.078
B09014.00-B09015.00	5434	145.0	8.0	0.134	2.859	0.002	0.020	0.002	0.032	0.002	0.047	0.003	0.053
B09015.00-B09016.00	5430	287.3	8.0	0.052	1.781	0.003	0.030	0.007	0.048	0.021	0.078	0.025	0.086
B09016.00-B09017.00	5098	228.9	8.0	0.050	1.746	0.003	0.045	0.009	0.075	0.023	0.114	0.029	0.128
B09017.00-B09018.00	5093	290.3	8.0	0.004	0.494	0.003	0.059	0.010	0.102	0.023	0.150	0.030	0.171
B09018.00-B09028.00	5086	283.0	8.0	0.004	0.494	0.004	0.098	0.012	0.172	0.025	0.255	0.033	0.291
B09019.00-B09020.00	5084	213.0	8.0	0.193	3.431	0.000	0.000	0.002	0.045	0.017	0.132	0.018	0.139
B09020.00-B09021.00	5076	180.0	8.0	0.005	0.552	0.000	0.002	0.002	0.046	0.020	0.127	0.022	0.133
B09021.00-B09026.00	5342	243.0	8.0	0.594	6.019	0.000	0.502	0.006	0.509	0.021	0.519	0.024	0.521
B09022.00-B09023.00	5331	40.0	8.0	0.004	0.494	0.001	0.036	0.002	0.051	0.002	0.048	0.003	0.059
B09023.00-B09025.00	5330	216.0	8.0	0.037	1.502	0.002	0.027	0.004	0.039	0.003	0.034	0.006	0.044
B09024.00-B09025.00	5328	159.0	8.0	0.106	2.543	0.001	0.017	0.002	0.024	0.012	0.048	0.013	0.050
B09025.00-B09026.00	5312	230.0	8.0	0.613	6.115	0.006	0.509	0.009	0.512	0.017	0.517	0.021	0.519

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B09026.00-B09027.00	4673	262.0	8.0	-0.605	Adverse	0.005	0.522	0.018	0.537	0.038	0.558	0.047	0.564
B09027.00-B09028.00	4672	249.0	8.0	0.032	1.397	0.005	0.089	0.015	0.155	0.039	0.236	0.050	0.268
B09028.00-B09029.00	4671	281.0	8.0	0.004	0.494	0.009	0.091	0.028	0.159	0.064	0.237	0.084	0.270
B09029.00-B09030.00	5305	274.0	8.0	0.085	2.277	0.009	0.049	0.030	0.083	0.066	0.120	0.087	0.137
B09030.00-B09031.00	5302	435.0	8.0	0.075	2.139	0.011	0.063	0.033	0.106	0.069	0.148	0.091	0.170
B09031.00-B09032.00	5294	326.0	8.0	0.020	1.104	0.012	0.072	0.035	0.121	0.070	0.170	0.093	0.195
B09032.00-B09034.00	4760	241.0	8.0	0.026	1.259	0.012	0.070	0.036	0.117	0.072	0.162	0.096	0.187
B09033.00-B09034.00	2769	225.0	8.0	0.020	1.104	0.002	0.051	0.003	0.078	0.004	0.101	0.005	0.116
B09034.00-B09035.00	388	266.0	8.0	0.032	1.397	0.014	0.072	0.041	0.119	0.077	0.160	0.103	0.185
B09035.00-B09036.00	379	245.0	8.0	0.031	1.375	0.015	0.075	0.042	0.122	0.077	0.162	0.104	0.188
B09036.00-B09037.00	378	205.0	8.0	0.031	1.375	0.016	0.079	0.045	0.129	0.079	0.168	0.107	0.196
B09037.00-B09038.00	4755	358.0	8.0	0.034	1.440	0.017	0.077	0.047	0.124	0.080	0.160	0.110	0.187
B09038.00-B09039.00	4753	272.0	8.0	0.053	1.798	0.019	0.080	0.050	0.127	0.083	0.181	0.114	0.207
B09039.00-B09040.00	4747	310.0	8.0	0.047	1.693	0.026	0.086	0.071	0.139	0.175	0.217	0.219	0.243
B09040.00-B09047.00	4738	316.0	8.0	0.050	1.746	0.026	0.093	0.072	0.148	0.181	0.223	0.227	0.251
B09041.00-B09042.00	1303	113.0	6.0	-0.461	Adverse	0.001	0.508	0.002	0.513	0.001	0.511	0.003	0.514
B09042.00-B09044.00	1289	262.0	6.0	0.678	2.986	0.007	0.030	0.008	0.048	0.007	0.045	0.008	0.057
B09043.00-B09044.00	656	280.0	8.0	0.084	2.264	0.001	0.023	0.002	0.037	0.002	0.036	0.003	0.045
B09044.00-B09045.00	3410	276.0	8.0	0.050	1.746	0.004	0.039	0.009	0.062	0.009	0.063	0.015	0.078
B09044.A0-B09044.00	2772	123.3	8.0	0.002	0.349	0.001	0.044	0.003	0.061	0.005	0.080	0.006	0.089
B09045.00-B09046.00	3407	263.0	8.0	0.020	1.104	0.004	0.063	0.011	0.089	0.013	0.086	0.019	0.106
B09046.00-B09047.00	3406	303.0	8.0	0.009	0.741	0.010	0.091	0.018	0.132	0.014	0.163	0.022	0.190
B09047.00-B09055.00	3405	136.0	8.0	0.048	1.711	0.036	0.136	0.091	0.211	0.195	0.299	0.250	0.344
B09048.00-B09049.00	2773	83.3	6.0	0.002	0.162	0.002	0.098	0.003	0.128	0.001	0.078	0.002	0.114
B09049.00-B09051.00	2774	103.3	6.0	0.002	0.162	0.003	0.086	0.005	0.115	0.001	0.065	0.004	0.101
B09050.00-B09051.00	3404	50.0	8.0	0.022	1.158	0.000	0.022	0.001	0.035	0.000	0.015	0.001	0.032
B09051.00-B09052.00	3403	320.0	8.0	0.056	1.848	0.004	0.056	0.009	0.078	0.002	0.044	0.007	0.071
B09052.00-B09053.00	3401	111.0	8.0	0.004	0.494	0.006	0.084	0.012	0.114	0.004	0.065	0.009	0.101
B09053.00-B09054.00	653	131.0	8.0	0.004	0.494	0.008	0.089	0.015	0.120	0.005	0.089	0.011	0.121
B09054.00-B09055.00	647	363.0	8.0	0.005	0.552	0.009	0.130	0.017	0.193	0.014	0.240	0.022	0.283
B09055.00-B09059.00	642	204.0	8.0	0.008	0.699	0.046	0.186	0.110	0.285	0.209	0.391	0.273	0.454
B09056.00-B09057.00	2775	209.0	8.0	0.086	2.290	0.001	0.023	0.002	0.032	0.001	0.023	0.002	0.031
B09057.00-B09058.00	5232	257.0	8.0	0.044	1.638	0.002	0.048	0.005	0.064	0.003	0.048	0.005	0.064
B09058.00-B09059.00	4378	252.0	8.0	0.004	0.494	0.005	0.135	0.008	0.197	0.004	0.239	0.008	0.283
B09059.00-B09060.00	4371	182.0	8.0	0.010	0.781	0.052	0.172	0.120	0.261	0.214	0.350	0.283	0.406
B09060.00-B09061.00	4363	300.0	8.0	0.023	1.184	0.052	0.143	0.122	0.217	0.215	0.291	0.285	0.337
B09061.00-B09062.00	4357	167.0	8.0	0.023	1.184	0.052	0.144	0.123	0.219	0.223	0.296	0.294	0.341
B09062.00-B09064.00	212	68.0	8.0	0.016	0.988	0.054	0.149	0.126	0.230	0.226	0.309	0.298	0.358
B09063.00-B09064.00	867	218.0	8.0	0.020	1.104	0.000	0.082	0.001	0.133	0.001	0.173	0.002	0.203
B09064.00-B09081.A0	2776	277.0	8.0	0.021	1.132	0.054	0.149	0.129	0.228	0.227	0.304	0.302	0.353
B09065.00-B09066.00	860	210.0	8.0	0.093	2.382	0.001	0.031	0.003	0.043	0.004	0.044	0.006	0.052
B09065.A0-B09065.00	2777	78.0	8.0	0.007	0.653	0.000	0.008	0.001	0.031	0.003	0.049	0.004	0.057
B09066.00-B09067.00	4353	229.0	8.0	0.032	1.397	0.006	0.051	0.009	0.061	0.009	0.059	0.013	0.067
B09067.00-B09081.00	4343	361.0	8.0	0.084	2.264	0.014	0.120	0.019	0.162	0.016	0.196	0.020	0.226
B09068.00-B09069.00	2778	167.0	8.0	0.135	2.870	0.002	0.022	0.003	0.029	0.002	0.029	0.003	0.035
B09069.00-B09070.00	4339	436.0	8.0	0.058	1.881	0.002	0.031	0.005	0.041	0.006	0.045	0.008	0.052
B09070.00-B09071.00	4333	199.0	8.0	0.062	1.945	0.005	0.039	0.008	0.051	0.009	0.050	0.012	0.060
B09071.00-B09074.00	5225	139.0	8.0	0.055	1.832	0.006	0.046	0.011	0.061	0.010	0.078	0.014	0.088
B09072.00-B09073.00	5222	53.0	8.0	0.075	2.139	0.001	0.020	0.002	0.028	0.006	0.059	0.008	0.062
B09073.00-B09074.00	4988	346.0	8.0	0.108	2.567	0.002	0.036	0.004	0.049	0.031	0.091	0.034	0.097
B09074.00-B09075.00	4985	113.0	8.0	0.049	1.729	0.009	0.052	0.017	0.070	0.042	0.107	0.050	0.117
B09075.00-B09078.00	4905	200.0	8.0	0.049	1.729	0.010	0.087	0.019	0.124	0.043	0.184	0.052	0.204
B09076.00-B09077.00	4894	147.0	8.0	0.004	0.494	0.000	0.018	0.001	0.046	0.001	0.059	0.002	0.071
B09077.00-B09078.00	5213	326.0	8.0	0.004	0.494	0.001	0.073	0.003	0.115	0.007	0.170	0.009	0.191
B09078.00-B09079.00	5203	155.0	8.0	0.005	0.552	0.013	0.109	0.026	0.150	0.052	0.210	0.065	0.234

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B09079.00-B09080.00	4284	247.0	8.0	0.030	1.353	0.021	0.086	0.035	0.110	0.058	0.140	0.071	0.156
B09080.00-B09081.00	5191	198.0	8.0	0.064	1.976	0.022	0.129	0.037	0.177	0.060	0.226	0.075	0.258
B09081.00-B09082.00	5190	308.0	8.0	0.028	1.307	0.096	0.195	0.192	0.276	0.312	0.355	0.408	0.411
B09081.A0-B09081.00	7583	224.0	8.0	0.028	1.307	0.059	0.164	0.135	0.238	0.235	0.311	0.311	0.359
B09082.00-B09085.00	5186	42.0	8.0	0.008	0.699	0.096	0.213	0.193	0.304	0.312	0.384	0.410	0.449
B09084.00-B09085.00	2780	145.0	6.0	0.002	0.162	0.001	0.180	0.004	0.264	0.001	0.293	0.003	0.359
B09084.A0-B09084.00	7584	50.0	6.0	0.002	0.162	0.001	0.057	0.002	0.091	0.001	0.057	0.002	0.092
B09085.00-B09087.00	5185	221.0	8.0	0.019	1.077	0.098	0.204	0.198	0.291	0.314	0.370	0.414	0.431
B09086.00-B09087.00	2779	155.0	6.0	0.002	0.162	0.001	0.152	0.002	0.217	0.001	0.262	0.002	0.309
B09087.00-B09088.00	2224	160.0	8.0	0.027	1.283	0.099	0.200	0.202	0.286	0.340	0.374	0.443	0.433
B09088.00-B09089.00	2223	293.0	8.0	0.021	1.132	0.100	0.201	0.204	0.287	0.340	0.376	0.445	0.435
B10001.00-B10002.00	761	107.0	8.0	0.008	0.699	0.000	0.022	0.001	0.039	0.002	0.041	0.003	0.052
B10002.00-B10003.00	775	265.0	8.0	0.017	1.018	0.001	0.027	0.004	0.044	0.004	0.052	0.007	0.062
B10003.00-B10004.00	2219	226.0	8.0	0.029	1.330	0.002	0.029	0.005	0.048	0.009	0.060	0.012	0.070
B10004.00-B10005.00	3090	206.6	8.0	0.030	1.353	0.002	0.033	0.007	0.054	0.010	0.068	0.015	0.080
B10005.00-B10006.00	3084	270.0	8.0	0.030	1.353	0.003	0.037	0.009	0.060	0.015	0.081	0.021	0.093
B10006.00-B10007.00	4529	270.0	8.0	0.030	1.353	0.004	0.040	0.011	0.064	0.020	0.084	0.026	0.097
B10007.00-B10008.00	4522	365.0	8.0	0.040	1.562	0.005	0.143	0.013	0.253	0.021	0.361	0.029	0.434
B10008.00-B10009.00	4509	206.5	10.0	0.014	1.675	0.142	0.217	0.445	0.391	0.867	0.571	1.171	0.701
B10009.00-B10015.00	1602	248.8	10.0	0.009	1.343	0.143	0.218	0.447	0.392	0.869	0.574	1.174	0.702
B10010.00-B10011.00	2073	211.0	8.0	0.033	1.419	0.000	0.000	0.001	0.023	0.016	0.075	0.017	0.077
B10011.00-B10012.00	2070	206.0	8.0	0.088	2.317	0.000	0.004	0.002	0.025	0.019	0.065	0.022	0.068
B10012.00-B10014.00	2066	181.0	8.0	0.149	3.015	0.002	0.013	0.004	0.030	0.022	0.061	0.025	0.065
B10013.00-B10014.00	3218	174.0	8.0	0.011	0.819	0.001	0.030	0.002	0.040	0.007	0.065	0.008	0.070
B10014.00-B10015.00	3216	266.0	8.0	0.284	4.162	0.003	0.134	0.008	0.239	0.030	0.354	0.036	0.421
B10015.00-B10016.00	3200	462.0	10.0	0.021	2.052	0.145	0.180	0.457	0.319	0.900	0.460	1.212	0.549
B10016.00-B10025.00	5180	420.0	10.0	0.035	2.649	0.147	0.211	0.459	0.374	0.901	0.539	1.215	0.650
B10017.00-B10019.00	5179	224.2	8.0	0.002	0.349	0.001	0.044	0.002	0.059	0.001	0.047	0.003	0.061
B10018.00-B10019.00	5178	235.0	8.0	0.004	0.494	0.001	0.038	0.002	0.050	0.002	0.040	0.003	0.052
B10019.00-B10021.00	5177	182.7	8.0	0.060	1.913	0.004	0.041	0.007	0.048	0.005	0.039	0.008	0.052
B10020.00-B10021.00	5176	224.8	8.0	0.002	0.349	0.001	0.041	0.002	0.052	0.001	0.039	0.002	0.055
B10021.00-B10023.00	5175	149.4	8.0	0.060	1.913	0.006	0.043	0.010	0.063	0.006	0.049	0.012	0.067
B10022.00-B10023.00	5174	187.8	8.0	-0.282	Adverse	0.004	0.524	0.006	0.536	0.003	0.528	0.006	0.539
B10023.00-B10024.00	5173	270.0	8.0	0.027	1.283	0.006	0.059	0.014	0.089	0.008	0.071	0.016	0.098
B10024.00-B10025.00	5171	213.2	8.0	0.007	0.653	0.007	0.198	0.016	0.344	0.010	0.466	0.019	0.559
B10025.00-B10026.00	5170	364.0	12.0	0.005	1.628	0.154	0.209	0.477	0.372	0.917	0.538	1.240	0.653
B10026.00-B10027.00	5162	256.0	12.0	0.006	1.784	0.155	0.242	0.479	0.443	0.919	0.654	1.243	0.810
B10027.00-B10070.00	2408	189.0	12.0	0.002	1.030	0.156	0.280	0.481	0.497	0.924	0.724	1.250	0.891
B10028.00-B10029.00	2393	205.9	8.0	0.005	0.552	0.000	0.019	0.001	0.044	0.005	0.076	0.006	0.085
B10029.00-B10030.00	2488	229.6	8.0	0.005	0.552	0.000	0.025	0.003	0.057	0.008	0.089	0.010	0.102
B10030.00-B10031.00	2483	228.5	8.0	0.016	0.988	0.001	0.024	0.004	0.048	0.010	0.072	0.014	0.082
B10031.00-B10032.00	4883	171.9	8.0	0.171	3.230	0.002	0.023	0.006	0.044	0.017	0.070	0.021	0.079
B10032.00-B10033.00	4875	183.0	8.0	0.049	1.729	0.002	0.023	0.007	0.047	0.018	0.071	0.024	0.082
B10033.00-B10034.00	320	166.2	8.0	0.164	3.163	0.002	0.018	0.009	0.038	0.018	0.054	0.025	0.063
B10034.00-B10035.00	8202	163.7	8.0	0.145	2.974	0.002	0.037	0.010	0.083	0.021	0.115	0.029	0.135
B10035.00-B10036.00	4715	141.7	8.0	0.010	0.781	0.002	0.037	0.011	0.083	0.022	0.113	0.031	0.133
B10036.00-B10037.00	1608	65.7	8.0	0.086	2.290	0.002	0.030	0.013	0.060	0.022	0.075	0.032	0.091
B10037.00-B10038.00	2133	110.0	8.0	0.020	1.104	0.004	0.053	0.015	0.102	0.022	0.120	0.034	0.147
B10038.00-B10039.00	5042	288.6	8.0	0.010	0.781	0.005	0.056	0.018	0.103	0.023	0.117	0.035	0.144
B10039.00-B10040.00	5038	273.3	8.0	0.041	1.581	0.008	0.050	0.021	0.081	0.024	0.086	0.038	0.106
B10040.00-B10054.00	5032	251.4	8.0	0.064	1.976	0.010	0.059	0.025	0.098	0.025	0.124	0.040	0.146
B10041.00-B10042.00	4664	335.6	8.0	0.107	2.555	0.002	0.012	0.002	0.022	0.012	0.050	0.014	0.052
B10042.00-B10043.00	4661	173.9	8.0	0.141	2.933	0.001	0.012	0.003	0.026	0.014	0.053	0.016	0.057
B10043.00-B10044.A0	1579	135.4	8.0	0.115	2.648	0.002	0.011	0.004	0.028	0.017	0.053	0.021	0.058
B10044.00-B10045.00	3464	116.0	8.0	0.133	2.848	0.001	0.011	0.006	0.033	0.020	0.055	0.026	0.062

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B10044.A0-B10044.00	412	134.2	8.0	0.149	3.015	0.002	0.010	0.005	0.029	0.018	0.050	0.023	0.056
B10045.00-B10046.00	4650	175.0	8.0	0.147	2.994	0.002	0.011	0.008	0.037	0.020	0.059	0.027	0.067
B10046.00-B10047.00	2530	281.9	8.0	0.202	3.510	0.002	0.013	0.009	0.048	0.024	0.077	0.032	0.089
B10047.00-B10048.00	2547	318.1	8.0	0.035	1.461	0.001	0.018	0.010	0.065	0.028	0.103	0.037	0.118
B10048.00-B10049.00	4643	242.3	8.0	0.099	2.457	0.001	0.012	0.011	0.048	0.032	0.080	0.043	0.091
B10049.00-B10050.00	4639	102.1	8.0	0.378	4.802	0.001	0.344	0.012	0.513	0.055	0.525	0.066	0.528
B10050.00-B10051.00	4630	45.0	8.0	-0.259	Adverse	0.003	0.342	0.013	0.532	0.055	0.559	0.068	0.566
B10051.00-B10053.00	5018	105.0	8.0	0.046	1.675	0.000	0.016	0.015	0.069	0.055	0.121	0.069	0.136
B10052.00-B10053.00	5005	235.7	8.0	0.060	1.913	0.001	0.025	0.002	0.051	0.001	0.067	0.001	0.081
B10053.00-B10054.00	5004	222.2	8.0	0.047	1.693	0.003	0.048	0.020	0.096	0.056	0.147	0.072	0.167
B10054.00-B10057.00	5000	118.0	8.0	0.043	1.620	0.014	0.073	0.047	0.123	0.102	0.172	0.134	0.197
B10055.00-B10056.00	4993	438.8	8.0	0.012	0.856	0.001	0.031	0.002	0.036	0.000	0.019	0.001	0.027
B10055.00-B10058.00	4259	205.5	8.0	0.042	1.601	0.002	0.036	0.003	0.042	0.001	0.023	0.002	0.032
B10056.00-B10057.00	4253	400.3	8.0	0.047	1.693	0.004	0.057	0.005	0.085	0.001	0.097	0.003	0.115
B10057.00-B10060.00	4244	196.0	8.0	0.041	1.581	0.020	0.112	0.056	0.173	0.104	0.237	0.139	0.272
B10058.00-B10059.00	4242	470.8	8.0	0.026	1.259	0.005	0.049	0.007	0.058	0.002	0.030	0.004	0.043
B10059.00-B10060.00	4132	340.1	8.0	0.032	1.397	0.008	0.099	0.011	0.140	0.003	0.167	0.006	0.195
B10060.00-B10062.00	3818	204.0	8.0	0.007	0.653	0.030	0.159	0.070	0.239	0.133	0.326	0.172	0.374
B10061.00-B10062.00	3816	349.4	8.0	0.007	0.653	0.002	0.108	0.003	0.155	0.001	0.186	0.002	0.221
B10062.00-B10063.00	3808	205.0	8.0	0.004	0.494	0.034	0.185	0.077	0.276	0.136	0.380	0.177	0.436
B10063.00-B10064.00	3804	280.5	8.0	0.004	0.494	0.036	0.183	0.080	0.271	0.149	0.375	0.191	0.429
B10064.00-B10068.00	3794	275.5	8.0	0.006	0.605	0.038	0.190	0.083	0.276	0.150	0.365	0.193	0.418
B10065.00-B10066.00	3789	382.4	8.0	0.031	1.375	0.001	0.028	0.002	0.034	0.001	0.024	0.002	0.031
B10066.00-B10068.00	4700	167.0	8.0	0.030	1.353	0.003	0.121	0.004	0.171	0.002	0.208	0.003	0.241
B10067.00-B10065.00	556	189.4	8.0	0.049	1.729	0.002	0.030	0.002	0.036	0.001	0.026	0.002	0.033
B10067.00-B10068.00	4694	266.9	8.0	0.035	1.461	0.004	0.123	0.005	0.172	0.002	0.210	0.004	0.243
B10068.00-B10069.00	4682	258.0	8.0	0.004	0.494	0.045	0.206	0.095	0.297	0.154	0.384	0.202	0.476
B10069.00-B10070.00	4624	129.0	8.0	0.004	0.494	0.045	0.307	0.096	0.496	0.154	0.677	0.203	0.753
B10070.00-B10071.00	4622	182.0	12.0	0.006	1.784	0.202	0.220	0.578	0.371	1.080	0.518	1.456	0.617
B10071.00-B10072.00	4617	259.0	12.0	0.024	3.567	0.202	0.161	0.580	0.272	1.081	0.376	1.458	0.444
B10072.00-B10073.00	4610	293.0	12.0	0.028	3.853	0.202	0.156	0.581	0.263	1.082	0.363	1.461	0.428
B10073.00-B10074.00	4603	293.0	12.0	0.030	3.988	0.203	0.161	0.583	0.272	1.094	0.378	1.474	0.445
B10074.00-B10075.00	4598	321.0	12.0	0.020	3.256	0.203	0.190	0.584	0.324	1.104	0.464	1.485	0.553
B10075.00-B10076.00	4597	413.0	12.0	0.008	2.060	0.204	0.227	0.586	0.394	1.141	0.580	1.523	0.818
B10076.00-B10081.00	4585	273.0	12.0	0.005	1.628	0.205	0.250	0.588	0.423	1.144	0.816	1.528	1.000
B10077.00-B10078.00	4502	118.0	8.0	0.072	2.096	0.001	0.025	0.002	0.034	0.003	0.046	0.004	0.051
B10078.00-B10079.00	4498	295.0	8.0	0.068	2.037	0.003	0.031	0.007	0.042	0.013	0.058	0.017	0.064
B10078.A0-B10078.00	2119	315.9	8.0	0.002	0.349	0.000	0.027	0.001	0.047	0.008	0.101	0.009	0.108
B10079.00-B10080.00	4273	290.0	8.0	0.138	2.901	0.006	0.046	0.010	0.056	0.016	0.067	0.021	0.074
B10080.00-B10081.00	2325	409.0	8.0	0.103	2.507	0.018	0.222	0.023	0.349	0.033	0.540	0.039	0.543
B10081.00-B10082.00	2317	53.0	12.0	0.003	1.261	0.222	0.232	0.613	0.385	1.178	1.000	1.568	1.000
B10082.00-B10083.00	2308	133.0	12.0	0.010	2.303	0.222	0.604	0.614	0.674	1.206	1.000	1.597	1.000
B10083.00-B10084.00	959	236.0	12.0	-0.003	Adverse	0.222	0.585	0.615	0.634	1.206	0.688	1.598	0.718
B10084.00-B10085.00	1592	290.0	12.0	0.035	4.308	0.269	0.180	0.670	0.285	1.285	0.402	1.687	0.469
B10084.A0-B10084.B0	1722	67.0	8.0	0.031	1.375	0.001	0.051	0.002	0.058	0.038	0.111	0.039	0.112
B10084.B0-B10084.C0	2717	236.0	8.0	0.039	1.542	0.024	0.091	0.026	0.096	0.038	0.127	0.040	0.130
B10084.C0-B10084.D0	1975	281.0	8.0	0.025	1.235	0.024	0.105	0.027	0.113	0.056	0.160	0.060	0.165
B10084.D0-B10084.E0	2737	208.0	8.0	0.012	0.856	0.024	0.155	0.028	0.166	0.056	0.214	0.061	0.222
B10084.E0-B10084.F0	2754	78.0	8.0	0.005	0.552	0.047	0.224	0.052	0.238	0.078	0.290	0.084	0.301
B10084.F0-B10084.G0	2811	264.0	8.0	0.005	0.552	0.047	0.194	0.053	0.208	0.078	0.250	0.085	0.261
B10084.G0-B10084.00	711	166.0	8.0	0.022	1.158	0.047	0.195	0.055	0.274	0.078	0.369	0.086	0.418
B10085.00-B10089.00	548	268.0	12.0	0.021	3.337	0.269	0.223	0.671	0.357	1.285	0.515	1.688	0.616
B10086.00-B10088.00	2836	331.0	8.0	0.022	1.158	0.006	0.059	0.010	0.074	0.012	0.080	0.016	0.092
B10086.A0-B10086.B0	2933	196.0	8.0	0.058	1.881	0.004	0.034	0.005	0.038	0.006	0.041	0.007	0.044
B10086.B0-B10086.00	1851	190.0	8.0	0.127	2.783	0.005	0.042	0.007	0.051	0.008	0.056	0.010	0.063

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B10087.00-B10088.00	2688	191.0	8.0	0.129	2.805	0.002	0.041	0.002	0.053	0.002	0.055	0.004	0.064
B10088.00-B10089.00	2348	71.1	8.0	0.013	0.890	0.009	0.224	0.014	0.350	0.016	0.494	0.021	0.551
B10089.00-B10092.00	1535	342.0	12.0	0.007	1.927	0.277	0.255	0.687	0.409	1.304	0.597	1.713	0.726
B10090.00-B10091.00	953	325.3	8.0	0.002	0.349	0.000	0.009	0.001	0.042	0.001	0.041	0.002	0.057
B10091.00-B10092.00	944	221.0	8.0	0.089	2.330	0.002	0.199	0.004	0.320	0.006	0.465	0.009	0.522
B10092.00-B10093.00	4269	310.0	12.0	0.007	1.927	0.279	0.265	0.692	0.426	1.312	0.620	1.725	0.754
B10093.00-B10094.00	4263	349.0	12.0	0.008	2.060	0.280	0.251	0.694	0.402	1.315	0.580	1.729	0.698
B11134.00-B10008.00	1477	176.0	10.0	0.016	1.791	0.137	0.193	0.431	0.345	0.828	0.497	1.123	0.598
B11001.00-B11002.00	2494	260.0	8.0	0.075	2.139	0.002	0.023	0.003	0.032	0.003	0.036	0.005	0.041
B11002.00-B11003.00	4459	164.0	8.0	0.051	1.764	0.002	0.033	0.004	0.048	0.006	0.056	0.008	0.066
B11003.00-B11004.00	4450	37.0	8.0	0.010	0.781	0.002	0.030	0.006	0.046	0.007	0.051	0.011	0.062
B11004.00-B11005.00	4443	259.0	8.0	0.237	3.802	0.002	0.023	0.007	0.037	0.008	0.037	0.012	0.047
B11005.00-B11006.00	6373	191.0	8.0	0.104	2.519	0.003	0.041	0.009	0.066	0.008	0.063	0.014	0.081
B11006.00-B11007.00	6581	205.0	8.0	0.007	0.653	0.004	0.055	0.011	0.090	0.010	0.088	0.017	0.112
B11007.00-B11008.00	4435	291.0	8.0	0.008	0.699	0.004	0.061	0.012	0.099	0.012	0.092	0.020	0.118
B11008.00-B11021.00	4428	210.0	8.0	0.008	0.699	0.005	0.060	0.014	0.098	0.013	0.111	0.022	0.134
B11009.00-B11010.00	4419	195.0	8.0	0.094	2.394	0.002	0.020	0.002	0.029	0.003	0.038	0.004	0.043
B11010.00-B11011.00	4415	284.0	8.0	0.054	1.815	0.001	0.021	0.004	0.033	0.006	0.041	0.008	0.048
B11011.00-B11012.00	4414	74.0	8.0	0.057	1.865	0.001	0.017	0.005	0.031	0.006	0.034	0.009	0.043
B11012.00-B11021.00	4412	288.0	8.0	0.164	3.163	0.001	0.034	0.006	0.061	0.007	0.081	0.011	0.095
B11013.00-B11014.00	4410	251.0	8.0	0.040	1.562	0.001	0.030	0.002	0.043	0.003	0.040	0.004	0.051
B11014.00-B11015.00	4409	254.0	8.0	0.021	1.132	0.002	0.029	0.004	0.043	0.004	0.043	0.006	0.053
B11015.00-B11018.00	1094	122.0	8.0	0.150	3.025	0.002	0.022	0.005	0.035	0.011	0.062	0.015	0.067
B11016.00-B11017.00	1077	176.0	8.0	0.005	0.552	0.001	0.042	0.002	0.061	0.018	0.190	0.020	0.194
B11017.00-B11018.00	4398	122.0	8.0	0.005	0.552	0.002	0.040	0.004	0.060	0.036	0.170	0.039	0.176
B11018.00-B11019.00	6259	147.0	8.0	0.133	2.848	0.004	0.034	0.011	0.055	0.048	0.110	0.055	0.118
B11019.00-B11020.00	5281	220.0	8.0	0.045	1.657	0.004	0.036	0.012	0.061	0.049	0.118	0.057	0.127
B11020.00-B11021.00	4117	290.0	8.0	0.095	2.407	0.004	0.042	0.013	0.072	0.052	0.115	0.061	0.129
B11021.00-B11023.00	4097	83.0	8.0	0.071	2.081	0.011	0.083	0.035	0.146	0.073	0.206	0.097	0.238
B11022.00-B11023.00	331	25.0	8.0	-0.001	Adverse	0.001	0.137	0.002	0.224	0.007	0.305	0.004	0.350
B11023.00-B11024.00	913	250.0	8.0	0.010	0.781	0.011	0.084	0.038	0.148	0.076	0.208	0.102	0.241
B11024.00-B11025.00	4382	449.0	8.0	0.080	2.209	0.012	0.054	0.040	0.093	0.079	0.129	0.106	0.149
B11025.00-B11026.00	4229	370.0	8.0	0.096	2.420	0.014	0.057	0.043	0.095	0.081	0.128	0.109	0.148
B11026.00-B11028.00	4225	132.4	8.0	0.083	2.250	0.017	0.062	0.048	0.101	0.089	0.136	0.119	0.157
B11027.00-B11026.00	3066	350.0	6.0	0.007	0.303	0.001	0.063	0.002	0.096	0.006	0.137	0.008	0.155
B11028.00-B11030.00	4224	381.0	8.0	0.079	2.195	0.018	0.064	0.050	0.104	0.091	0.139	0.123	0.161
B11029.00-B11030.00	4223	375.0	8.0	0.005	0.552	0.001	0.048	0.002	0.074	0.003	0.095	0.004	0.111
B11030.00-B11037.00	4222	39.2	8.0	0.024	1.210	0.019	0.072	0.054	0.116	0.095	0.156	0.129	0.180
B11031.00-B11032.00	4221	252.0	8.0	0.020	1.104	0.001	0.026	0.002	0.035	0.011	0.070	0.012	0.074
B11032.00-B11033.00	640	99.0	8.0	0.068	2.037	0.001	0.022	0.004	0.041	0.011	0.066	0.013	0.074
B11033.00-B11035.00	636	166.0	8.0	0.021	1.132	0.001	0.026	0.005	0.047	0.013	0.077	0.017	0.085
B11034.00-B11035.00	631	335.0	8.0	0.006	0.605	0.001	0.035	0.002	0.046	0.010	0.089	0.011	0.094
B11035.00-B11036.00	257	324.0	8.0	0.168	3.201	0.004	0.028	0.009	0.042	0.030	0.071	0.036	0.078
B11036.00-B11037.00	254	329.0	8.0	0.140	2.922	0.005	0.054	0.011	0.086	0.032	0.124	0.039	0.141
B11037.00-B11040.00	7368	413.0	8.0	0.060	1.913	0.024	0.086	0.067	0.139	0.127	0.190	0.170	0.219
B11038.00-B11039.00	623	244.0	8.0	0.006	0.605	0.001	0.031	0.002	0.049	0.002	0.049	0.003	0.062
B11039.00-B11040.00	6865	151.3	8.0	0.005	0.552	0.001	0.065	0.004	0.106	0.004	0.133	0.006	0.157
B11040.00-B11043.00	612	63.8	8.0	0.019	1.077	0.025	0.093	0.069	0.152	0.129	0.205	0.173	0.238
B11041.00-B11042.00	1158	5.0	8.0	0.004	0.494	0.000	0.009	0.001	0.021	0.004	0.031	0.005	0.035
B11042.00-B11043.00	3039	400.0	8.0	0.135	2.870	0.001	0.053	0.003	0.089	0.006	0.120	0.008	0.140
B11043.00-B11046.00	2764	408.0	8.0	0.036	1.482	0.027	0.095	0.076	0.157	0.139	0.208	0.188	0.243
B11044.00-B11045.00	3455	198.0	6.0	0.098	1.135	0.001	0.023	0.002	0.036	0.001	0.031	0.002	0.042
B11045.00-B11046.00	2763	250.0	6.0	0.084	1.051	0.001	0.078	0.004	0.128	0.003	0.159	0.005	0.189
B11046.00-B11047.00	2762	159.5	8.0	0.035	1.461	0.029	0.100	0.081	0.165	0.141	0.216	0.194	0.253
B11047.00-B11048.00	2761	329.0	8.0	0.028	1.307	0.029	0.129	0.083	0.225	0.142	0.263	0.196	0.324

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B11048.00-B11049.00	2760	287.0	8.0	0.044	1.638	0.085	0.164	0.280	0.296	0.328	0.318	0.523	0.409
B11049.00-B11050.00	2759	301.0	8.0	0.038	1.522	0.086	0.161	0.282	0.292	0.329	0.316	0.525	0.406
B11050.00-B11051.00	2758	379.0	8.0	0.051	1.764	0.086	0.171	0.283	0.312	0.347	0.347	0.544	0.444
B11051.00-B11055.00	2757	200.0	8.0	0.019	1.077	0.086	0.196	0.284	0.359	0.347	0.399	0.545	0.516
B11052.00-B11053.00	2756	340.0	8.0	0.080	2.209	0.001	0.020	0.002	0.029	0.005	0.039	0.006	0.043
B11053.00-B11054.00	2755	346.0	8.0	0.073	2.110	0.002	0.024	0.004	0.036	0.007	0.043	0.009	0.050
B11054.00-B11055.00	2956	117.0	8.0	0.075	2.139	0.003	0.112	0.006	0.201	0.009	0.225	0.012	0.289
B11055.00-B11056.00	2955	110.0	8.0	0.017	1.018	0.089	0.200	0.291	0.368	0.355	0.424	0.558	0.544
B11056.00-B11057.00	2954	194.0	8.0	0.019	1.077	0.089	0.195	0.293	0.358	0.404	0.426	0.608	0.540
B11057.00-B11061.00	2953	156.0	8.0	0.022	1.158	0.089	0.201	0.294	0.368	0.405	0.502	0.610	0.626
B11058.00-B11059.00	3270	282.0	8.0	0.081	2.223	0.001	0.014	0.002	0.026	0.009	0.050	0.010	0.054
B11059.00-B11060.00	910	331.0	8.0	0.057	1.865	0.001	0.023	0.003	0.036	0.011	0.144	0.013	0.148
B11060.00-B11061.00	908	357.0	8.0	0.059	1.897	0.003	0.122	0.007	0.217	0.227	0.414	0.230	0.485
B11061.00-B11062.00	907	232.0	8.0	0.016	0.988	0.092	0.207	0.302	0.381	0.631	0.584	0.841	0.713
B11062.00-B11113.00	906	350.0	8.0	0.018	1.048	0.093	0.206	0.304	0.374	0.635	0.564	0.846	0.684
B11063.00-B11064.00	905	264.8	8.0	0.002	0.349	0.001	0.032	0.002	0.058	0.002	0.071	0.003	0.086
B11064.00-B11065.00	904	71.2	8.0	0.002	0.349	0.001	0.040	0.003	0.077	0.006	0.097	0.008	0.115
B11065.00-B11066.00	903	14.3	8.0	0.000	0.000	0.001	0.036	0.004	0.071	0.007	0.085	0.010	0.103
B11066.00-B11067.00	902	265.0	8.0	0.019	1.077	0.001	0.027	0.006	0.052	0.009	0.066	0.014	0.079
B11067.00-B11068.00	901	330.0	8.0	0.043	1.620	0.003	0.052	0.008	0.079	0.014	0.098	0.020	0.114
B11068.00-B11084.00	900	324.0	8.0	0.004	0.494	0.004	0.066	0.011	0.103	0.017	0.127	0.024	0.149
B11069.00-B11070.00	899	300.0	8.0	0.004	0.494	0.001	0.039	0.002	0.052	0.002	0.049	0.003	0.060
B11070.00-B11084.00	898	315.0	8.0	0.075	2.139	0.002	0.039	0.004	0.066	0.004	0.078	0.006	0.094
B11071.00-B11072.00	835	147.0	8.0	0.055	1.832	0.000	0.013	0.001	0.025	0.003	0.033	0.004	0.039
B11072.00-B11076.00	897	219.0	8.0	0.078	2.181	0.001	0.022	0.003	0.037	0.005	0.046	0.007	0.054
B11073.00-B11074.00	1190	303.0	8.0	0.006	0.605	0.001	0.031	0.002	0.044	0.010	0.090	0.011	0.095
B11074.00-B11075.00	896	177.0	8.0	0.072	2.096	0.001	0.019	0.003	0.032	0.011	0.052	0.013	0.058
B11075.00-B11076.00	895	169.0	8.0	0.089	2.330	0.002	0.024	0.005	0.040	0.012	0.055	0.016	0.063
B11076.00-B11082.00	894	213.0	8.0	0.126	2.772	0.004	0.031	0.010	0.055	0.018	0.073	0.025	0.085
B11077.00-B11078.00	893	163.0	8.0	0.033	1.419	0.000	0.000	0.001	0.022	0.002	0.029	0.003	0.036
B11078.00-B11082.00	892	184.0	8.0	0.110	2.590	0.000	0.018	0.002	0.045	0.002	0.055	0.004	0.067
B11079.00-B11080.00	1364	235.2	6.0	0.002	0.162	0.000	0.040	0.001	0.080	0.009	0.163	0.010	0.177
B11080.00-B11081.00	1311	195.2	6.0	0.002	0.162	0.001	0.055	0.003	0.115	0.010	0.196	0.012	0.220
B11081.00-B11082.00	891	259.2	6.0	0.002	0.162	0.001	0.055	0.004	0.112	0.011	0.173	0.014	0.198
B11082.00-B11083.00	890	170.0	8.0	0.111	2.602	0.005	0.031	0.018	0.060	0.032	0.078	0.046	0.092
B11083.00-B11084.00	889	83.0	8.0	0.083	2.250	0.005	0.042	0.019	0.077	0.032	0.095	0.047	0.115
B11084.00-B11087.00	888	342.0	8.0	0.046	1.675	0.011	0.062	0.036	0.110	0.054	0.132	0.079	0.159
B11085.00-B11086.00	887	301.0	8.0	0.004	0.494	0.000	0.020	0.001	0.040	0.002	0.044	0.003	0.055
B11086.00-B11087.00	2952	409.0	8.0	0.021	1.132	0.001	0.043	0.003	0.078	0.003	0.088	0.005	0.109
B11087.00-B11092.00	2951	211.0	8.0	0.032	1.397	0.013	0.102	0.041	0.177	0.059	0.210	0.088	0.255
B11088.00-B11089.00	2950	400.0	8.0	0.080	2.209	0.002	0.024	0.004	0.036	0.008	0.047	0.010	0.054
B11088.A0-B11088.00	2949	30.0	8.0	0.004	0.494	0.001	0.027	0.002	0.039	0.007	0.065	0.008	0.070
B11089.00-B11092.00	2948	413.0	8.0	0.060	1.913	0.003	0.083	0.006	0.138	0.010	0.165	0.013	0.200
B11090.00-B11091.00	2947	294.0	6.0	0.003	0.199	0.000	0.030	0.001	0.075	0.002	0.086	0.003	0.106
B11091.00-B11092.00	2946	400.0	6.0	0.003	0.199	0.001	0.122	0.004	0.205	0.004	0.239	0.007	0.292
B11092.00-B11094.00	203	256.0	8.0	0.005	0.552	0.018	0.123	0.053	0.208	0.075	0.245	0.110	0.299
B11093.00-B11094.00	179	340.0	6.0	0.006	0.281	0.001	0.096	0.002	0.154	0.003	0.176	0.004	0.213
B11094.00-B11097.00	666	405.0	8.0	0.010	0.781	0.020	0.134	0.057	0.225	0.078	0.269	0.116	0.326
B11095.00-B11096.00	3454	160.0	8.0	0.030	1.353	0.001	0.025	0.002	0.034	0.013	0.070	0.015	0.073
B11096.00-B11097.00	2945	348.8	8.0	0.054	1.815	0.003	0.095	0.005	0.153	0.016	0.196	0.018	0.233
B11097.00-B11099.00	2944	405.0	8.0	0.003	0.428	0.023	0.159	0.064	0.265	0.095	0.327	0.136	0.395
B11098.00-B11099.00	1767	76.1	8.0	0.002	0.349	0.001	0.098	0.002	0.159	0.009	0.221	0.011	0.284
B11099.00-B11100.00	1766	324.0	8.0	0.003	0.428	0.024	0.158	0.068	0.261	0.106	0.328	0.149	0.394
B11100.00-B11106.A0	59	366.0	8.0	0.004	0.494	0.025	0.160	0.070	0.265	0.110	0.334	0.154	0.400
B11101.00-B11102.00	1765	260.0	8.0	0.009	0.741	0.001	0.028	0.002	0.043	0.003	0.043	0.004	0.053

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B11102.00-B11104.00	1764	150.0	8.0	0.098	2.445	0.002	0.016	0.003	0.028	0.003	0.024	0.005	0.033
B11103.00-B11104.00	1818	11.2	8.0	-0.141	Adverse	0.001	0.502	0.005	0.504	0.003	0.503	0.007	0.505
B11104.00-B11105.00	1763	144.0	8.0	0.004	0.494	0.000	0.018	0.000	0.028	0.000	0.024	0.000	0.032
B11105.00-B11106.00	1762	542.0	8.0	0.004	0.494	0.001	0.093	0.002	0.150	0.002	0.177	0.003	0.215
B11106.00-B11110.00	1761	353.0	8.0	0.005	0.552	0.027	0.157	0.075	0.260	0.112	0.318	0.160	0.384
B11106.A0-B11106.00	94	93.0	8.0	0.004	0.494	0.026	0.158	0.072	0.262	0.110	0.326	0.156	0.391
B11107.00-B11108.00	7582	165.0	8.0	0.005	0.552	0.001	0.038	0.002	0.056	0.002	0.060	0.003	0.072
B11108.00-B11109.00	1876	362.0	8.0	0.009	0.741	0.001	0.032	0.004	0.051	0.005	0.061	0.008	0.072
B11109.00-B11110.00	1875	235.0	8.0	0.074	2.125	0.002	0.092	0.005	0.152	0.008	0.184	0.011	0.223
B11110.00-B11111.00	1874	135.9	8.0	0.005	0.552	0.030	0.195	0.082	0.324	0.121	0.394	0.174	0.478
B11111.00-B11112.00	1873	349.0	8.0	0.004	0.494	0.030	0.166	0.084	0.275	0.122	0.332	0.176	0.402
B11112.00-B11113.00	16	351.0	8.0	0.032	1.397	0.031	0.156	0.086	0.272	0.124	0.378	0.179	0.459
B11113.00-B11117.00	1872	372.0	8.0	0.027	1.283	0.124	0.211	0.391	0.380	0.768	0.559	1.035	0.684
B11114.00-B11115.00	188	309.3	6.0	0.002	0.162	0.001	0.060	0.002	0.092	0.003	0.093	0.004	0.115
B11115.00-B11116.00	1871	53.2	6.0	0.002	0.162	0.001	0.067	0.004	0.112	0.003	0.111	0.006	0.142
B11116.00-B11117.00	1393	250.1	6.0	0.002	0.162	0.002	0.177	0.005	0.316	0.005	0.437	0.009	0.539
B11117.00-B11118.00	1870	317.0	8.0	0.027	1.283	0.125	0.212	0.397	0.384	0.776	0.565	1.047	0.693
B11118.00-B11119.C0	7484	335.0	8.0	0.026	1.259	0.126	0.213	0.398	0.385	0.777	0.567	1.050	0.696
B11119.00-B11120.00	1869	288.0	8.0	0.027	1.283	0.126	0.218	0.403	0.395	0.791	0.576	1.068	0.698
B11119.A0-B11119.B0	1877	300.2	8.0	0.118	2.683	0.001	0.008	0.001	0.022	0.004	0.031	0.005	0.036
B11119.B0-B11119.C0	1526	272.0	8.0	0.099	2.457	0.002	0.110	0.003	0.205	0.005	0.301	0.007	0.369
B11119.C0-B11119.00	7191	335.0	8.0	0.027	1.283	0.126	0.212	0.402	0.385	0.789	0.568	1.065	0.697
B11120.00-B11133.00	1868	96.0	10.0	0.015	1.734	0.126	0.183	0.404	0.327	0.791	0.469	1.069	0.562
B11121.00-B11122.00	1867	32.0	8.0	0.003	0.428	0.001	0.027	0.002	0.048	0.005	0.074	0.006	0.083
B11122.00-B11123.00	1866	296.0	8.0	0.007	0.653	0.001	0.029	0.003	0.050	0.007	0.072	0.009	0.082
B11123.00-B11124.00	1865	335.2	8.0	0.073	2.110	0.002	0.027	0.006	0.041	0.010	0.055	0.013	0.062
B11124.00-B11125.00	1864	105.7	8.0	0.055	1.832	0.003	0.036	0.008	0.052	0.015	0.069	0.020	0.079
B11125.00-B11126.00	1863	220.0	8.0	0.036	1.482	0.005	0.048	0.011	0.067	0.019	0.086	0.024	0.098
B11126.00-B11130.00	1862	394.0	8.0	0.025	1.235	0.007	0.094	0.014	0.134	0.022	0.164	0.029	0.189
B11127.00-B11128.00	1861	90.0	8.0	0.011	0.819	0.001	0.029	0.002	0.039	0.004	0.050	0.005	0.056
B11128.00-B11129.00	1860	281.5	8.0	0.174	3.258	0.002	0.022	0.004	0.033	0.006	0.038	0.008	0.045
B11129.00-B11130.00	1859	290.7	8.0	0.065	1.991	0.003	0.081	0.006	0.117	0.008	0.139	0.011	0.163
B11130.00-B11131.00	1858	521.2	8.0	0.004	0.494	0.010	0.099	0.022	0.142	0.032	0.172	0.044	0.200
B11131.00-B11132.00	1857	215.2	8.0	0.033	1.419	0.011	0.092	0.023	0.135	0.037	0.165	0.049	0.212
B11132.00-B11133.00	1856	147.2	8.0	0.002	0.349	0.011	0.176	0.025	0.295	0.037	0.403	0.050	0.501
B11133.00-B11134.00	1855	186.0	10.0	0.017	1.846	0.137	0.186	0.430	0.332	0.828	0.475	1.122	0.571
B12088.00-B11048.00	7264	395.7	8.0	0.016	0.988	0.055	0.159	0.194	0.299	0.185	0.298	0.325	0.393
B12002.00-B12003.00	1816	3.7	8.0	0.000	0.000	0.000	0.074	0.002	0.184	0.002	0.173	0.002	0.241
B12003.00-B12004.00	1854	204.0	8.0	0.012	0.856	0.008	0.069	0.047	0.160	0.041	0.150	0.080	0.208
B12003.A0-B12003.B0	7902	210.1	8.0	0.144	2.964	0.002	0.010	0.002	0.021	0.011	0.046	0.013	0.049
B12003.B0-B12003.C0	7903	61.2	8.0	0.048	1.711	0.001	0.012	0.003	0.028	0.011	0.048	0.014	0.053
B12003.C0-B12003.D0	7904	130.6	8.0	0.083	2.250	0.001	0.017	0.004	0.037	0.011	0.055	0.015	0.063
B12003.D0-B12003.E0	7905	161.9	8.0	0.047	1.693	0.001	0.026	0.006	0.051	0.012	0.069	0.017	0.081
B12003.E0-B12003.F0	7906	79.5	8.0	0.017	1.018	0.002	0.029	0.007	0.061	0.013	0.078	0.018	0.093
B12003.F0-B12003.G0	7907	38.6	8.0	0.010	0.781	0.002	0.027	0.009	0.059	0.013	0.071	0.020	0.088
B12003.G0-B12003.K0	7908	94.8	8.0	0.036	1.482	0.002	0.033	0.010	0.069	0.013	0.072	0.021	0.094
B12003.H0-B12003.I0	7897	42.8	8.0	0.016	0.988	0.000	0.012	0.001	0.026	0.000	0.015	0.002	0.027
B12003.I0-B12003.J0	7898	55.2	8.0	0.031	1.375	0.001	0.080	0.003	0.116	0.001	0.102	0.003	0.127
B12003.J0-B12003.K0	7899	69.0	8.0	-0.001	Adverse	0.001	0.093	0.004	0.143	0.001	0.134	0.004	0.165
B12003.K0-B12003.L0	7900	298.7	8.0	0.034	1.440	0.003	0.035	0.016	0.074	0.015	0.071	0.027	0.096
B12003.L0-B12003.N0	7901	30.7	8.0	0.017	1.018	0.004	0.043	0.017	0.092	0.015	0.086	0.029	0.118
B12003.M0-B12003.N0	7890	125.7	8.0	0.006	0.605	0.000	0.036	0.003	0.083	0.003	0.079	0.005	0.108
B12003.MA-B12003.M0	7888	73.0	8.0	0.021	1.132	0.000	0.015	0.001	0.036	0.003	0.041	0.004	0.052
B12003.N0-B12003.O0	7891	56.3	8.0	0.006	0.605	0.004	0.054	0.021	0.122	0.018	0.112	0.035	0.156
B12003.O0-B12003.P0	7892	83.9	8.0	0.007	0.653	0.004	0.064	0.022	0.143	0.018	0.129	0.036	0.181

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B12003.P0-B12003.Q0	7893	86.9	8.0	0.007	0.653	0.004	0.057	0.024	0.129	0.019	0.114	0.038	0.161
B12003.Q0-B12003.Y0	7894	4.7	8.0	0.002	0.349	0.004	0.065	0.025	0.145	0.019	0.136	0.039	0.186
B12003.R0-B12003.S0	7438	271.4	8.0	0.068	2.037	0.001	0.015	0.002	0.025	0.001	0.017	0.002	0.026
B12003.S0-B12003.T0	7439	33.1	8.0	0.025	1.235	0.001	0.015	0.003	0.027	0.001	0.018	0.004	0.028
B12003.T0-B12003.U0	7440	133.6	8.0	0.016	0.988	0.003	0.042	0.012	0.078	0.020	0.098	0.029	0.117
B12003.TA-B12003.TB	7430	87.0	8.0	0.073	2.110	0.001	0.010	0.001	0.021	0.001	0.009	0.001	0.021
B12003.TB-B12003.TC	7431	167.6	8.0	0.128	2.794	0.001	0.015	0.003	0.029	0.001	0.015	0.003	0.029
B12003.TC-B12003.TD	7435	286.6	8.0	0.089	2.330	0.001	0.022	0.005	0.041	0.001	0.049	0.005	0.061
B12003.TD-B12003.TE	7436	144.5	8.0	0.033	1.419	0.002	0.039	0.006	0.071	0.018	0.108	0.023	0.122
B12003.TE-B12003.T0	7437	276.8	8.0	0.005	0.552	0.002	0.043	0.008	0.083	0.018	0.126	0.024	0.143
B12003.U0-B12003.V0	7441	82.3	8.0	0.054	1.815	0.003	0.027	0.014	0.053	0.021	0.065	0.031	0.079
B12003.V0-B12003.W0	7442	89.3	8.0	0.060	1.913	0.003	0.028	0.015	0.056	0.021	0.066	0.032	0.082
B12003.W0-B12003.X0	7443	74.3	8.0	0.045	1.657	0.003	0.029	0.016	0.062	0.022	0.071	0.035	0.088
B12003.X0-B12003.Y0	7889	70.0	8.0	0.035	1.461	0.003	0.030	0.017	0.065	0.022	0.073	0.036	0.093
B12003.Y0-B12003.Z0	7895	30.4	8.0	0.004	0.494	0.008	0.069	0.043	0.153	0.041	0.148	0.076	0.200
B12003.Z0-B12003.00	7896	251.5	8.0	0.043	1.620	0.008	0.050	0.044	0.114	0.041	0.112	0.077	0.148
B12004.00-B12006.00	1853	195.0	8.0	0.030	1.353	0.009	0.082	0.049	0.177	0.043	0.164	0.083	0.224
B12005.00-B12006.00	1815	5.5	8.0	0.000	0.000	0.001	0.096	0.002	0.215	0.003	0.198	0.002	0.271
B12006.00-B12008.00	1852	23.0	8.0	0.002	0.349	0.010	0.087	0.052	0.189	0.043	0.173	0.085	0.238
B12007.00-B12008.00	1814	3.4	8.0	0.000	0.000	0.001	0.064	0.001	0.150	0.002	0.135	0.001	0.191
B12008.00-B12009.00	1760	190.0	8.0	0.032	1.397	0.010	0.060	0.054	0.134	0.044	0.121	0.088	0.170
B12009.00-B12010.00	1759	229.0	8.0	0.069	2.052	0.011	0.055	0.057	0.120	0.045	0.108	0.091	0.151
B12010.00-B12011.00	1758	274.0	8.0	0.050	1.746	0.012	0.060	0.059	0.127	0.048	0.115	0.095	0.160
B12011.00-B12012.00	1757	300.0	8.0	0.050	1.746	0.013	0.068	0.061	0.140	0.050	0.128	0.098	0.177
B12012.00-B12013.00	1756	358.0	8.0	0.026	1.259	0.014	0.077	0.063	0.157	0.053	0.143	0.102	0.197
B12013.00-B12014.00	1755	331.0	8.0	0.027	1.283	0.015	0.076	0.065	0.153	0.054	0.140	0.105	0.193
B12014.00-B12015.00	2943	321.0	8.0	0.048	1.711	0.015	0.067	0.067	0.135	0.056	0.124	0.107	0.170
B12015.00-B12016.00	2942	319.0	8.0	0.071	2.081	0.016	0.072	0.068	0.144	0.056	0.131	0.109	0.180
B12016.00-B12017.00	2941	157.0	8.0	0.024	1.210	0.016	0.084	0.070	0.175	0.057	0.158	0.111	0.220
B12017.00-B12030.00	2940	155.0	8.0	0.022	1.158	0.017	0.085	0.072	0.169	0.058	0.152	0.113	0.211
B12018.00-B12019.00	2939	341.0	8.0	0.034	1.440	0.001	0.027	0.002	0.036	0.002	0.038	0.003	0.045
B12019.00-B12020.00	5546	346.0	8.0	0.040	1.562	0.003	0.037	0.005	0.049	0.007	0.057	0.009	0.065
B12020.00-B12021.00	3402	345.0	8.0	0.026	1.259	0.004	0.042	0.008	0.056	0.009	0.061	0.013	0.071
B12021.00-B12024.00	5228	350.0	8.0	0.054	1.815	0.006	0.046	0.010	0.061	0.011	0.062	0.016	0.074
B12022.00-B12023.00	2938	317.0	6.0	-0.713	Adverse	0.002	0.524	0.003	0.532	0.002	0.530	0.004	0.536
B12023.00-B12024.00	393	373.0	6.0	0.032	0.649	0.003	0.058	0.005	0.077	0.004	0.075	0.007	0.090
B12024.00-B12025.00	5096	117.4	8.0	0.051	1.764	0.009	0.055	0.017	0.075	0.017	0.074	0.025	0.089
B12025.00-B12028.00	2937	350.0	8.0	0.030	1.353	0.010	0.068	0.019	0.094	0.018	0.090	0.027	0.111
B12026.00-B12027.00	2936	215.0	6.0	0.008	0.324	0.001	0.046	0.002	0.062	0.002	0.052	0.003	0.066
B12027.00-B12028.00	2935	128.0	6.0	0.066	0.932	0.002	0.066	0.004	0.094	0.003	0.086	0.005	0.109
B12028.00-B12029.00	2934	64.2	8.0	0.018	1.048	0.012	0.066	0.025	0.093	0.022	0.087	0.034	0.109
B12029.00-B12030.00	2932	352.0	8.0	0.068	2.037	0.013	0.072	0.027	0.116	0.023	0.106	0.037	0.139
B12030.00-B12031.C0	2163	384.0	8.0	0.066	2.006	0.030	0.092	0.100	0.163	0.081	0.147	0.151	0.199
B12031.00-B12043.00	2931	247.0	8.0	0.020	1.104	0.031	0.108	0.105	0.195	0.083	0.171	0.157	0.237
B12031.A0-B12031.B0	7824	98.0	8.0	0.069	2.052	0.000	0.000	0.001	0.018	0.001	0.018	0.002	0.025
B12031.B0-B12031.C0	7823	155.5	8.0	0.084	2.264	0.001	0.013	0.003	0.027	0.002	0.023	0.004	0.033
B12031.C0-B12031.00	2164	384.0	8.0	0.021	1.132	0.031	0.101	0.104	0.182	0.083	0.162	0.156	0.222
B12032.00-B12033.00	2930	3.0	8.0	0.000	0.000	0.000	0.021	0.001	0.040	0.001	0.026	0.002	0.043
B12033.00-B12035.00	2929	108.0	8.0	0.034	1.440	0.001	0.024	0.003	0.043	0.001	0.033	0.003	0.049
B12034.00-B12035.00	2261	205.0	8.0	0.083	2.250	0.001	0.025	0.002	0.039	0.002	0.034	0.003	0.045
B12035.00-B12036.00	2260	51.4	8.0	0.017	1.018	0.002	0.027	0.007	0.047	0.004	0.038	0.009	0.054
B12036.00-B12037.00	2259	152.0	8.0	0.097	2.432	0.002	0.030	0.008	0.053	0.005	0.040	0.010	0.059
B12037.00-B12038.00	2258	212.0	8.0	0.037	1.502	0.003	0.035	0.010	0.059	0.006	0.044	0.012	0.064
B12038.00-B12039.00	2257	139.0	8.0	0.077	2.167	0.004	0.048	0.012	0.080	0.006	0.058	0.014	0.086
B12039.00-B12040.00	2161	81.0	8.0	0.014	0.924	0.005	0.049	0.014	0.083	0.007	0.060	0.016	0.089

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B12040.00-B12042.00	2160	225.0	8.0	0.076	2.153	0.005	0.042	0.015	0.073	0.008	0.055	0.018	0.081
B12042.00-B12043.00	2159	256.0	8.0	0.019	1.077	0.005	0.081	0.017	0.144	0.009	0.120	0.021	0.170
B12043.00-B12063.00	2158	176.5	8.0	0.032	1.397	0.036	0.111	0.123	0.207	0.092	0.185	0.179	0.255
B12044.00-B12045.00	5446	156.0	8.0	0.014	0.924	0.000	0.000	0.001	0.027	0.002	0.035	0.003	0.043
B12045.00-B12046.00	2157	60.0	8.0	0.089	2.330	0.000	0.002	0.002	0.017	0.003	0.019	0.005	0.025
B12046.00-B12047.A0	4315	158.0	8.0	0.314	4.376	0.005	0.006	0.004	0.025	0.005	0.027	0.008	0.035
B12047.00-B12048.00	2156	300.0	8.0	0.042	1.601	0.001	0.031	0.006	0.085	0.007	0.097	0.012	0.124
B12047.A0-B12047.00	3240	174.0	8.0	0.116	2.660	0.000	0.012	0.005	0.039	0.006	0.040	0.010	0.053
B12048.00-B12049.00	2155	300.0	8.0	0.005	0.552	0.001	0.031	0.008	0.082	0.011	0.095	0.018	0.121
B12049.00-B12050.00	2154	276.0	8.0	0.152	3.045	0.002	0.019	0.009	0.050	0.011	0.053	0.019	0.069
B12050.00-B12051.00	2153	154.0	8.0	0.039	1.542	0.001	0.025	0.010	0.066	0.012	0.077	0.021	0.097
B12051.00-B12052.00	2152	146.0	8.0	0.035	1.461	0.001	0.023	0.012	0.063	0.018	0.078	0.028	0.096
B12052.00-B12056.00	2151	300.0	8.0	0.088	2.317	0.001	0.022	0.013	0.061	0.019	0.072	0.030	0.091
B12053.00-B12055.00	1591	81.0	8.0	0.054	1.815	0.000	0.000	0.001	0.021	0.000	0.016	0.001	0.028
B12054.00-B12055.00	2162	40.0	8.0	0.005	0.552	0.000	0.000	0.001	0.029	0.002	0.036	0.003	0.044
B12055.00-B12056.00	1590	304.5	8.0	0.168	3.201	0.000	0.013	0.003	0.047	0.006	0.056	0.009	0.070
B12056.00-B12057.00	1589	275.0	8.0	0.062	1.945	0.002	0.028	0.018	0.070	0.025	0.081	0.041	0.102
B12057.00-B12058.00	1588	297.0	8.0	0.063	1.960	0.003	0.043	0.020	0.099	0.027	0.111	0.044	0.142
B12058.00-B12062.00	1587	264.0	8.0	0.015	0.957	0.004	0.044	0.022	0.104	0.027	0.116	0.046	0.148
B12059.00-B12060.00	5462	228.0	8.0	0.134	2.859	0.000	0.000	0.002	0.018	0.002	0.026	0.003	0.031
B12060.00-B12061.00	426	374.0	8.0	0.158	3.104	0.000	0.000	0.002	0.024	0.005	0.033	0.007	0.040
B12061.00-B12062.00	2928	333.0	8.0	0.119	2.694	0.000	0.017	0.003	0.054	0.007	0.064	0.010	0.080
B12062.00-B12063.00	2927	336.6	8.0	0.064	1.976	0.004	0.072	0.027	0.147	0.034	0.143	0.057	0.192
B12063.00-B12064.00	2926	295.0	8.0	0.038	1.522	0.040	0.164	0.151	0.323	0.126	0.293	0.237	0.415
B12064.00-B12086.00	2925	282.0	8.0	0.003	0.428	0.040	0.235	0.153	0.457	0.128	0.430	0.240	0.600
B12065.00-B12066.00	2924	315.0	8.0	0.036	1.482	0.001	0.024	0.002	0.035	0.017	0.085	0.018	0.088
B12066.00-B12067.00	2923	500.0	8.0	0.040	1.562	0.003	0.031	0.005	0.041	0.021	0.082	0.024	0.086
B12067.00-B12068.00	2922	205.0	8.0	0.113	2.625	0.004	0.030	0.007	0.041	0.025	0.069	0.028	0.074
B12068.00-B12070.00	2324	55.0	8.0	0.038	1.522	0.004	0.030	0.009	0.045	0.026	0.072	0.030	0.079
B12069.00-B12070.00	4411	150.0	8.0	0.005	0.552	0.000	0.015	0.001	0.040	0.002	0.061	0.004	0.070
B12070.00-B12071.00	3793	130.0	8.0	0.091	2.356	0.004	0.040	0.011	0.063	0.029	0.096	0.036	0.107
B12071.00-B12072.00	2921	230.0	8.0	0.022	1.158	0.005	0.047	0.013	0.074	0.030	0.110	0.038	0.123
B12072.00-B12073.00	2920	280.0	8.0	0.039	1.542	0.006	0.051	0.015	0.079	0.033	0.114	0.043	0.128
B12073.00-B12074.00	2919	250.0	8.0	0.020	1.104	0.007	0.058	0.018	0.089	0.038	0.126	0.048	0.142
B12074.00-B12075.00	2918	225.0	8.0	0.022	1.158	0.008	0.060	0.019	0.090	0.039	0.126	0.051	0.143
B12075.00-B12076.00	2917	240.0	8.0	0.046	1.675	0.009	0.053	0.022	0.080	0.043	0.110	0.055	0.124
B12076.00-B12086.00	2916	167.0	8.0	0.101	2.482	0.009	0.150	0.023	0.275	0.044	0.280	0.058	0.371
B12077.00-B12079.00	2915	311.0	8.0	0.007	0.653	0.000	0.028	0.001	0.063	0.001	0.064	0.002	0.083
B12078.00-B12079.00	2914	299.0	8.0	0.009	0.741	0.001	0.039	0.002	0.066	0.002	0.068	0.003	0.086
B12079.00-B12080.00	2913	308.0	8.0	0.005	0.552	0.002	0.041	0.005	0.069	0.005	0.070	0.009	0.089
B12080.00-B12081.00	2912	172.0	8.0	0.082	2.236	0.002	0.024	0.007	0.041	0.007	0.040	0.011	0.051
B12081.00-B12085.00	2911	134.0	8.0	0.103	2.507	0.003	0.027	0.008	0.047	0.007	0.041	0.013	0.056
B12082.00-B12083.00	2910	248.0	8.0	0.004	0.494	0.000	0.023	0.001	0.047	0.001	0.031	0.002	0.051
B12083.00-B12084.00	4943	92.0	8.0	0.015	0.957	0.001	0.020	0.003	0.040	0.001	0.026	0.003	0.043
B12084.00-B12085.00	5487	160.0	8.0	0.166	3.182	0.003	0.022	0.005	0.040	0.002	0.032	0.006	0.046
B12085.00-B12086.00	2909	335.0	8.0	0.098	2.445	0.004	0.142	0.014	0.268	0.010	0.257	0.020	0.351
B12086.00-B12087.00	2908	190.9	8.0	0.007	0.653	0.054	0.194	0.191	0.366	0.181	0.355	0.318	0.480
B12087.00-B12088.00	2907	396.0	8.0	0.033	1.419	0.054	0.149	0.193	0.284	0.181	0.267	0.320	0.360
B13001.00-B13002.00	2958	170.0	6.0	0.093	1.106	0.001	0.024	0.002	0.035	0.002	0.035	0.003	0.044
B13002.00-B13003.00	2906	314.8	6.0	0.146	1.386	0.002	0.042	0.004	0.060	0.004	0.061	0.007	0.075
B13003.00-B13005.00	2905	370.2	6.0	0.030	0.628	0.003	0.049	0.006	0.071	0.006	0.068	0.009	0.085
B13004.00-B13005.00	2957	148.1	8.0	0.002	0.349	0.001	0.032	0.002	0.051	0.001	0.038	0.002	0.054
B13005.00-B13006.00	2364	215.8	8.0	0.105	2.531	0.005	0.036	0.011	0.053	0.008	0.045	0.014	0.058
B13006.00-B13007.00	2204	185.0	8.0	0.056	1.848	0.006	0.041	0.012	0.060	0.009	0.050	0.015	0.066
B13007.00-B13012.00	2205	284.0	8.0	0.057	1.865	0.006	0.047	0.014	0.071	0.009	0.059	0.017	0.078

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B13008.00-B13009.00	7654	291.0	8.0	0.035	1.461	0.001	0.024	0.002	0.031	0.002	0.027	0.003	0.034
B13009.00-B13010.00	2201	351.0	8.0	0.132	2.838	0.003	0.029	0.005	0.039	0.004	0.035	0.006	0.043
B13010.00-B13011.00	2202	143.0	8.0	0.048	1.711	0.004	0.043	0.007	0.060	0.005	0.052	0.009	0.066
B13011.00-B13012.00	2363	96.0	8.0	0.011	0.819	0.004	0.053	0.009	0.076	0.006	0.065	0.011	0.085
B13012.00-B13013.00	2362	144.0	8.0	0.058	1.881	0.010	0.058	0.024	0.085	0.017	0.071	0.030	0.094
B13013.00-B13026.00	2361	323.0	8.0	0.039	1.542	0.012	0.088	0.027	0.129	0.018	0.115	0.033	0.149
B13014.00-B13015.00	2193	73.0	8.0	0.003	0.428	0.000	0.196	0.001	0.222	0.001	0.220	0.002	0.233
B13015.00-B13016.00	2194	74.8	8.0	0.009	0.741	0.001	0.696	0.003	0.704	0.004	0.702	0.006	0.708
B13016.00-B13017.00	2195	194.7	8.0	-0.005	Adverse	0.001	0.509	0.005	0.516	0.004	0.514	0.008	0.520
B13017.00-B13018.00	2360	210.0	8.0	0.143	2.953	0.002	0.022	0.006	0.039	0.005	0.034	0.010	0.046
B13018.00-B13019.00	2359	254.0	8.0	0.070	2.066	0.003	0.037	0.008	0.063	0.006	0.054	0.012	0.074
B13019.00-B13020.00	2196	256.0	8.0	0.011	0.819	0.004	0.057	0.010	0.096	0.008	0.079	0.015	0.108
B13020.00-B13024.00	2200	268.0	8.0	0.012	0.856	0.007	0.065	0.019	0.103	0.014	0.092	0.025	0.119
B13020.A0-B13020.B0	2197	117.0	8.0	0.060	1.913	0.001	0.034	0.002	0.047	0.002	0.045	0.003	0.056
B13020.B0-B13020.C0	2198	381.0	8.0	0.010	0.781	0.002	0.040	0.005	0.055	0.004	0.051	0.006	0.063
B13020.C0-B13020.00	2199	77.0	8.0	0.049	1.729	0.003	0.048	0.007	0.077	0.005	0.063	0.009	0.084
B13021.00-B13022.00	2203	185.0	8.0	0.007	0.653	0.002	0.043	0.003	0.052	0.007	0.074	0.008	0.079
B13022.00-B13023.00	2358	220.0	8.0	0.058	1.881	0.003	0.034	0.006	0.043	0.013	0.061	0.015	0.066
B13023.00-B13024.00	2357	337.3	8.0	0.075	2.139	0.006	0.051	0.009	0.069	0.017	0.079	0.020	0.092
B13024.00-B13025.00	2356	86.0	8.0	0.034	1.440	0.014	0.065	0.030	0.093	0.032	0.096	0.048	0.116
B13025.00-B13026.00	2355	273.0	8.0	0.048	1.711	0.015	0.090	0.032	0.131	0.033	0.126	0.050	0.157
B13026.00-B13027.00	2354	248.0	8.0	0.023	1.184	0.028	0.106	0.061	0.155	0.053	0.144	0.086	0.183
B13027.00-B13045.00	2353	139.0	8.0	0.034	1.440	0.028	0.116	0.063	0.174	0.054	0.161	0.088	0.207
B13028.00-B13029.00	1539	211.9	8.0	0.002	0.349	0.002	0.055	0.003	0.073	0.006	0.098	0.007	0.109
B13029.00-B13030.00	2352	181.9	8.0	0.002	0.349	0.003	0.063	0.005	0.088	0.008	0.103	0.010	0.120
B13030.00-B13032.00	2351	43.4	8.0	0.001	0.247	0.003	0.074	0.006	0.107	0.008	0.111	0.011	0.135
B13031.00-B13032.00	1540	191.2	6.0	0.002	0.162	0.002	0.091	0.003	0.125	0.002	0.121	0.004	0.148
B13032.00-B13033.00	1537	133.8	8.0	0.002	0.349	0.005	0.080	0.010	0.118	0.010	0.118	0.016	0.146
B13033.00-B13034.00	1538	209.0	8.0	0.003	0.428	0.005	0.100	0.012	0.153	0.012	0.149	0.019	0.188
B13034.00-B13035.00	1543	347.0	8.0	0.005	0.552	0.008	0.084	0.020	0.132	0.017	0.122	0.030	0.158
B13034.A0-B13034.B0	2959	277.0	8.0	0.010	0.781	0.001	0.022	0.002	0.036	0.003	0.043	0.004	0.051
B13034.B0-B13034.C0	2960	120.0	8.0	0.090	2.343	0.001	0.017	0.004	0.028	0.003	0.026	0.005	0.034
B13034.C0-B13034.D0	2961	51.0	8.0	0.049	1.729	0.002	0.018	0.005	0.031	0.004	0.027	0.008	0.037
B13034.D0-B13034.00	1536	186.0	8.0	0.165	3.172	0.002	0.072	0.007	0.112	0.004	0.104	0.009	0.134
B13035.00-B13036.00	1544	61.0	8.0	0.034	1.440	0.009	0.046	0.026	0.074	0.019	0.065	0.035	0.087
B13035.A0-B13035.B0	1541	235.0	8.0	-0.062	Adverse	0.001	0.508	0.003	0.513	0.001	0.509	0.003	0.513
B13035.B0-B13035.00	1542	135.0	8.0	0.108	2.567	0.002	0.031	0.004	0.050	0.002	0.041	0.004	0.057
B13036.00-B13037.00	1545	215.0	8.0	0.102	2.494	0.010	0.047	0.027	0.076	0.021	0.067	0.038	0.089
B13037.00-B13038.00	1546	336.0	8.0	0.092	2.369	0.011	0.056	0.029	0.089	0.022	0.079	0.040	0.105
B13038.00-B13043.00	1547	172.0	8.0	0.033	1.419	0.011	0.065	0.031	0.105	0.023	0.093	0.043	0.123
B13039.00-B13040.00	2350	280.0	8.0	0.079	2.195	0.001	0.023	0.002	0.031	0.003	0.032	0.005	0.038
B13040.00-B13041.00	1548	148.0	8.0	0.055	1.832	0.003	0.040	0.005	0.056	0.004	0.050	0.007	0.063
B13041.00-B13042.00	1549	245.0	8.0	0.010	0.781	0.003	0.045	0.006	0.065	0.005	0.058	0.009	0.074
B13042.00-B13043.00	1550	268.0	8.0	0.030	1.353	0.003	0.052	0.008	0.081	0.007	0.074	0.012	0.096
B13043.00-B13044.00	1551	309.0	8.0	0.045	1.657	0.015	0.073	0.041	0.115	0.032	0.105	0.057	0.138
B13044.00-B13045.00	1552	217.0	8.0	0.028	1.307	0.016	0.106	0.042	0.164	0.035	0.151	0.062	0.197
B13045.00-B13046.00	2349	280.0	8.0	0.022	1.158	0.045	0.146	0.107	0.224	0.090	0.207	0.152	0.268
B13046.00-B13047.00	1553	294.9	8.0	0.013	0.890	0.045	0.153	0.108	0.235	0.093	0.217	0.156	0.282
B13047.00-B13049.00	1245	294.9	8.0	0.015	0.957	0.046	0.157	0.111	0.240	0.095	0.222	0.159	0.288
B13048.00-B13049.00	2347	328.0	8.0	0.069	2.052	0.001	0.091	0.002	0.138	0.001	0.127	0.003	0.165
B13049.00-B13050.00	2346	190.0	8.0	0.011	0.819	0.048	0.177	0.115	0.271	0.098	0.250	0.164	0.326
B13050.00-B13051.00	1246	133.0	8.0	0.011	0.819	0.049	0.166	0.116	0.255	0.099	0.235	0.167	0.306
B13051.00-B13052.00	1247	120.0	8.0	0.020	1.104	0.049	0.147	0.118	0.226	0.100	0.207	0.169	0.270
B13052.00-B13058.00	2345	228.0	8.0	0.017	1.018	0.050	0.152	0.120	0.235	0.101	0.221	0.171	0.286
B13053.00-B13054.00	3461	289.2	6.0	0.211	1.666	0.002	0.032	0.004	0.041	0.013	0.072	0.014	0.076

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B13054.00-B13055.00	2344	246.1	6.0	0.096	1.124	0.003	0.055	0.005	0.077	0.015	0.127	0.017	0.135
B13055.00-B13056.D0	1248	126.0	8.0	0.004	0.494	0.003	0.056	0.006	0.083	0.016	0.124	0.020	0.136
B13056.00-B13057.00	2343	304.7	8.0	0.055	1.832	0.006	0.043	0.017	0.071	0.026	0.087	0.037	0.103
B13056.A0-B13056.BA	7193	80.0	8.0	0.022	1.158	0.001	0.021	0.002	0.030	0.004	0.041	0.005	0.045
B13056.B0-B13056.C0	1249	235.0	8.0	0.170	3.220	0.002	0.027	0.006	0.043	0.008	0.049	0.012	0.059
B13056.BA-B13056.B0	7194	87.0	8.0	0.057	1.865	0.002	0.020	0.004	0.031	0.007	0.040	0.010	0.045
B13056.C0-B13056.D0	1250	70.0	8.0	0.021	1.132	0.003	0.045	0.007	0.070	0.009	0.089	0.014	0.103
B13056.D0-B13056.00	1251	96.2	8.0	0.023	1.184	0.006	0.049	0.015	0.077	0.026	0.100	0.035	0.116
B13056.E0-B13056.00	8318	65.0	8.0	0.004	0.494	0.000	0.031	0.001	0.054	0.000	0.054	0.002	0.070
B13057.00-B13058.00	15	239.0	8.0	0.049	1.729	0.007	0.099	0.019	0.157	0.030	0.161	0.042	0.202
B13058.00-B13091.00	790	89.0	8.0	0.019	1.077	0.057	0.185	0.140	0.293	0.131	0.278	0.214	0.363
B13059.00-B13060.00	2342	195.0	8.0	0.055	1.832	0.002	0.049	0.004	0.072	0.002	0.055	0.004	0.075
B13059.A0-B13059.00	7653	120.8	8.0	0.052	1.781	0.001	0.019	0.002	0.029	0.001	0.019	0.002	0.030
B13060.00-B13061.00	2904	215.0	8.0	0.004	0.494	0.003	0.054	0.006	0.077	0.004	0.059	0.007	0.081
B13061.00-B13063.00	2903	166.0	8.0	0.078	2.181	0.004	0.046	0.009	0.066	0.004	0.048	0.009	0.067
B13062.00-B13063.00	2902	153.0	8.0	0.004	0.494	0.001	0.043	0.002	0.065	0.001	0.046	0.002	0.067
B13063.00-B13076.00	2695	350.0	8.0	0.011	0.819	0.006	0.071	0.012	0.104	0.006	0.078	0.013	0.109
B13073.00-B13074.00	2694	250.0	8.0	0.073	2.110	0.001	0.031	0.002	0.044	0.002	0.044	0.003	0.054
B13074.00-B13075.00	2693	322.0	8.0	0.011	0.819	0.002	0.036	0.004	0.052	0.004	0.051	0.006	0.063
B13075.00-B13076.00	2692	123.0	8.0	0.060	1.913	0.003	0.055	0.006	0.081	0.005	0.066	0.008	0.088
B13076.00-B13077.00	2691	111.0	8.0	0.017	1.018	0.009	0.065	0.020	0.097	0.012	0.075	0.023	0.104
B13077.00-B13078.00	2690	217.0	8.0	0.070	2.066	0.009	0.048	0.021	0.073	0.012	0.056	0.025	0.079
B13078.00-B13079.00	2689	221.0	8.0	0.069	2.052	0.010	0.050	0.023	0.077	0.013	0.060	0.027	0.083
B13079.00-B13080.00	2687	199.0	8.0	0.060	1.913	0.010	0.064	0.025	0.097	0.015	0.077	0.030	0.106
B13080.00-B13081.00	2686	271.0	8.0	0.016	0.988	0.011	0.083	0.027	0.127	0.017	0.101	0.033	0.140
B13081.00-B13082.00	2685	250.0	8.0	0.011	0.819	0.011	0.082	0.029	0.127	0.018	0.102	0.035	0.140
B13082.00-B13083.00	2684	226.0	8.0	0.020	1.104	0.012	0.090	0.030	0.138	0.020	0.115	0.038	0.156
B13083.00-B13084.00	2683	177.0	8.0	0.014	0.924	0.013	0.082	0.032	0.127	0.022	0.106	0.041	0.144
B13084.00-B13088.00	2847	183.0	8.0	0.061	1.929	0.013	0.058	0.033	0.091	0.022	0.075	0.043	0.103
B13085.00-B13086.00	1055	191.0	8.0	0.005	0.552	0.001	0.036	0.002	0.053	0.001	0.038	0.002	0.055
B13086.00-B13087.00	2846	211.0	8.0	0.004	0.494	0.002	0.046	0.004	0.070	0.002	0.059	0.005	0.079
B13087.00-B13088.00	2845	358.0	8.0	0.003	0.428	0.002	0.054	0.006	0.085	0.005	0.073	0.008	0.097
B13088.00-B13089.00	2844	187.0	8.0	0.097	2.432	0.016	0.060	0.041	0.094	0.028	0.079	0.054	0.106
B13089.00-B13090.00	2843	139.0	8.0	0.076	2.153	0.016	0.067	0.043	0.105	0.030	0.088	0.056	0.119
B13090.00-B13091.00	1054	337.0	8.0	0.045	1.657	0.017	0.145	0.045	0.230	0.031	0.210	0.059	0.279
B13091.00-B13092.00	791	155.0	8.0	0.008	0.699	0.074	0.235	0.186	0.378	0.164	0.351	0.276	0.467
B13092.00-B13095.00	792	213.0	8.0	0.008	0.699	0.075	0.222	0.188	0.355	0.165	0.332	0.278	0.439
B13095.00-B13096.00	1052	425.0	8.0	0.015	0.957	0.076	0.197	0.190	0.313	0.169	0.296	0.284	0.388
B13096.00-B13099.00	1053	104.0	8.0	0.012	0.856	0.077	0.202	0.192	0.322	0.171	0.303	0.287	0.399
B13097.00-B13098.00	2842	130.0	8.0	0.070	2.066	0.001	0.009	0.001	0.024	0.000	0.015	0.002	0.026
B13098.00-B13099.00	2841	177.0	8.0	0.070	2.066	0.000	0.105	0.003	0.174	0.001	0.160	0.004	0.214
B13099.00-B13100.00	2840	219.0	8.0	0.013	0.890	0.077	0.203	0.196	0.326	0.173	0.305	0.292	0.403
B13100.00-B13101.00	736	244.0	8.0	0.012	0.856	0.078	0.228	0.199	0.368	0.175	0.343	0.295	0.457
B13101.00-B13144.00	737	365.0	8.0	0.006	0.605	0.079	0.255	0.201	0.410	0.176	0.387	0.297	0.516
B13102.00-B13103.00	1058	74.7	8.0	0.002	0.349	0.003	0.063	0.004	0.084	0.005	0.096	0.006	0.111
B13103.00-B13105.00	929	399.0	8.0	0.022	1.158	0.010	0.088	0.022	0.123	0.030	0.137	0.043	0.160
B13103.A0-B13103.B0	1131	225.4	8.0	0.116	2.660	0.002	0.024	0.003	0.031	0.003	0.043	0.004	0.048
B13103.B0-B13103.C0	789	360.0	8.0	0.049	1.729	0.002	0.027	0.005	0.038	0.013	0.066	0.015	0.071
B13103.C0-B13103.I0	788	177.0	8.0	0.070	2.066	0.002	0.135	0.006	0.193	0.021	0.238	0.024	0.271
B13103.D0-B13103.E0	1137	103.7	8.0	0.038	1.522	0.001	0.021	0.002	0.030	0.001	0.017	0.002	0.028
B13103.E0-B13103.G0	1136	201.6	8.0	0.060	1.913	0.002	0.024	0.004	0.038	0.001	0.022	0.003	0.037
B13103.F0-B13103.G0	1135	71.7	8.0	0.037	1.502	0.001	0.020	0.002	0.032	0.001	0.019	0.002	0.032
B13103.G0-B13103.H0	1134	200.9	8.0	0.073	2.110	0.003	0.028	0.007	0.043	0.002	0.025	0.007	0.042
B13103.H0-B13103.I0	1132	190.0	8.0	0.118	2.683	0.004	0.137	0.010	0.196	0.003	0.216	0.009	0.254
B13103.I0-B13103.00	787	367.2	8.0	0.000	0.000	0.007	0.155	0.017	0.222	0.025	0.258	0.036	0.298

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B13104.00-B13105.A0	1057	295.4	8.0	0.002	0.349	0.002	0.079	0.003	0.092	0.003	0.093	0.004	0.104
B13105.00-B13106.00	7	378.0	8.0	0.009	0.741	0.020	0.114	0.036	0.152	0.043	0.165	0.059	0.193
B13105.A0-B13105.00	2839	162.3	10.0	0.002	0.633	0.010	0.089	0.012	0.108	0.013	0.114	0.015	0.129
B13106.00-B13109.00	2838	351.0	8.0	0.009	0.741	0.021	0.159	0.038	0.215	0.045	0.232	0.062	0.274
B13107.00-B13108.00	1056	154.0	8.0	0.105	2.531	0.002	0.016	0.002	0.023	0.003	0.024	0.004	0.029
B13108.00-B13109.00	2837	271.0	8.0	0.255	3.944	0.003	0.110	0.004	0.151	0.005	0.162	0.007	0.192
B13109.00-B13110.00	1529	99.0	8.0	0.004	0.494	0.023	0.143	0.044	0.195	0.050	0.208	0.071	0.247
B13110.00-B13111.00	1528	279.0	8.0	0.047	1.693	0.023	0.084	0.045	0.115	0.051	0.121	0.072	0.144
B13111.00-B13113.00	1527	386.0	8.0	0.044	1.638	0.025	0.087	0.048	0.120	0.052	0.125	0.075	0.149
B13112.00-B13113.00	731	140.1	8.0	0.002	0.349	0.002	0.070	0.003	0.094	0.003	0.097	0.004	0.115
B13113.00-B13114.00	2109	15.4	8.0	0.006	0.605	0.026	0.188	0.052	0.262	0.056	0.273	0.081	0.330
B13114.00-B13115.00	2108	550.0	8.0	0.002	0.349	0.026	0.185	0.053	0.259	0.058	0.270	0.084	0.326
B13115.00-B13116.00	2107	125.0	8.0	0.057	1.865	0.027	0.087	0.054	0.123	0.059	0.128	0.087	0.154
B13116.00-B13119.00	2106	383.0	8.0	0.038	1.522	0.027	0.099	0.055	0.139	0.059	0.144	0.088	0.174
B13117.00-B13118.00	733	140.0	8.0	0.098	2.445	0.003	0.027	0.004	0.032	0.002	0.023	0.003	0.029
B13118.00-B13119.00	732	250.0	8.0	0.117	2.671	0.004	0.067	0.006	0.092	0.004	0.091	0.006	0.110
B13119.00-B13126.00	2105	213.0	8.0	0.030	1.353	0.031	0.104	0.063	0.147	0.064	0.147	0.096	0.180
B13120.00-B13122.00	734	170.4	8.0	0.002	0.349	0.002	0.061	0.003	0.090	0.003	0.083	0.004	0.105
B13121.00-B13122.00	735	72.1	8.0	0.002	0.349	0.000	0.048	0.001	0.082	0.001	0.072	0.002	0.097
B13122.00-B13123.00	1813	48.1	8.0	0.002	0.349	0.002	0.051	0.005	0.081	0.004	0.070	0.007	0.093
B13123.00-B13124.00	2104	222.5	8.0	0.064	1.976	0.003	0.031	0.008	0.048	0.005	0.039	0.010	0.053
B13124.00-B13125.00	2103	240.0	8.0	0.059	1.897	0.004	0.038	0.010	0.056	0.006	0.045	0.012	0.061
B13125.00-B13126.00	2102	384.0	8.0	0.049	1.729	0.006	0.072	0.012	0.103	0.008	0.094	0.014	0.120
B13126.00-B13144.00	2101	96.0	8.0	0.037	1.502	0.037	0.182	0.077	0.281	0.072	0.269	0.112	0.350
B13127.00-B13128.00	739	314.0	8.0	0.132	2.838	0.002	0.020	0.002	0.031	0.002	0.029	0.003	0.037
B13128.00-B13133.00	740	256.0	8.0	0.023	1.184	0.001	0.036	0.004	0.062	0.003	0.062	0.005	0.079
B13129.00-B13130.00	2100	150.0	6.0	0.179	1.534	0.002	0.017	0.002	0.029	0.004	0.037	0.005	0.044
B13130.00-B13131.00	2099	144.0	6.0	0.171	1.500	0.002	0.021	0.003	0.038	0.005	0.042	0.007	0.051
B13131.00-B13132.C0	1064	102.0	6.0	0.070	0.959	0.001	0.027	0.005	0.053	0.005	0.059	0.009	0.074
B13132.00-B13133.00	2098	405.0	6.0	0.088	1.076	0.003	0.051	0.013	0.095	0.016	0.100	0.026	0.127
B13132.A0-B13132.B0	1145	72.0	8.0	0.069	2.052	0.001	0.013	0.004	0.031	0.009	0.042	0.012	0.049
B13132.AA-B13132.AB	7195	127.0	8.0	0.112	2.614	0.002	0.011	0.002	0.021	0.008	0.039	0.009	0.042
B13132.AB-B13132.A0	7196	16.0	8.0	0.017	1.018	0.001	0.011	0.003	0.025	0.009	0.039	0.011	0.044
B13132.B0-B13132.C0	1149	135.0	8.0	0.088	2.317	0.001	0.019	0.006	0.042	0.010	0.051	0.015	0.062
B13132.C0-B13132.00	1253	34.1	6.0	0.032	0.649	0.002	0.035	0.011	0.071	0.015	0.080	0.024	0.100
B13133.00-B13137.00	2097	243.5	8.0	0.029	1.330	0.006	0.058	0.020	0.101	0.021	0.105	0.034	0.133
B13134.00-B13135.00	2096	8.0	8.0	0.014	0.924	0.001	0.017	0.002	0.027	0.004	0.038	0.005	0.043
B13135.00-B13136.00	2095	220.0	8.0	0.167	3.192	0.001	0.017	0.003	0.029	0.006	0.037	0.009	0.043
B13136.00-B13137.00	2094	351.0	8.0	0.113	2.625	0.002	0.045	0.005	0.076	0.008	0.082	0.011	0.102
B13137.00-B13138.00	738	349.0	8.0	0.014	0.924	0.009	0.081	0.027	0.140	0.030	0.148	0.049	0.186
B13138.00-B13139.00	2093	369.0	8.0	0.010	0.781	0.010	0.078	0.029	0.132	0.032	0.138	0.052	0.174
B13139.00-B13143.00	2092	349.0	8.0	0.038	1.522	0.012	0.072	0.033	0.113	0.036	0.119	0.056	0.147
B13140.00-B13141.00	437	340.0	8.0	0.053	1.798	0.001	0.031	0.002	0.048	0.003	0.069	0.004	0.077
B13141.00-B13142.00	2091	107.0	8.0	0.006	0.605	0.002	0.039	0.004	0.058	0.008	0.084	0.011	0.093
B13142.00-B13143.A0	934	239.0	8.0	0.034	1.440	0.002	0.032	0.006	0.049	0.010	0.061	0.013	0.071
B13143.00-B13144.00	2090	112.0	8.0	0.028	1.307	0.017	0.171	0.043	0.270	0.049	0.264	0.075	0.344
B13143.A0-B13143.00	937	246.0	8.0	0.035	1.461	0.003	0.058	0.008	0.089	0.012	0.098	0.017	0.119
B13144.00-B13145.00	3293	279.0	8.0	0.013	0.890	0.134	0.325	0.322	0.527	0.296	0.504	0.485	0.689
B13145.00-B13146.00	2987	204.0	8.0	0.005	0.552	0.134	0.337	0.324	0.548	0.302	0.526	0.492	0.720
B13146.00-B13149.00	2990	317.0	8.0	0.009	0.741	0.134	0.368	0.325	0.592	0.303	0.569	0.494	0.766
B13147.00-B13148.00	2089	37.0	8.0	0.005	0.552	0.001	0.019	0.002	0.029	0.002	0.026	0.003	0.033
B13148.00-B13149.00	2835	258.0	8.0	0.028	1.307	0.002	0.239	0.004	0.384	0.003	0.368	0.006	0.495
B13149.00-B13151.00	2834	130.0	8.0	0.004	0.494	0.136	0.342	0.330	0.546	0.309	0.526	0.503	0.703
B13150.00-B13151.00	2833	413.0	8.0	0.036	1.482	0.001	0.126	0.002	0.197	0.002	0.190	0.003	0.248
B13151.00-B13152.00	3302	306.0	8.0	0.023	1.184	0.137	0.258	0.334	0.412	0.313	0.398	0.510	0.527

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B13152.00-B13154.00	3311	236.0	8.0	0.010	0.781	0.138	0.295	0.336	0.473	0.315	0.456	0.513	0.609
B13153.00-B13154.00	2832	307.0	8.0	0.063	1.960	0.002	0.164	0.003	0.258	0.002	0.247	0.004	0.328
B13154.00-B13155.00	2831	58.8	8.0	0.007	0.653	0.141	0.288	0.341	0.461	0.317	0.443	0.518	0.589
B13155.00-B13222.00	1846	79.5	8.0	0.012	0.856	0.141	0.401	0.344	0.652	0.318	0.622	0.521	0.778
B13155.A0-B13155.00	3320	213.0	6.0	0.097	1.129	0.001	0.188	0.001	0.304	0.002	0.286	0.002	0.384
B13156.00-B13157.00	1138	233.0	8.0	0.007	0.653	0.001	0.039	0.002	0.064	0.001	0.039	0.002	0.063
B13157.00-B13158.00	2828	50.3	8.0	0.002	0.349	0.001	0.035	0.003	0.061	0.001	0.036	0.003	0.061
B13158.00-B13160.00	2827	247.0	8.0	0.076	2.153	0.002	0.032	0.005	0.046	0.002	0.038	0.006	0.051
B13159.00-B13160.00	2826	270.0	8.0	0.039	1.542	0.005	0.041	0.006	0.050	0.009	0.053	0.010	0.060
B13160.00-B13165.00	2825	158.0	8.0	0.076	2.153	0.007	0.047	0.013	0.065	0.012	0.060	0.017	0.075
B13161.00-B13162.00	2824	78.4	8.0	0.004	0.494	0.001	0.043	0.002	0.059	0.002	0.047	0.003	0.062
B13162.00-B13163.00	1139	163.1	8.0	0.004	0.494	0.003	0.055	0.005	0.076	0.003	0.066	0.005	0.084
B13163.00-B13164.00	725	227.7	8.0	0.004	0.494	0.003	0.060	0.007	0.090	0.006	0.084	0.010	0.107
B13164.00-B13165.00	2823	65.3	8.0	0.004	0.494	0.003	0.058	0.008	0.087	0.006	0.078	0.011	0.101
B13165.00-B13166.00	2822	451.0	8.0	0.061	1.929	0.011	0.064	0.022	0.091	0.018	0.082	0.029	0.104
B13166.00-B13173.A0	7989	300.0	8.0	0.015	0.957	0.011	0.073	0.023	0.106	0.018	0.094	0.030	0.121
B13168.00-B13170.00	727	240.0	8.0	0.098	2.445	0.002	0.032	0.002	0.040	0.001	0.027	0.002	0.036
B13169.00-B13170.00	2821	374.5	8.0	0.031	1.375	0.005	0.047	0.007	0.054	0.004	0.040	0.005	0.047
B13170.00-B13173.E0	7211	162.0	8.0	0.046	1.675	0.008	0.058	0.011	0.071	0.005	0.049	0.009	0.064
B13173.00-B13174.00	730	320.0	8.0	0.022	1.158	0.019	0.096	0.044	0.141	0.043	0.139	0.068	0.174
B13173.A0-B13173.B0	729	264.6	8.0	0.017	1.018	0.011	0.075	0.024	0.113	0.018	0.112	0.032	0.140
B13173.B0-B13173.C0	2829	223.2	8.0	0.011	0.819	0.011	0.087	0.025	0.133	0.030	0.143	0.045	0.175
B13173.C0-B13173.D0	7991	140.6	8.0	0.011	0.819	0.011	0.078	0.027	0.122	0.030	0.130	0.046	0.159
B13173.D0-B13173.00	7992	168.0	8.0	0.032	1.397	0.011	0.076	0.028	0.116	0.032	0.118	0.049	0.146
B13173.E0-B13173.F0	7212	103.7	8.0	0.012	0.856	0.008	0.075	0.012	0.096	0.005	0.058	0.010	0.083
B13173.F0-B13173.G0	7213	91.0	8.0	0.012	0.856	0.008	0.066	0.013	0.086	0.005	0.057	0.011	0.080
B13173.G0-B13173.00	7987	156.3	8.0	0.052	1.781	0.008	0.069	0.015	0.099	0.011	0.093	0.018	0.117
B13174.00-B13208.00	2820	431.0	8.0	0.016	0.988	0.022	0.219	0.048	0.306	0.046	0.295	0.073	0.367
B13179.00-B13180.00	3436	163.0	8.0	0.066	2.006	0.004	0.033	0.010	0.052	0.006	0.041	0.013	0.058
B13179.A0-B13179.B0	7197	82.0	8.0	0.079	2.195	0.000	0.020	0.001	0.038	0.001	0.029	0.002	0.043
B13179.B0-B13179.C0	7198	156.2	8.0	0.011	0.819	0.001	0.026	0.003	0.046	0.002	0.037	0.004	0.052
B13179.C0-B13179.D0	7199	204.5	8.0	0.137	2.891	0.002	0.028	0.005	0.043	0.004	0.037	0.008	0.050
B13179.D0-B13179.E0	7200	81.0	8.0	0.023	1.184	0.003	0.039	0.008	0.062	0.005	0.051	0.009	0.070
B13179.E0-B13179.00	7202	36.0	8.0	0.009	0.741	0.003	0.037	0.009	0.061	0.005	0.049	0.011	0.068
B13180.00-B13197.00	1534	260.0	8.0	0.096	2.420	0.005	0.085	0.013	0.116	0.008	0.100	0.016	0.128
B13181.00-B13182.00	1533	386.0	8.0	0.072	2.096	0.002	0.032	0.003	0.039	0.002	0.032	0.003	0.040
B13182.00-B13183.00	1532	293.0	8.0	0.024	1.210	0.004	0.043	0.006	0.054	0.004	0.043	0.006	0.054
B13183.00-B13184.00	590	366.0	8.0	0.031	1.375	0.005	0.052	0.009	0.065	0.005	0.048	0.009	0.063
B13184.00-B13185.00	1898	207.0	8.0	0.028	1.307	0.007	0.053	0.012	0.067	0.006	0.049	0.011	0.064
B13185.00-B13186.00	2793	281.0	8.0	0.061	1.929	0.008	0.056	0.014	0.068	0.007	0.058	0.013	0.070
B13186.00-B13188.00	538	280.0	8.0	0.086	2.290	0.019	0.065	0.026	0.077	0.024	0.075	0.031	0.085
B13187.00-B13188.00	1897	217.0	8.0	0.172	3.239	0.002	0.041	0.002	0.050	0.001	0.047	0.002	0.055
B13188.00-B13190.00	537	62.3	8.0	0.037	1.502	0.020	0.067	0.029	0.081	0.029	0.080	0.038	0.091
B13189.00-B13190.00	536	171.3	6.0	0.019	0.500	0.002	0.066	0.003	0.082	0.002	0.077	0.003	0.091
B13190.00-B13191.00	535	243.0	8.0	0.090	2.343	0.022	0.102	0.033	0.125	0.031	0.121	0.042	0.141
B13191.00-B13192.00	534	120.0	8.0	0.005	0.552	0.023	0.144	0.035	0.178	0.032	0.170	0.045	0.200
B13192.00-B13196.00	168	469.0	8.0	0.004	0.494	0.025	0.171	0.039	0.212	0.034	0.198	0.048	0.234
B13193.00-B13194.00	167	198.0	8.0	0.102	2.494	0.001	0.014	0.002	0.021	0.002	0.015	0.003	0.022
B13194.00-B13195.00	931	150.0	8.0	0.136	2.880	0.002	0.021	0.004	0.031	0.002	0.022	0.004	0.032
B13195.00-B13196.00	930	200.0	8.0	0.130	2.816	0.003	0.107	0.006	0.135	0.004	0.122	0.007	0.147
B13196.00-B13197.00	550	148.0	8.0	0.004	0.494	0.029	0.163	0.047	0.207	0.039	0.188	0.057	0.227
B13197.00-B13198.00	549	292.0	8.0	0.018	1.048	0.036	0.125	0.063	0.165	0.048	0.145	0.076	0.181
B13198.00-B13208.00	547	429.0	8.0	0.030	1.353	0.038	0.225	0.067	0.306	0.050	0.287	0.079	0.358
B13199.00-B13200.00	546	202.0	8.0	0.030	1.353	0.002	0.032	0.003	0.040	0.002	0.036	0.003	0.044
B13200.00-B13201.00	545	114.0	8.0	0.031	1.375	0.004	0.042	0.006	0.053	0.005	0.051	0.007	0.060

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B13201.00-B13203.00	544	178.0	8.0	0.030	1.353	0.006	0.066	0.009	0.082	0.009	0.081	0.012	0.095
B13202.00-B13203.00	543	284.0	8.0	0.019	1.077	0.002	0.058	0.003	0.073	0.003	0.072	0.004	0.084
B13203.00-B13204.00	542	372.0	8.0	0.007	0.653	0.010	0.087	0.016	0.108	0.015	0.108	0.021	0.126
B13204.00-B13205.00	541	71.0	8.0	0.007	0.653	0.012	0.101	0.019	0.126	0.019	0.126	0.026	0.147
B13205.00-B13206.00	540	186.0	8.0	0.004	0.494	0.013	0.117	0.021	0.147	0.021	0.147	0.029	0.172
B13206.00-B13207.00	539	344.0	8.0	0.004	0.494	0.016	0.125	0.025	0.156	0.025	0.156	0.034	0.182
B13207.00-B13208.00	814	142.0	8.0	0.004	0.494	0.017	0.232	0.028	0.311	0.027	0.300	0.037	0.368
B13208.00-B13211.00	813	415.0	8.0	0.004	0.494	0.078	0.264	0.144	0.362	0.134	0.348	0.200	0.432
B13209.00-B13210.00	3349	94.0	8.0	0.035	1.461	0.002	0.025	0.003	0.033	0.001	0.023	0.002	0.032
B13210.00-B13211.00	812	156.0	8.0	0.064	1.976	0.002	0.108	0.004	0.149	0.002	0.138	0.004	0.173
B13211.00-B13213.00	811	69.0	8.0	0.012	0.856	0.080	0.264	0.150	0.366	0.139	0.352	0.209	0.439
B13212.00-B13213.00	810	180.0	8.0	0.009	0.741	0.000	0.176	0.001	0.251	0.002	0.243	0.003	0.306
B13213.00-B13214.00	809	217.0	8.0	0.003	0.428	0.082	0.301	0.154	0.419	0.142	0.401	0.214	0.503
B13214.00-B13215.00	808	157.0	8.0	0.005	0.552	0.083	0.278	0.156	0.388	0.142	0.371	0.215	0.467
B13215.00-B13217.00	807	200.0	8.0	0.003	0.428	0.083	0.314	0.157	0.436	0.147	0.423	0.222	0.527
B13216.00-B13217.00	806	299.0	8.0	0.047	1.693	0.001	0.178	0.002	0.246	0.005	0.247	0.006	0.302
B13217.00-B13218.00	805	97.0	8.0	0.004	0.494	0.085	0.266	0.162	0.367	0.155	0.360	0.231	0.443
B13218.00-B13219.00	804	373.0	8.0	0.023	1.184	0.085	0.181	0.163	0.250	0.157	0.245	0.235	0.301
B13219.00-B13222.00	803	273.0	8.0	0.034	1.440	0.087	0.349	0.166	0.549	0.159	0.526	0.238	0.638
B13220.00-B13221.00	802	115.0	6.0	0.050	0.811	0.001	0.028	0.002	0.041	0.001	0.026	0.002	0.040
B13221.00-B13222.00	801	36.0	6.0	0.028	0.607	0.002	0.369	0.004	0.522	0.001	0.513	0.004	0.521
B13222.00-B13229.00	1996	194.4	10.0	0.002	0.633	0.229	0.416	0.514	0.671	0.478	0.637	0.763	0.927
B13223.00-B13224.00	3333	130.0	8.0	0.039	1.542	0.001	0.033	0.002	0.047	0.002	0.046	0.003	0.057
B13224.00-B13227.00	3049	208.0	8.0	0.007	0.653	0.002	0.040	0.004	0.057	0.003	0.048	0.005	0.063
B13225.00-B13226.00	1995	130.0	8.0	0.079	2.195	0.001	0.014	0.002	0.024	0.001	0.012	0.002	0.023
B13226.00-B13227.00	1994	27.0	8.0	0.015	0.957	0.001	0.022	0.003	0.035	0.001	0.022	0.003	0.036
B13227.00-B13228.00	1993	241.0	8.0	0.097	2.432	0.004	0.034	0.009	0.051	0.004	0.036	0.010	0.053
B13228.00-B13229.00	1992	100.0	8.0	0.040	1.562	0.005	0.273	0.012	0.434	0.005	0.403	0.012	0.530
B13229.00-B13230.00	1991	71.7	10.0	0.002	0.633	0.235	0.394	0.528	0.627	0.483	0.592	0.777	0.816
B13230.00-B13231.00	1990	335.0	10.0	0.003	0.776	0.236	0.366	0.530	0.581	0.484	0.550	0.779	0.823
B13231.A0-B13231.00	7110	75.0	8.0	0.005	0.552	0.001	0.235	0.002	0.410	0.001	0.376	0.004	0.758
B14001.00-B14002.00	1989	88.0	8.0	0.039	1.542	0.001	0.021	0.002	0.028	0.005	0.038	0.006	0.042
B14002.00-B14004.00	1988	154.0	8.0	0.102	2.494	0.002	0.029	0.004	0.042	0.006	0.051	0.008	0.060
B14004.00-B14005.00	1987	259.0	8.0	0.035	1.461	0.002	0.030	0.006	0.045	0.008	0.052	0.011	0.062
B14005.00-B14006.CH	7636	322.0	8.0	0.041	1.581	0.002	0.063	0.007	0.100	0.008	0.104	0.012	0.129
B14006.00-B14008.00	1986	117.6	8.0	0.011	0.819	0.010	0.079	0.030	0.130	0.026	0.123	0.046	0.161
B14006.A0-B14006.B0	1256	324.0	8.0	0.035	1.461	0.001	0.019	0.003	0.035	0.002	0.030	0.004	0.042
B14006.AA-B14006.A0	2117	20.0	8.0	0.001	0.247	0.000	0.008	0.001	0.044	0.000	0.013	0.001	0.045
B14006.B0-B14006.C0	1257	289.0	8.0	0.066	2.006	0.002	0.042	0.005	0.069	0.004	0.066	0.008	0.085
B14006.C0-B14006.00	2110	156.9	8.0	0.030	1.353	0.010	0.078	0.028	0.129	0.027	0.124	0.045	0.160
B14006.CA-B14006.CB	7641	300.0	8.0	0.069	2.052	0.001	0.035	0.002	0.047	0.002	0.058	0.004	0.066
B14006.CB-B14006.CD	7642	308.0	8.0	0.005	0.552	0.003	0.057	0.005	0.078	0.009	0.095	0.012	0.109
B14006.CC-B14006.CD	7643	119.6	8.0	0.108	2.567	0.001	0.037	0.002	0.053	0.001	0.056	0.002	0.068
B14006.CD-B14006.CE	7640	184.4	8.0	0.005	0.552	0.004	0.071	0.009	0.101	0.012	0.111	0.016	0.132
B14006.CE-B14006.CF	7639	315.3	8.0	0.003	0.428	0.005	0.081	0.011	0.116	0.013	0.124	0.019	0.149
B14006.CF-B14006.CG	7635	258.9	8.0	0.005	0.552	0.006	0.070	0.012	0.103	0.013	0.106	0.020	0.130
B14006.CG-B14006.CH	7638	59.3	8.0	0.009	0.741	0.006	0.082	0.014	0.127	0.014	0.129	0.022	0.160
B14006.CH-B14006.C0	7637	322.0	8.0	0.005	0.552	0.008	0.083	0.022	0.133	0.022	0.134	0.036	0.168
B14007.00-B14008.00	1985	247.0	8.0	0.045	1.657	0.001	0.039	0.002	0.064	0.001	0.059	0.002	0.077
B14008.00-B14013.00	2111	214.0	8.0	0.037	1.502	0.012	0.080	0.034	0.132	0.029	0.121	0.051	0.160
B14009.00-B14010.00	1984	105.0	8.0	0.041	1.581	0.000	0.000	0.001	0.023	0.002	0.028	0.003	0.034
B14010.00-B14011.00	1983	185.0	8.0	0.071	2.081	0.000	0.012	0.002	0.035	0.002	0.032	0.005	0.044
B14011.00-B14012.00	2962	200.0	8.0	0.026	1.259	0.001	0.026	0.005	0.047	0.003	0.039	0.007	0.054
B14012.00-B14013.00	2113	237.0	8.0	0.050	1.746	0.002	0.062	0.008	0.105	0.005	0.092	0.010	0.125
B14012.A0-B14012.00	443	66.0	8.0	0.023	1.184	0.000	0.019	0.001	0.036	0.001	0.029	0.002	0.042

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B14013.00-B14014.00	2112	193.0	8.0	0.010	0.781	0.015	0.101	0.044	0.169	0.036	0.154	0.064	0.206
B14014.00-B14015.00	1982	251.0	8.0	0.011	0.819	0.015	0.095	0.045	0.159	0.037	0.144	0.066	0.192
B14015.00-B14016.00	1597	232.0	8.0	0.022	1.158	0.016	0.083	0.047	0.138	0.039	0.125	0.070	0.166
B14016.00-B14018.00	1596	245.0	8.0	0.025	1.235	0.017	0.087	0.049	0.144	0.042	0.133	0.074	0.176
B14017.00-B14018.00	1595	203.0	8.0	0.074	2.125	0.001	0.053	0.002	0.088	0.001	0.075	0.002	0.103
B14018.00-B14019.00	1594	350.0	8.0	0.027	1.283	0.017	0.082	0.052	0.137	0.042	0.124	0.076	0.166
B14019.00-B14020.00	2233	251.0	8.0	0.047	1.693	0.017	0.075	0.053	0.128	0.042	0.113	0.077	0.153
B14020.00-B14026.00	2963	309.0	8.0	0.033	1.419	0.018	0.088	0.054	0.151	0.042	0.132	0.079	0.180
B14021.00-B14022.00	1593	284.0	8.0	0.027	1.283	0.001	0.018	0.002	0.029	0.002	0.030	0.003	0.037
B14022.00-B14023.00	1525	298.0	8.0	0.095	2.407	0.001	0.024	0.004	0.037	0.003	0.035	0.006	0.044
B14023.00-B14024.00	1524	348.0	8.0	0.070	2.066	0.003	0.027	0.006	0.040	0.005	0.036	0.008	0.046
B14024.00-B14025.00	1523	320.0	8.0	0.219	3.655	0.003	0.034	0.008	0.053	0.006	0.046	0.010	0.061
B14025.00-B14026.00	1522	61.0	8.0	0.010	0.781	0.004	0.072	0.009	0.120	0.007	0.104	0.013	0.141
B14026.00-B14027.00	1521	116.4	8.0	0.018	1.048	0.021	0.102	0.065	0.170	0.049	0.146	0.092	0.199
B14027.00-B14028.00	1520	350.0	8.0	0.019	1.077	0.025	0.107	0.070	0.175	0.049	0.149	0.094	0.204
B14028.00-B14031.00	1519	349.0	8.0	0.018	1.048	0.025	0.123	0.071	0.203	0.053	0.174	0.099	0.237
B14029.00-B14030.00	1518	119.0	8.0	0.048	1.711	0.001	0.020	0.002	0.030	0.001	0.024	0.003	0.032
B14030.00-B14031.00	816	331.0	8.0	0.068	2.037	0.002	0.080	0.004	0.130	0.002	0.110	0.005	0.151
B14031.00-B14032.00	800	103.6	8.0	0.018	1.048	0.027	0.110	0.076	0.181	0.055	0.155	0.105	0.211
B14032.00-B14033.00	799	140.0	8.0	0.073	2.110	0.027	0.079	0.078	0.130	0.055	0.111	0.106	0.151
B14033.00-B14034.00	798	232.0	8.0	0.088	2.317	0.028	0.079	0.080	0.130	0.056	0.109	0.107	0.149
B14034.00-B14111.I0	797	349.0	8.0	0.078	2.181	0.029	0.161	0.082	0.225	0.056	0.192	0.109	0.247
B14035.00-B14036.00	431	142.0	8.0	0.026	1.259	0.001	0.036	0.002	0.051	0.002	0.050	0.003	0.062
B14036.00-B14038.00	2241	127.0	8.0	0.008	0.699	0.002	0.043	0.005	0.059	0.004	0.054	0.006	0.067
B14037.00-B14038.00	428	150.0	8.0	0.002	0.349	0.001	0.044	0.002	0.059	0.001	0.041	0.002	0.057
B14038.00-B14039.00	427	219.0	8.0	0.102	2.494	0.005	0.033	0.009	0.045	0.007	0.039	0.012	0.049
B14039.00-B14041.00	796	296.0	8.0	0.133	2.848	0.006	0.050	0.011	0.070	0.008	0.058	0.014	0.076
B14040.00-B14041.00	429	198.0	8.0	0.013	0.890	0.001	0.046	0.002	0.065	0.001	0.051	0.002	0.069
B14041.00-B14044.00	795	232.0	8.0	0.020	1.104	0.007	0.058	0.015	0.082	0.010	0.067	0.018	0.088
B14042.00-B14043.00	2240	64.0	8.0	0.042	1.601	0.000	0.014	0.001	0.026	0.000	0.016	0.001	0.027
B14043.00-B14044.00	724	262.0	8.0	0.090	2.343	0.001	0.034	0.004	0.050	0.002	0.040	0.005	0.054
B14044.00-B14052.00	723	303.0	8.0	0.077	2.167	0.010	0.091	0.022	0.127	0.013	0.106	0.025	0.138
B14045.00-B14046.00	722	335.0	8.0	0.002	0.349	0.001	0.042	0.002	0.064	0.001	0.054	0.003	0.072
B14046.00-B14048.00	721	212.2	8.0	0.002	0.349	0.001	0.055	0.004	0.086	0.003	0.073	0.005	0.098
B14047.00-B14048.00	2239	225.0	8.0	0.004	0.494	0.001	0.051	0.002	0.075	0.001	0.061	0.003	0.082
B14048.00-B14049.00	720	211.0	8.0	0.006	0.605	0.003	0.053	0.008	0.080	0.005	0.066	0.010	0.089
B14049.00-B14050.00	719	254.0	8.0	0.034	1.440	0.004	0.047	0.010	0.070	0.006	0.055	0.012	0.075
B14050.00-B14051.00	718	200.0	8.0	0.014	0.924	0.005	0.067	0.012	0.101	0.007	0.081	0.014	0.110
B14051.00-B14052.00	717	220.0	8.0	0.003	0.428	0.006	0.106	0.014	0.152	0.009	0.128	0.017	0.167
B14052.00-B14067.00	716	439.0	8.0	0.006	0.605	0.019	0.123	0.040	0.176	0.025	0.141	0.045	0.188
B14053.00-B14054.00	559	5.0	8.0	0.000	0.000	0.001	0.058	0.002	0.081	0.002	0.076	0.003	0.095
B14054.00-B14057.00	715	341.2	8.0	0.002	0.349	0.002	0.058	0.005	0.080	0.003	0.069	0.006	0.089
B14055.00-B14056.00	714	70.0	8.0	0.033	1.419	0.000	0.010	0.001	0.021	0.000	0.007	0.001	0.020
B14056.00-B14057.00	713	452.0	8.0	0.018	1.048	0.001	0.029	0.003	0.044	0.001	0.031	0.003	0.046
B14057.00-B14067.00	794	445.1	8.0	0.017	1.018	0.005	0.086	0.011	0.121	0.006	0.093	0.012	0.126
B14058.00-B14059.00	2235	196.0	8.0	0.098	2.445	0.001	0.019	0.002	0.029	0.001	0.022	0.002	0.031
B14059.00-B14061.00	793	314.0	8.0	0.050	1.746	0.002	0.037	0.004	0.043	0.002	0.040	0.005	0.044
B14060.00-B14061.00	2236	130.0	8.0	0.080	2.209	0.001	0.034	0.002	0.038	0.002	0.036	0.003	0.039
B14061.00-B14063.00	856	135.0	8.0	0.052	1.781	0.005	0.039	0.009	0.058	0.006	0.043	0.009	0.060
B14062.00-B14063.00	2237	182.0	8.0	-0.341	Adverse	0.004	0.522	0.005	0.533	0.004	0.524	0.006	0.535
B14063.00-B14065.00	855	375.0	8.0	0.027	1.283	0.005	0.074	0.011	0.113	0.006	0.085	0.013	0.120
B14064.00-B14066.00	2238	210.0	8.0	0.115	2.648	0.002	0.042	0.003	0.057	0.002	0.041	0.002	0.056
B14065.00-B14066.00	854	255.0	8.0	0.003	0.428	0.007	0.085	0.015	0.124	0.008	0.094	0.016	0.130
B14066.00-B14067.00	853	334.0	8.0	0.028	1.307	0.011	0.093	0.021	0.129	0.011	0.098	0.021	0.133
B14067.00-B14068.00	852	238.0	8.0	0.024	1.210	0.038	0.122	0.075	0.171	0.044	0.132	0.082	0.178

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B14068.00-B14070.00	851	299.0	8.0	0.024	1.210	0.039	0.135	0.078	0.188	0.046	0.144	0.085	0.195
B14069.00-B14070.00	430	241.0	8.0	0.110	2.590	0.002	0.085	0.003	0.115	0.002	0.088	0.003	0.118
B14070.00-B14075.00	850	324.0	8.0	0.014	0.924	0.043	0.151	0.084	0.209	0.049	0.159	0.090	0.215
B14071.00-B14073.00	849	155.0	8.0	0.065	1.991	0.001	0.022	0.002	0.031	0.001	0.020	0.002	0.030
B14072.00-B14073.00	848	256.0	8.0	0.039	1.542	0.001	0.025	0.002	0.034	0.002	0.026	0.003	0.035
B14073.00-B14074.00	847	203.0	8.0	0.122	2.728	0.004	0.037	0.007	0.050	0.003	0.035	0.007	0.049
B14074.00-B14075.00	846	99.0	8.0	0.022	1.158	0.005	0.100	0.009	0.139	0.004	0.103	0.009	0.141
B14075.00-B14076.00	845	162.3	8.0	0.014	0.924	0.049	0.156	0.095	0.216	0.053	0.162	0.100	0.221
B14076.00-B14080.00	844	339.0	8.0	0.015	0.957	0.050	0.163	0.099	0.226	0.055	0.168	0.103	0.229
B14077.00-B14078.00	712	227.0	8.0	0.029	1.330	0.002	0.029	0.003	0.036	0.001	0.024	0.002	0.032
B14078.00-B14079.00	325	343.0	8.0	0.117	2.671	0.004	0.046	0.007	0.056	0.003	0.036	0.005	0.049
B14079.00-B14080.00	324	61.0	8.0	0.007	0.653	0.006	0.116	0.009	0.155	0.004	0.111	0.007	0.152
B14080.00-B14089.00	323	350.0	8.0	0.014	0.924	0.057	0.262	0.110	0.340	0.059	0.270	0.112	0.347
B14081.00-B14083.00	1531	214.4	8.0	0.002	0.349	0.002	0.062	0.003	0.089	0.003	0.077	0.004	0.100
B14082.00-B14083.00	1530	6.6	8.0	0.000	0.000	0.001	0.061	0.001	0.101	0.001	0.078	0.001	0.112
B14083.00-B14085.00	1785	89.1	8.0	0.002	0.349	0.002	0.057	0.006	0.087	0.004	0.071	0.007	0.096
B14084.00-B14085.00	1784	297.0	8.0	0.026	1.259	0.002	0.038	0.003	0.050	0.002	0.040	0.003	0.052
B14085.00-B14088.00	1783	342.0	8.0	0.031	1.375	0.005	0.165	0.011	0.197	0.008	0.182	0.014	0.212
B14086.00-B14087.00	2819	272.0	8.0	0.042	1.601	0.039	0.122	0.040	0.125	0.042	0.128	0.043	0.130
B14087.00-B14088.00	2818	267.0	8.0	0.015	0.957	0.039	0.212	0.041	0.237	0.043	0.227	0.045	0.250
B14088.00-B14089.00	2817	130.0	8.0	0.001	0.247	0.044	0.321	0.054	0.389	0.051	0.339	0.061	0.406
B14089.00-B14100.00	2816	210.0	8.0	0.006	0.605	0.102	0.280	0.165	0.358	0.111	0.292	0.174	0.368
B14090.00-B14091.00	432	121.6	6.0	0.002	0.162	0.001	0.054	0.002	0.080	0.001	0.059	0.002	0.083
B14091.00-B14092.00	2815	199.0	6.0	0.007	0.303	0.002	0.066	0.005	0.091	0.003	0.066	0.005	0.093
B14092.00-B14094.F0	8327	16.7	8.0	0.001	0.247	0.003	0.050	0.006	0.082	0.003	0.058	0.006	0.086
B14093.00-B14094.F0	2813	174.1	8.0	0.118	2.683	0.001	0.012	0.002	0.020	0.001	0.012	0.002	0.020
B14094.00-B14095.00	2812	369.0	8.0	0.036	1.482	0.005	0.046	0.018	0.081	0.009	0.059	0.022	0.089
B14094.A0-B14094.B0	8323	199.4	8.0	0.053	1.798	0.000	0.005	0.001	0.024	0.001	0.025	0.002	0.033
B14094.B0-B14094.C0	8328	180.4	8.0	0.056	1.848	0.001	0.012	0.003	0.038	0.003	0.034	0.005	0.049
B14094.C0-B14094.D0	8329	51.6	8.0	0.007	0.653	0.000	0.016	0.004	0.059	0.003	0.051	0.006	0.075
B14094.D0-B14094.E0	8330	226.8	8.0	0.008	0.699	0.000	0.020	0.005	0.059	0.004	0.050	0.008	0.075
B14094.E0-B14094.F0	8331	60.4	8.0	0.020	1.104	0.001	0.017	0.006	0.049	0.004	0.040	0.010	0.060
B14094.F0-B14094.00	8326	162.6	8.0	0.019	1.077	0.004	0.045	0.016	0.084	0.008	0.060	0.019	0.092
B14095.00-B14097.00	2810	366.0	8.0	0.031	1.375	0.007	0.057	0.020	0.093	0.011	0.068	0.024	0.101
B14096.00-B14097.00	433	151.8	8.0	0.002	0.349	0.002	0.061	0.003	0.086	0.002	0.062	0.003	0.086
B14097.00-B14098.00	2809	104.1	8.0	0.022	1.158	0.009	0.065	0.026	0.103	0.013	0.074	0.029	0.109
B14098.00-B14100.00	2808	285.0	8.0	0.025	1.235	0.011	0.136	0.028	0.187	0.014	0.145	0.031	0.194
B14099.00-B14100.00	434	105.0	8.0	0.009	0.741	0.001	0.116	0.002	0.155	0.001	0.123	0.002	0.160
B14100.00-B14101.00	2807	221.0	8.0	0.025	1.235	0.115	0.268	0.197	0.356	0.127	0.282	0.209	0.369
B14101.00-B14102.00	2806	154.0	8.0	0.004	0.494	0.115	0.336	0.199	0.453	0.128	0.355	0.212	0.470
B14102.00-B14103.00	435	125.0	8.0	0.003	0.428	0.115	0.346	0.200	0.468	0.128	0.366	0.213	0.485
B14103.00-B14104.00	436	97.0	8.0	0.003	0.428	0.115	0.341	0.201	0.461	0.128	0.361	0.214	0.478
B14104.00-B14105.00	438	169.8	8.0	0.004	0.494	0.118	0.359	0.205	0.479	0.132	0.379	0.219	0.496
B14105.00-B14106.00	439	201.2	8.0	0.013	0.890	0.119	0.243	0.207	0.321	0.132	0.256	0.221	0.332
B14106.00-B14107.00	440	128.0	8.0	0.191	3.413	0.119	0.170	0.208	0.225	0.132	0.180	0.222	0.232
B14107.00-B14111.A0	8006	32.0	10.0	0.004	0.896	0.119	0.192	0.209	0.255	0.132	0.203	0.223	0.263
B14111.00-B14154.00	2802	346.0	8.0	0.007	0.653	0.228	0.409	0.387	0.556	0.284	0.462	0.444	0.606
B14111.A0-B14111.B0	8007	133.2	10.0	0.011	1.485	0.119	0.192	0.210	0.256	0.132	0.203	0.224	0.264
B14111.B0-B14111.C0	8008	80.2	10.0	0.009	1.343	0.119	0.192	0.211	0.256	0.132	0.203	0.225	0.265
B14111.C0-B14111.D0	8009	39.0	10.0	0.004	0.896	0.119	0.192	0.212	0.257	0.132	0.203	0.226	0.266
B14111.D0-B14111.E0	7094	39.0	10.0	0.004	0.896	0.119	0.197	0.214	0.265	0.132	0.208	0.227	0.273
B14111.E0-B14111.F0	7095	208.7	10.0	0.009	1.343	0.119	0.225	0.215	0.291	0.132	0.241	0.229	0.304
B14111.F0-B14111.G0	7096	178.6	10.0	0.009	1.343	0.180	0.249	0.278	0.311	0.211	0.270	0.308	0.330
B14111.G0-B14111.H0	7097	83.8	10.0	0.008	1.267	0.180	0.254	0.279	0.311	0.211	0.271	0.310	0.327
B14111.H0-B14111.I0	7098	60.6	10.0	0.008	1.267	0.180	0.226	0.280	0.283	0.211	0.245	0.311	0.299

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B14111.I0-B14111.M0	7099	125.3	10.0	0.033	2.572	0.210	0.232	0.363	0.306	0.267	0.261	0.421	0.329
B14111.J0-B14111.K0	7102	141.2	10.0	0.010	1.416	0.000	0.053	0.001	0.066	0.000	0.051	0.001	0.064
B14111.K0-B14111.L0	7103	291.2	10.0	0.010	1.416	0.018	0.080	0.021	0.084	0.017	0.076	0.019	0.081
B14111.L0-B14111.M0	7101	27.3	10.0	0.011	1.485	0.018	0.162	0.022	0.207	0.017	0.177	0.020	0.219
B14111.M0-B14111.00	7100	96.1	10.0	0.010	1.416	0.228	0.302	0.386	0.404	0.284	0.339	0.442	0.439
B14112.00-B14113.00	2801	8.0	8.0	0.002	0.349	0.000	0.013	0.001	0.027	0.005	0.044	0.006	0.049
B14113.00-B14114.00	2800	319.0	8.0	0.080	2.209	0.001	0.018	0.003	0.034	0.006	0.042	0.008	0.050
B14114.00-B14115.00	2799	354.0	8.0	0.050	1.746	0.002	0.027	0.005	0.045	0.007	0.051	0.011	0.062
B14115.00-B14116.00	2798	353.0	8.0	0.031	1.375	0.002	0.034	0.007	0.056	0.008	0.059	0.013	0.073
B14116.00-B14119.00	2797	347.0	8.0	0.026	1.259	0.003	0.054	0.009	0.090	0.010	0.090	0.016	0.114
B14117.00-B14118.00	2796	162.0	8.0	0.158	3.104	0.002	0.009	0.002	0.020	0.000	0.013	0.002	0.022
B14118.00-B14119.00	2795	165.0	8.0	0.142	2.943	0.002	0.041	0.003	0.071	0.002	0.067	0.004	0.088
B14119.00-B14121.00	2753	58.0	8.0	0.008	0.699	0.004	0.052	0.013	0.088	0.012	0.084	0.021	0.109
B14120.00-B14121.00	2234	123.0	8.0	0.020	1.104	0.001	0.026	0.002	0.044	0.001	0.037	0.002	0.051
B14121.00-B14122.00	2752	241.0	8.0	0.107	2.555	0.005	0.038	0.016	0.067	0.013	0.059	0.024	0.081
B14122.00-B14123.00	2751	180.9	8.0	0.033	1.419	0.005	0.048	0.018	0.088	0.013	0.075	0.026	0.104
B14123.00-B14124.00	2750	124.3	8.0	0.015	0.957	0.005	0.055	0.019	0.107	0.013	0.091	0.027	0.129
B14124.00-B14130.00	444	61.1	8.0	0.008	0.699	0.005	0.059	0.020	0.108	0.013	0.088	0.028	0.126
B14125.00-B14126.00	2749	170.0	8.0	0.010	0.781	0.001	0.030	0.002	0.044	0.001	0.030	0.002	0.045
B14126.00-B14127.00	2748	374.0	8.0	0.010	0.781	0.002	0.038	0.004	0.054	0.002	0.037	0.004	0.054
B14127.00-B14128.00	2747	310.0	8.0	0.026	1.259	0.003	0.038	0.007	0.052	0.003	0.038	0.007	0.052
B14128.00-B14129.00	2746	350.0	8.0	0.072	2.096	0.005	0.036	0.009	0.049	0.005	0.036	0.009	0.049
B14129.00-B14130.00	2745	349.0	8.0	0.097	2.432	0.006	0.049	0.012	0.075	0.006	0.057	0.012	0.080
B14130.00-B14131.00	2744	281.0	8.0	0.043	1.620	0.012	0.062	0.034	0.101	0.020	0.078	0.041	0.112
B14131.00-B14144.00	2743	354.0	8.0	0.041	1.581	0.012	0.120	0.035	0.181	0.020	0.154	0.043	0.206
B14132.00-B14134.00	2742	102.0	8.0	0.049	1.729	0.001	0.019	0.001	0.032	0.001	0.014	0.001	0.030
B14133.00-B14134.00	2741	150.0	8.0	0.022	1.158	0.002	0.028	0.003	0.040	0.001	0.022	0.002	0.036
B14134.00-B14135.00	2740	159.0	8.0	0.042	1.601	0.002	0.034	0.006	0.051	0.001	0.026	0.005	0.045
B14135.00-B14136.00	2739	310.0	8.0	0.035	1.461	0.004	0.040	0.009	0.055	0.002	0.048	0.007	0.062
B14136.00-B14138.00	2738	283.0	8.0	0.080	2.209	0.006	0.045	0.012	0.059	0.020	0.070	0.026	0.080
B14137.00-B14138.00	2736	210.0	8.0	0.037	1.502	0.002	0.039	0.003	0.050	0.001	0.047	0.002	0.057
B14138.00-B14140.00	2735	333.0	8.0	0.070	2.066	0.010	0.055	0.018	0.072	0.022	0.075	0.030	0.088
B14139.00-B14140.00	2734	205.0	8.0	0.043	1.620	0.001	0.040	0.002	0.053	0.001	0.048	0.002	0.059
B14140.00-B14141.00	2733	215.0	8.0	0.063	1.960	0.013	0.071	0.024	0.093	0.024	0.091	0.034	0.108
B14141.00-B14142.00	2732	362.0	8.0	0.020	1.104	0.016	0.087	0.027	0.113	0.025	0.113	0.036	0.134
B14142.00-B14143.00	2731	99.0	8.0	0.017	1.018	0.018	0.112	0.030	0.145	0.032	0.148	0.045	0.175
B14143.00-B14144.00	2730	112.0	8.0	0.004	0.494	0.018	0.154	0.032	0.216	0.032	0.201	0.046	0.253
B14144.00-B14145.00	2729	191.0	8.0	0.010	0.781	0.031	0.135	0.069	0.199	0.052	0.174	0.090	0.227
B14145.00-B14153.00	2728	187.0	8.0	0.050	1.746	0.032	0.096	0.071	0.141	0.053	0.120	0.092	0.158
B14146.00-B14147.00	2727	200.0	8.0	0.073	2.110	0.002	0.025	0.003	0.033	0.001	0.022	0.002	0.031
B14147.00-B14150.00	1981	227.0	8.0	0.050	1.746	0.002	0.048	0.005	0.066	0.002	0.041	0.004	0.062
B14148.00-B14150.00	1980	160.0	8.0	0.004	0.494	0.001	0.053	0.002	0.073	0.001	0.044	0.002	0.067
B14150.00-B14152.00	1979	96.0	8.0	0.004	0.494	0.005	0.074	0.009	0.104	0.003	0.062	0.008	0.096
B14151.00-B14152.00	1978	239.0	8.0	0.115	2.648	0.002	0.049	0.002	0.068	0.001	0.040	0.002	0.063
B14152.00-B14153.00	1977	162.0	8.0	0.004	0.494	0.007	0.090	0.013	0.129	0.004	0.093	0.011	0.132
B14153.00-B14154.00	1976	304.0	8.0	0.059	1.897	0.039	0.250	0.086	0.346	0.058	0.288	0.105	0.377
B14154.00-B14155.00	7995	355.0	10.0	0.007	1.185	0.267	0.347	0.475	0.476	0.342	0.392	0.549	0.514
B14155.00-B14156.00	1974	350.0	10.0	0.006	1.097	0.268	0.328	0.477	0.446	0.342	0.373	0.551	0.485
B14156.00-B14172.00	1973	340.0	10.0	0.016	1.791	0.289	0.273	0.498	0.363	0.361	0.306	0.570	0.390
B14157.00-B14159.00	1972	197.0	8.0	0.028	1.307	0.002	0.041	0.003	0.050	0.001	0.019	0.002	0.035
B14158.00-B14159.00	1971	199.0	8.0	0.012	0.856	0.002	0.044	0.003	0.054	0.001	0.022	0.002	0.039
B14159.00-B14161.00	1970	272.0	8.0	0.024	1.210	0.007	0.072	0.010	0.087	0.001	0.034	0.005	0.061
B14160.00-B14161.00	1969	254.0	8.0	0.005	0.552	0.002	0.068	0.003	0.083	0.000	0.032	0.002	0.058
B14161.00-B14164.00	2726	120.0	8.0	0.007	0.653	0.011	0.104	0.017	0.127	0.002	0.048	0.008	0.089
B14162.00-B14163.00	2725	177.0	8.0	0.005	0.552	0.002	0.051	0.003	0.062	0.000	0.023	0.002	0.044

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B14163.00-B14164.00	2724	162.0	8.0	0.007	0.653	0.004	0.087	0.007	0.107	0.001	0.040	0.003	0.075
B14164.00-B14165.00	2723	162.0	8.0	0.006	0.605	0.017	0.131	0.026	0.161	0.003	0.059	0.012	0.112
B14165.00-B14166.00	2722	148.0	8.0	0.008	0.699	0.019	0.115	0.030	0.141	0.004	0.052	0.014	0.099
B14166.00-B14168.00	2721	63.0	8.0	0.020	1.104	0.021	0.103	0.032	0.130	0.004	0.048	0.015	0.093
B14167.00-B14168.00	2720	89.0	8.0	0.003	0.428	0.001	0.076	0.002	0.101	0.000	0.038	0.001	0.077
B14168.00-B14169.00	2719	105.0	8.0	0.007	0.653	0.021	0.164	0.035	0.207	0.004	0.075	0.018	0.148
B14169.00-B14170.00	2718	245.0	8.0	0.006	0.605	0.025	0.138	0.039	0.173	0.005	0.063	0.020	0.124
B14170.00-B14171.00	2716	70.0	8.0	0.052	1.781	0.026	0.076	0.042	0.095	0.005	0.035	0.021	0.069
B14171.00-B14172.00	2715	71.0	8.0	0.037	1.502	0.027	0.205	0.044	0.268	0.005	0.196	0.022	0.264
B14172.00-B14238.00	2714	77.0	12.0	0.011	2.415	0.315	0.263	0.543	0.345	0.366	0.295	0.594	0.372
B14173.00-B14174.00	2713	150.0	8.0	0.048	1.711	0.002	0.033	0.003	0.039	0.001	0.021	0.002	0.031
B14174.00-B14176.00	1754	325.0	8.0	0.047	1.693	0.005	0.048	0.007	0.058	0.002	0.029	0.004	0.045
B14175.00-B14176.00	1753	152.0	8.0	0.010	0.781	0.000	0.036	0.001	0.051	0.000	0.017	0.001	0.041
B14176.00-B14177.00	1752	185.0	8.0	0.027	1.283	0.008	0.058	0.012	0.072	0.003	0.035	0.007	0.056
B14177.00-B14179.00	1850	187.0	8.0	0.030	1.353	0.010	0.067	0.016	0.082	0.003	0.041	0.009	0.064
B14178.00-B14179.00	1849	226.0	8.0	0.040	1.562	0.002	0.051	0.003	0.062	0.001	0.032	0.002	0.049
B14179.00-B14181.00	1848	286.0	8.0	0.030	1.353	0.014	0.079	0.022	0.099	0.005	0.049	0.013	0.078
B14180.00-B14181.00	1847	120.0	8.0	0.014	0.924	0.003	0.063	0.004	0.077	0.001	0.038	0.002	0.060
B14181.00-B14182.00	1770	258.0	8.0	0.030	1.353	0.018	0.082	0.029	0.101	0.007	0.051	0.017	0.079
B14182.00-B14184.00	6893	150.0	8.0	0.057	1.865	0.020	0.073	0.032	0.091	0.008	0.046	0.019	0.071
B14183.00-B14184.00	6892	50.0	8.0	0.021	1.132	0.000	0.040	0.001	0.054	0.000	0.025	0.001	0.045
B14184.00-B14204.00	6891	225.0	8.0	0.076	2.153	0.021	0.104	0.035	0.132	0.008	0.068	0.022	0.107
B14185.00-B14187.00	6890	160.0	8.0	0.004	0.494	0.001	0.056	0.002	0.072	0.001	0.039	0.002	0.060
B14186.00-B14187.00	6889	161.0	8.0	0.022	1.158	0.003	0.055	0.004	0.068	0.001	0.038	0.002	0.056
B14187.00-B14188.00	7581	218.0	8.0	0.004	0.494	0.006	0.096	0.009	0.120	0.003	0.067	0.006	0.099
B14188.00-B14189.00	7580	424.0	8.0	0.004	0.494	0.008	0.089	0.013	0.110	0.004	0.061	0.008	0.089
B14189.00-B14192.00	7579	267.0	8.0	0.040	1.562	0.011	0.068	0.017	0.083	0.005	0.046	0.011	0.067
B14190.00-B14191.00	7578	192.0	8.0	0.020	1.104	0.002	0.034	0.003	0.042	0.001	0.025	0.002	0.036
B14191.00-B14192.00	7577	224.0	8.0	0.040	1.562	0.004	0.057	0.007	0.070	0.002	0.040	0.004	0.057
B14192.00-B14196.00	7576	208.0	8.0	0.036	1.482	0.017	0.094	0.027	0.116	0.008	0.064	0.017	0.094
B14193.00-B14194.00	7575	304.0	8.0	0.048	1.711	0.002	0.030	0.003	0.037	0.001	0.020	0.002	0.031
B14194.00-B14195.00	7574	129.0	8.0	0.040	1.562	0.004	0.039	0.006	0.049	0.002	0.027	0.004	0.041
B14195.00-B14196.00	7573	161.0	8.0	0.039	1.542	0.005	0.077	0.009	0.096	0.002	0.053	0.006	0.079
B14196.00-B14198.00	7572	265.0	8.0	0.020	1.104	0.025	0.103	0.038	0.127	0.011	0.070	0.025	0.103
B14197.00-B14198.00	7571	263.0	8.0	0.045	1.657	0.003	0.062	0.004	0.075	0.001	0.043	0.003	0.061
B14198.00-B14199.00	7570	252.0	8.0	0.044	1.638	0.030	0.098	0.046	0.120	0.013	0.067	0.029	0.097
B14199.00-B14201.00	7569	222.0	8.0	0.036	1.482	0.032	0.139	0.049	0.173	0.014	0.095	0.032	0.140
B14200.00-B14201.00	7568	128.0	8.0	0.051	1.764	0.001	0.097	0.002	0.123	0.001	0.068	0.002	0.102
B14201.00-B14202.00	7567	87.0	8.0	0.004	0.494	0.034	0.215	0.054	0.269	0.016	0.148	0.035	0.219
B14202.00-B14203.00	7566	200.0	8.0	0.004	0.494	0.035	0.177	0.056	0.221	0.016	0.122	0.037	0.181
B14203.00-B14204.00	7565	296.0	8.0	0.050	1.746	0.036	0.119	0.058	0.150	0.017	0.080	0.038	0.123
B14204.00-B14205.00	7564	198.0	8.0	0.032	1.397	0.057	0.162	0.094	0.196	0.025	0.093	0.061	0.144
B14205.00-B14206.00	7563	340.0	8.0	0.030	1.353	0.102	0.198	0.140	0.232	0.025	0.100	0.062	0.157
B14206.00-B14228.00	7543	256.0	8.0	0.018	1.048	0.102	0.237	0.141	0.286	0.025	0.243	0.064	0.297
B14207.00-B14208.00	7542	56.0	8.0	0.011	0.819	0.000	0.020	0.001	0.033	0.000	0.021	0.001	0.034
B14208.00-B14209.00	557	40.0	8.0	0.009	0.741	0.002	0.029	0.004	0.044	0.002	0.033	0.004	0.046
B14209.00-B14210.00	7541	144.0	8.0	0.036	1.482	0.003	0.036	0.006	0.056	0.003	0.039	0.007	0.058
B14210.00-B14211.00	7540	70.0	8.0	0.012	0.856	0.003	0.041	0.008	0.062	0.004	0.046	0.008	0.065
B14211.00-B14222.00	7539	463.0	8.0	0.048	1.711	0.006	0.056	0.012	0.075	0.007	0.121	0.013	0.133
B14212.00-B14213.00	7538	306.0	8.0	0.034	1.440	0.002	0.038	0.003	0.045	0.164	0.228	0.165	0.228
B14213.00-B14214.00	7537	174.0	8.0	0.040	1.562	0.007	0.049	0.009	0.057	0.169	0.222	0.171	0.224
B14214.00-B14218.00	7536	47.0	8.0	0.016	0.988	0.008	0.065	0.011	0.083	0.170	0.270	0.173	0.275
B14215.00-B14216.00	7535	71.0	8.0	0.008	0.699	0.001	0.026	0.002	0.041	0.001	0.029	0.002	0.043
B14216.00-B14217.00	7278	41.0	8.0	0.005	0.552	0.001	0.034	0.004	0.052	0.002	0.038	0.004	0.055
B14217.00-B14218.00	7277	91.0	8.0	0.015	0.957	0.002	0.058	0.006	0.080	0.003	0.179	0.006	0.191

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B14218.00-B14219.00	7276	48.0	8.0	0.006	0.605	0.010	0.086	0.018	0.114	0.172	0.339	0.179	0.347
B14219.00-B14220.00	7275	149.0	8.0	0.013	0.890	0.011	0.080	0.021	0.105	0.174	0.298	0.182	0.306
B14220.00-B14221.00	3281	125.0	8.0	0.011	0.819	0.013	0.110	0.023	0.146	0.175	0.400	0.185	0.412
B14221.00-B14222.00	3280	47.0	8.0	0.004	0.494	0.013	0.111	0.025	0.148	0.175	0.379	0.187	0.392
B14222.00-B14223.00	3279	251.0	8.0	0.026	1.259	0.021	0.088	0.039	0.118	0.185	0.248	0.203	0.260
B14223.00-B14224.00	3278	186.0	8.0	0.015	0.957	0.023	0.508	0.042	0.554	0.187	0.650	0.206	0.658
B14224.00-B14227.00	3277	130.0	8.0	-0.003	Adverse	0.026	0.502	0.046	0.548	0.191	0.635	0.211	0.642
B14225.00-B14226.00	3276	493.0	8.0	0.014	0.924	0.000	0.000	0.001	0.026	0.000	0.042	0.001	0.056
B14226.00-B14227.00	3275	62.0	8.0	0.058	1.881	0.000	0.048	0.002	0.078	0.027	0.177	0.029	0.185
B14227.00-B14227.A0	7113	115.0	8.0	0.034	1.440	0.027	0.095	0.051	0.129	0.219	0.264	0.243	0.278
B14227.A0-B14228.00	3274	115.4	8.0	0.038	1.522	0.028	0.179	0.053	0.226	0.220	0.319	0.245	0.350
B14228.00-B14235.00	3273	300.0	8.0	0.014	0.924	0.130	0.238	0.195	0.292	0.245	0.327	0.310	0.370
B14229.00-B14230.00	3272	272.0	8.0	0.055	1.832	0.009	0.057	0.010	0.062	0.001	0.012	0.001	0.028
B14230.00-B14232.00	3271	153.0	8.0	0.030	1.353	0.011	0.093	0.013	0.104	0.001	0.027	0.003	0.055
B14231.00-B14232.00	3269	159.0	8.0	0.007	0.653	0.003	0.084	0.004	0.096	0.000	0.030	0.002	0.057
B14232.00-B14233.00	2710	347.0	8.0	0.017	1.018	0.016	0.086	0.020	0.097	0.001	0.028	0.006	0.055
B14233.00-B14234.00	2709	59.0	8.0	0.062	1.945	0.019	0.073	0.025	0.084	0.002	0.026	0.008	0.050
B14234.00-B14235.00	2708	37.0	8.0	0.008	0.699	0.019	0.153	0.026	0.184	0.002	0.153	0.009	0.189
B14235.00-B14236.00	2707	300.0	8.0	0.038	1.522	0.149	0.227	0.223	0.278	0.247	0.293	0.321	0.336
B14236.00-B14237.00	2706	357.0	8.0	0.022	1.158	0.149	0.274	0.224	0.336	0.247	0.353	0.322	0.406
B14237.00-B14238.00	2705	321.0	10.0	0.007	1.185	0.151	0.306	0.226	0.390	0.248	0.369	0.323	0.445
B14238.00-B14239.00	2704	77.0	12.0	0.008	2.060	0.466	0.346	0.770	0.454	0.613	0.404	0.918	0.505
B14239.00-B14274.00	2703	297.0	12.0	0.009	2.184	0.466	0.310	0.772	0.403	0.614	0.357	0.921	0.443
B14240.00-B14250.00	2702	124.0	8.0	0.014	0.924	0.002	0.038	0.003	0.048	0.000	0.020	0.002	0.037
B14250.00-B14251.00	2701	80.0	8.0	0.013	0.890	0.003	0.058	0.005	0.078	0.001	0.028	0.003	0.061
B14251.00-B14252.00	2700	117.0	8.0	0.004	0.494	0.004	0.061	0.007	0.083	0.001	0.029	0.004	0.065
B14252.00-B14254.00	2699	219.0	8.0	0.025	1.235	0.005	0.049	0.010	0.065	0.001	0.025	0.006	0.050
B14253.00-B14254.00	1833	276.0	8.0	0.026	1.259	0.002	0.040	0.003	0.051	0.001	0.021	0.002	0.039
B14254.00-B14257.00	1832	243.0	8.0	0.054	1.815	0.009	0.061	0.016	0.078	0.002	0.032	0.009	0.059
B14255.00-B14256.00	1831	260.0	8.0	0.049	1.729	0.002	0.036	0.003	0.043	0.000	0.019	0.002	0.032
B14256.00-B14257.00	1830	321.0	8.0	0.023	1.184	0.005	0.059	0.008	0.073	0.001	0.032	0.004	0.054
B14257.00-B14258.00	1829	60.0	8.0	0.023	1.184	0.016	0.072	0.027	0.091	0.004	0.038	0.015	0.068
B14258.00-B14260.00	1828	126.0	8.0	0.045	1.657	0.018	0.089	0.029	0.113	0.005	0.047	0.016	0.084
B14259.00-B14260.00	1827	303.0	8.0	0.034	1.440	0.002	0.066	0.003	0.084	0.001	0.035	0.002	0.063
B14260.00-B14261.00	1826	122.0	8.0	0.014	0.924	0.022	0.106	0.035	0.135	0.006	0.056	0.019	0.101
B14261.00-B14264.00	1825	105.0	8.0	0.014	0.924	0.023	0.120	0.038	0.152	0.006	0.063	0.021	0.113
B14262.00-B14263.00	1824	236.0	8.0	0.016	0.988	0.002	0.038	0.003	0.046	0.000	0.020	0.002	0.034
B14263.00-B14264.00	1823	326.0	8.0	0.029	1.330	0.005	0.089	0.008	0.110	0.001	0.047	0.004	0.081
B14264.00-B14267.00	1822	230.0	8.0	0.020	1.104	0.030	0.113	0.048	0.142	0.008	0.060	0.026	0.106
B14265.00-B14266.00	1821	81.0	8.0	0.023	1.184	0.001	0.023	0.002	0.034	0.000	0.012	0.001	0.028
B14266.00-B14267.00	1820	228.0	8.0	0.040	1.562	0.003	0.062	0.005	0.079	0.001	0.033	0.003	0.060
B14267.00-B14271.00	1812	51.0	8.0	0.023	1.184	0.034	0.107	0.056	0.135	0.009	0.056	0.031	0.101
B14268.00-B14269.00	1811	215.0	8.0	0.004	0.494	0.002	0.042	0.003	0.054	0.000	0.022	0.002	0.041
B14269.00-B14270.00	1810	246.0	8.0	0.027	1.283	0.004	0.045	0.006	0.055	0.001	0.024	0.003	0.041
B14270.00-B14271.00	1809	212.0	8.0	0.033	1.419	0.007	0.085	0.010	0.106	0.002	0.045	0.005	0.079
B14271.00-B14274.00	1808	148.0	8.0	0.030	1.353	0.042	0.236	0.068	0.299	0.011	0.225	0.037	0.300
B14272.00-B14273.00	7274	350.0	8.0	0.060	1.913	0.036	0.116	0.038	0.120	0.040	0.123	0.043	0.127
B14272.A0-B14272.00	7273	331.0	8.0	0.048	1.711	0.001	0.058	0.002	0.063	0.008	0.075	0.009	0.078
B14273.00-B14274.00	7272	359.0	8.0	0.013	0.890	0.036	0.244	0.039	0.294	0.040	0.266	0.044	0.318
B14274.00-B14275.00	7271	47.4	15.0	0.009	3.961	0.544	0.230	0.880	0.294	0.665	0.255	1.003	0.631
B14275.00-B14276.00	7270	42.0	15.0	0.003	2.287	0.544	0.272	0.882	0.350	0.665	0.302	1.013	1.000
B14276.00-B14277.00	7269	121.0	15.0	0.007	3.493	0.544	0.272	0.883	0.350	0.665	0.302	1.005	1.000
B14277.00-B14278.00	7268	106.0	15.0	0.007	3.493	0.544	0.271	0.884	0.349	0.665	0.301	1.004	1.000
B14278.00-B14279.00	7267	97.0	15.0	0.006	3.234	0.544	0.273	0.885	0.350	0.665	0.303	0.998	1.000
B14279.00-B14280.00	7266	185.0	15.0	0.007	3.493	0.585	0.277	0.927	0.583	0.709	0.305	1.028	1.000

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B14280.00-B14281.00	7265	141.0	15.0	0.007	3.493	0.585	0.301	0.928	0.909	0.709	0.332	1.022	1.000
B14281.00-B14282.00	7263	167.0	15.0	0.007	3.493	0.585	0.270	0.931	1.000	0.709	0.297	1.028	1.000
B14282.00-B14300.00	7262	190.0	15.0	0.019	5.755	0.585	0.304	0.928	1.000	0.709	0.618	1.031	1.000
B14282.A0-B14282.00	7562	10.2	15.0	0.000	0.000	0.006	0.206	0.045	1.000	0.008	0.227	0.067	1.000
B14283.00-B14284.00	7261	126.0	8.0	0.020	1.104	0.004	0.062	0.005	0.068	0.008	0.070	0.009	0.075
B14284.00-B14286.A0	7114	339.0	8.0	0.014	0.924	0.013	0.088	0.015	0.095	0.012	0.086	0.014	0.094
B14285.00-B14286.00	7260	107.0	8.0	0.010	0.781	0.000	0.050	0.001	0.072	0.000	0.050	0.001	0.072
B14286.00-B14292.00	7259	210.0	8.0	0.010	0.781	0.017	0.153	0.022	0.170	0.016	0.155	0.022	0.172
B14286.A0-B14286.00	935	86.0	8.0	0.014	0.924	0.017	0.097	0.020	0.109	0.016	0.097	0.020	0.109
B14287.00-B14288.00	936	91.0	8.0	0.042	1.601	0.006	0.068	0.007	0.072	0.006	0.067	0.007	0.072
B14288.00-B14289.00	7258	172.0	8.0	0.020	1.104	0.021	0.117	0.023	0.123	0.021	0.116	0.023	0.123
B14289.00-B14290.00	7257	199.0	8.0	0.015	0.957	0.027	0.114	0.030	0.121	0.026	0.114	0.030	0.121
B14290.00-B14291.00	7256	162.0	8.0	0.054	1.815	0.030	0.097	0.035	0.105	0.030	0.097	0.035	0.105
B14291.00-B14292.00	7190	164.0	8.0	0.028	1.307	0.030	0.155	0.036	0.169	0.030	0.157	0.036	0.171
B14292.00-B14293.00	7187	129.0	8.0	0.009	0.741	0.060	0.193	0.073	0.212	0.062	0.197	0.075	0.215
B14293.00-B14298.00	7175	302.0	8.0	0.012	0.856	0.060	0.342	0.074	0.379	0.062	0.327	0.076	0.365
B14294.00-B14296.00	7532	67.0	8.0	0.034	1.440	0.002	0.054	0.003	0.059	0.004	0.048	0.005	0.053
B14295.00-B14296.00	7527	194.0	8.0	0.021	1.132	0.027	0.107	0.028	0.109	0.012	0.073	0.014	0.076
B14296.00-B14297.00	7525	276.0	8.0	0.070	2.066	0.029	0.085	0.033	0.090	0.016	0.064	0.020	0.071
B14297.00-B14298.00	6868	38.8	8.0	0.018	1.048	0.029	0.296	0.034	0.326	0.016	0.268	0.021	0.300
B14298.00-B14299.00	6864	406.0	8.0	0.002	0.349	0.091	0.329	0.110	0.363	0.079	0.307	0.098	0.343
B14299.00-B14300.00	6858	396.0	8.0	0.065	1.991	0.100	0.445	0.120	0.583	0.087	0.571	0.107	0.579
B14300.00-B14301.00	938	397.3	8.0	0.010	0.781	0.686	0.754	1.030	1.000	0.803	1.000	1.129	1.000
B14301.00-B14302.00	2242	352.5	8.0	0.010	0.781	0.686	0.725	1.030	1.000	0.803	1.000	1.128	1.000
B15001.00-B15002.00	7520	426.0	8.0	0.004	0.494	0.091	0.287	0.097	0.296	0.088	0.282	0.093	0.291
B15001.A0-B15001.00	7111	78.0	8.0	0.007	0.653	0.049	0.296	0.050	0.303	0.049	0.289	0.050	0.297
B15001.B0-B15001.C0	3640	144.0	8.0	0.002	0.349	0.042	0.235	0.043	0.239	0.039	0.225	0.040	0.230
B15001.C0-B15001.D0	8259	116.0	8.0	0.002	0.349	0.042	0.235	0.044	0.242	0.039	0.225	0.041	0.233
B15001.D0-B15001.00	8260	78.0	8.0	0.002	0.349	0.042	0.320	0.046	0.330	0.039	0.308	0.042	0.319
B15002.00-B15009.00	7513	354.0	8.0	0.035	1.461	0.091	0.183	0.098	0.192	0.096	0.191	0.102	0.200
B15003.00-B15006.00	7502	160.0	8.0	0.010	0.781	0.002	0.068	0.003	0.082	0.003	0.091	0.004	0.101
B15004.00-B15005.00	7498	245.0	8.0	0.035	1.461	0.004	0.042	0.005	0.047	0.006	0.057	0.008	0.061
B15005.00-B15006.00	7491	240.0	8.0	0.056	1.848	0.008	0.073	0.010	0.085	0.016	0.101	0.018	0.110
B15006.00-B15007.00	7488	146.0	8.0	0.010	0.781	0.010	0.079	0.014	0.095	0.019	0.109	0.024	0.121
B15007.00-B15008.00	7224	260.0	8.0	0.041	1.581	0.011	0.063	0.017	0.077	0.022	0.088	0.028	0.097
B15008.00-B15009.00	7219	300.0	8.0	0.042	1.601	0.015	0.132	0.022	0.145	0.028	0.151	0.035	0.162
B15009.00-B15010.C0	3296	371.9	8.0	0.040	1.562	0.105	0.176	0.120	0.188	0.124	0.191	0.139	0.202
B15010.00-B15011.00	7447	375.0	8.0	0.067	2.022	0.136	0.200	0.156	0.214	0.170	0.229	0.189	0.235
B15010.A0-B15010.B0	7428	133.0	8.0	0.000	0.000	0.000	0.075	0.001	0.092	0.007	0.144	0.008	0.152
B15010.B0-B15010.C0	3295	292.0	8.0	0.027	1.283	0.009	0.107	0.011	0.116	0.017	0.126	0.019	0.134
B15010.C0-B15010.00	3297	147.2	8.0	0.078	2.181	0.114	0.166	0.132	0.177	0.141	0.184	0.159	0.195
B15011.00-B15072.00	7031	164.0	8.0	0.028	1.307	0.145	0.248	0.165	0.276	0.178	0.249	0.198	0.273
B15012.00-B15072.00	7410	78.9	8.0	0.010	0.781	0.001	0.146	0.002	0.173	0.003	0.141	0.004	0.167
B15013.00-B15014.00	7394	388.0	8.0	0.031	1.375	0.002	0.052	0.003	0.062	0.001	0.035	0.002	0.049
B15014.00-B15017.00	7384	281.0	8.0	0.004	0.494	0.006	0.090	0.008	0.108	0.003	0.061	0.005	0.086
B15015.00-B15016.00	7376	58.0	8.0	0.017	1.018	0.001	0.027	0.002	0.036	0.000	0.017	0.002	0.030
B15016.00-B15017.00	7367	317.0	8.0	0.034	1.440	0.003	0.069	0.005	0.086	0.001	0.045	0.003	0.068
B15017.00-B15018.00	7362	147.0	8.0	0.004	0.494	0.011	0.117	0.017	0.142	0.005	0.078	0.010	0.112
B15018.00-B15019.00	7351	158.0	8.0	0.004	0.494	0.013	0.110	0.020	0.135	0.006	0.074	0.013	0.108
B15019.00-B15022.00	558	223.0	8.0	0.013	0.890	0.015	0.108	0.025	0.134	0.007	0.071	0.016	0.107
B15019.A0-B15019.00	7346	120.0	8.0	0.078	2.181	0.001	0.054	0.002	0.069	0.001	0.035	0.002	0.056
B15020.00-B15021.00	7327	448.0	8.0	0.081	2.223	0.003	0.031	0.004	0.037	0.001	0.020	0.002	0.029
B15021.00-B15027.00	3	198.0	8.0	0.065	1.991	0.005	0.065	0.007	0.079	0.002	0.043	0.004	0.063
B15022.00-B15025.00	6886	182.0	8.0	0.011	0.819	0.018	0.101	0.028	0.126	0.007	0.067	0.018	0.102
B15023.00-B15024.00	6879	230.0	8.0	0.008	0.699	0.002	0.036	0.003	0.046	0.001	0.025	0.002	0.038

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B15024.00-B15025.00	7314	277.0	8.0	0.065	1.991	0.003	0.053	0.005	0.068	0.001	0.036	0.004	0.056
B15025.00-B15026.00	7173	381.0	8.0	0.059	1.897	0.023	0.078	0.037	0.097	0.010	0.052	0.024	0.079
B15026.00-B15027.00	7164	161.0	8.0	0.079	2.195	0.027	0.085	0.041	0.105	0.011	0.057	0.026	0.084
B15027.00-B15059.00	7156	215.0	8.0	0.056	1.848	0.033	0.122	0.051	0.151	0.014	0.079	0.032	0.119
B15028.00-B15029.00	6604	373.0	8.0	0.018	1.048	0.003	0.041	0.004	0.048	0.001	0.023	0.002	0.035
B15029.00-B15030.00	6596	201.0	8.0	0.040	1.562	0.006	0.047	0.008	0.055	0.002	0.027	0.004	0.040
B15030.00-B15031.00	7145	402.0	8.0	0.056	1.848	0.009	0.059	0.012	0.069	0.003	0.034	0.006	0.049
B15031.00-B15039.00	3077	353.0	8.0	0.033	1.419	0.013	0.072	0.018	0.084	0.004	0.042	0.009	0.062
B15032.00-B15033.00	3069	272.0	8.0	0.027	1.283	0.002	0.038	0.003	0.046	0.001	0.022	0.002	0.035
B15033.00-B15035.00	3061	320.0	8.0	0.027	1.283	0.006	0.051	0.008	0.062	0.002	0.030	0.004	0.046
B15034.00-B15035.00	2465	87.0	8.0	0.004	0.494	0.002	0.049	0.003	0.061	0.001	0.029	0.002	0.047
B15035.00-B15038.00	2457	226.0	8.0	0.035	1.461	0.009	0.057	0.013	0.070	0.003	0.034	0.007	0.053
B15036.00-B15037.00	2451	207.0	8.0	0.037	1.502	0.003	0.038	0.004	0.044	0.001	0.025	0.002	0.034
B15037.00-B15038.00	7140	99.0	8.0	0.036	1.482	0.005	0.051	0.008	0.061	0.002	0.031	0.004	0.047
B15038.00-B15039.00	7134	260.0	8.0	0.081	2.223	0.015	0.067	0.023	0.081	0.005	0.041	0.013	0.061
B15039.00-B15042.00	2116	17.0	8.0	0.012	0.856	0.030	0.083	0.044	0.099	0.010	0.050	0.024	0.074
B15040.00-B15041.00	7124	172.0	8.0	0.049	1.729	0.002	0.036	0.003	0.045	0.001	0.022	0.002	0.035
B15041.00-B15042.00	7019	312.3	8.0	0.018	1.048	0.005	0.070	0.007	0.084	0.002	0.043	0.004	0.063
B15042.00-B15043.00	7010	204.0	8.0	0.081	2.223	0.037	0.091	0.055	0.110	0.013	0.055	0.030	0.083
B15043.00-B15056.00	6108	134.0	8.0	0.073	2.110	0.039	0.101	0.057	0.121	0.013	0.061	0.032	0.091
B15044.00-B15045.00	6099	278.0	8.0	0.020	1.104	0.002	0.042	0.003	0.050	0.001	0.025	0.002	0.038
B15045.00-B15050.00	177	300.0	8.0	0.020	1.104	0.006	0.077	0.008	0.091	0.002	0.045	0.004	0.066
B15046.00-B15047.00	6092	296.0	8.0	0.019	1.077	0.002	0.042	0.003	0.050	0.001	0.026	0.002	0.037
B15047.00-B15049.00	6085	339.0	8.0	0.028	1.307	0.007	0.052	0.009	0.061	0.002	0.030	0.004	0.044
B15048.00-B15049.00	6434	146.0	8.0	0.014	0.924	0.001	0.039	0.002	0.050	0.000	0.022	0.001	0.038
B15049.00-B15050.00	2171	260.0	8.0	0.060	1.913	0.011	0.078	0.015	0.092	0.003	0.045	0.008	0.067
B15050.00-B15051.00	2169	358.0	8.0	0.020	1.104	0.021	0.095	0.029	0.111	0.006	0.054	0.014	0.080
B15051.00-B15052.00	2492	165.0	8.0	0.041	1.581	0.025	0.099	0.035	0.116	0.007	0.056	0.016	0.083
B15052.00-B15065.00	6426	233.0	8.0	0.041	1.581	0.030	0.096	0.043	0.113	0.009	0.055	0.022	0.082
B15053.00-B15052.00	6418	175.0	8.0	0.020	1.104	0.003	0.073	0.005	0.089	0.001	0.044	0.004	0.068
B15053.A0-B15053.00	1768	102.0	8.0	0.023	1.184	0.001	0.031	0.002	0.041	0.001	0.021	0.002	0.035
B15054.00-B15055.00	6411	354.0	8.0	0.034	1.440	0.002	0.040	0.003	0.048	0.001	0.025	0.002	0.036
B15055.00-B15056.00	6403	238.1	8.0	0.020	1.104	0.005	0.079	0.008	0.095	0.002	0.049	0.004	0.071
B15056.00-B15058.00	6394	175.0	8.0	0.061	1.929	0.045	0.106	0.067	0.128	0.016	0.064	0.038	0.097
B15057.00-B15058.00	6387	90.0	8.0	0.029	1.330	0.001	0.061	0.002	0.077	0.001	0.039	0.002	0.061
B15058.00-B15059.00	6997	164.0	8.0	0.075	2.139	0.048	0.127	0.072	0.156	0.017	0.080	0.041	0.121
B15059.00-B15062.00	6989	197.0	8.0	0.044	1.638	0.082	0.218	0.125	0.272	0.032	0.138	0.075	0.212
B15060.00-B15061.00	2983	199.0	8.0	0.009	0.741	0.001	0.023	0.002	0.037	0.000	0.014	0.001	0.032
B15061.00-B15062.00	6982	287.0	8.0	0.055	1.832	0.001	0.152	0.003	0.195	0.001	0.098	0.003	0.154
B15062.00-B15063.00	6973	300.0	8.0	0.006	0.605	0.083	0.247	0.130	0.310	0.033	0.156	0.080	0.242
B15063.00-B15064.00	6967	312.0	8.0	0.012	0.856	0.083	0.214	0.131	0.269	0.033	0.136	0.081	0.212
B15064.00-B15068.00	6641	185.0	8.0	0.010	0.781	0.084	0.243	0.133	0.305	0.033	0.151	0.083	0.236
B15065.00-B15067.00	6330	225.0	8.0	0.100	2.470	0.033	0.084	0.047	0.100	0.010	0.049	0.024	0.073
B15066.00-B15067.00	6324	326.0	8.0	0.023	1.184	0.002	0.060	0.003	0.072	0.001	0.035	0.002	0.053
B15067.00-B15068.00	5939	161.0	8.0	0.093	2.382	0.038	0.177	0.054	0.219	0.012	0.107	0.028	0.166
B15068.00-B15069.00	5933	187.0	8.0	0.010	0.781	0.122	0.288	0.188	0.364	0.045	0.183	0.112	0.285
B15069.00-B15070.00	5924	128.0	8.0	0.010	0.781	0.122	0.266	0.189	0.332	0.045	0.163	0.113	0.254
B15070.00-B15071.00	5917	352.0	8.0	0.035	1.461	0.150	0.217	0.218	0.262	0.045	0.121	0.114	0.190
B15071.00-B15072.00	5910	237.0	8.0	0.038	1.522	0.150	0.241	0.220	0.284	0.045	0.178	0.115	0.234
B15072.00-B15073.00	6463	300.9	8.0	0.055	1.832	0.295	0.383	0.388	0.438	0.226	0.335	0.319	0.396
B15073.00-B15112.00	6457	108.1	12.0	0.005	1.628	0.295	0.284	0.389	0.327	0.226	0.249	0.320	0.297
B15074.00-B15075.00	6057	462.0	8.0	0.049	1.729	0.002	0.031	0.003	0.038	0.001	0.024	0.002	0.032
B15075.00-B15077.00	6050	262.0	8.0	0.051	1.764	0.004	0.063	0.006	0.082	0.002	0.055	0.005	0.076
B15076.00-B15077.00	6040	213.0	8.0	0.004	0.494	0.001	0.065	0.002	0.086	0.001	0.058	0.002	0.081
B15077.00-B15078.00	6033	343.0	8.0	0.006	0.605	0.006	0.069	0.010	0.091	0.004	0.061	0.009	0.086

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B15078.00-B15079.00	6023	100.0	8.0	0.039	1.542	0.007	0.053	0.013	0.072	0.005	0.044	0.010	0.065
B15079.00-B15080.00	6443	242.0	8.0	0.025	1.235	0.008	0.057	0.015	0.077	0.005	0.046	0.012	0.069
B15080.00-B15081.00	6436	159.0	8.0	0.048	1.711	0.009	0.063	0.017	0.085	0.005	0.049	0.013	0.076
B15081.00-B15082.00	6351	196.0	8.0	0.025	1.235	0.010	0.065	0.020	0.088	0.006	0.050	0.015	0.077
B15082.00-B15091.00	6078	170.0	8.0	0.060	1.913	0.012	0.071	0.022	0.096	0.006	0.058	0.016	0.088
B15083.00-B15084.00	1047	321.0	8.0	0.019	1.077	0.003	0.045	0.004	0.053	0.003	0.045	0.005	0.052
B15084.00-B15085.00	1038	341.0	8.0	0.027	1.283	0.006	0.048	0.008	0.056	0.004	0.043	0.007	0.052
B15085.00-B15086.00	1030	57.0	8.0	0.029	1.330	0.007	0.043	0.011	0.053	0.005	0.036	0.008	0.047
B15086.00-B15089.00	6070	70.0	8.0	0.036	1.482	0.008	0.060	0.012	0.080	0.005	0.062	0.010	0.081
B15087.00-B15088.00	3294	15.0	8.0	0.002	0.349	0.000	0.011	0.001	0.040	0.005	0.068	0.006	0.076
B15088.00-B15089.00	3292	114.0	8.0	0.010	0.781	0.001	0.050	0.003	0.075	0.005	0.074	0.008	0.092
B15089.00-B15090.00	6953	116.0	8.0	0.015	0.957	0.009	0.067	0.017	0.091	0.010	0.073	0.018	0.096
B15090.00-B15091.00	6944	51.0	8.0	0.018	1.048	0.010	0.071	0.019	0.097	0.011	0.067	0.020	0.094
B15091.00-B15093.00	6843	163.0	8.0	0.036	1.482	0.022	0.088	0.043	0.120	0.017	0.076	0.038	0.112
B15092.00-B15093.00	6063	230.0	8.0	0.044	1.638	0.001	0.053	0.002	0.074	0.001	0.044	0.001	0.069
B15093.00-B15095.00	6059	182.0	8.0	0.042	1.601	0.027	0.089	0.051	0.122	0.018	0.075	0.042	0.112
B15094.00-B15093.00	6342	409.0	8.0	0.016	0.988	0.002	0.062	0.003	0.082	0.001	0.047	0.002	0.072
B15095.00-B15097.00	6335	83.0	8.0	0.034	1.440	0.028	0.111	0.053	0.152	0.019	0.091	0.044	0.138
B15096.00-B15097.00	6584	241.0	8.0	0.004	0.494	0.001	0.083	0.002	0.116	0.000	0.065	0.001	0.103
B15097.00-B15106.00	6578	150.0	8.0	0.010	0.781	0.030	0.158	0.057	0.215	0.019	0.122	0.047	0.190
B15098.00-B15106.00	6572	177.0	8.0	0.004	0.494	0.002	0.114	0.003	0.151	0.001	0.082	0.002	0.129
B15099.00-B15101.00	6237	159.0	8.0	0.025	1.235	0.001	0.036	0.002	0.048	0.000	0.018	0.001	0.037
B15100.00-B15101.00	6319	105.0	8.0	0.011	0.819	0.001	0.037	0.002	0.050	0.000	0.021	0.002	0.041
B15101.00-B15102.00	6314	267.0	8.0	0.028	1.307	0.004	0.042	0.008	0.055	0.001	0.022	0.005	0.043
B15102.00-B15104.00	6229	153.0	8.0	0.097	2.432	0.006	0.066	0.010	0.086	0.002	0.038	0.006	0.067
B15103.00-B15104.00	6226	199.0	8.0	0.021	1.132	0.003	0.068	0.004	0.085	0.001	0.040	0.002	0.066
B15104.00-B15105.00	6218	215.0	8.0	0.004	0.494	0.010	0.102	0.017	0.131	0.003	0.059	0.010	0.103
B15105.00-B15106.00	6211	144.0	8.0	0.004	0.494	0.012	0.144	0.020	0.191	0.004	0.099	0.012	0.160
B15106.00-B15107.00	6201	135.0	8.0	0.014	0.924	0.045	0.149	0.082	0.201	0.024	0.111	0.062	0.174
B15107.00-B15108.00	6196	297.0	8.0	0.042	1.601	0.045	0.138	0.084	0.188	0.024	0.103	0.063	0.164
B15108.00-B15109.00	6563	308.0	8.0	0.011	0.819	0.046	0.163	0.086	0.223	0.024	0.120	0.064	0.194
B15109.00-B15110.00	6841	350.0	8.0	0.010	0.781	0.045	0.240	0.087	0.304	0.024	0.203	0.066	0.276
B15110.00-B15111.00	1128	500.0	8.0	0.010	0.781	0.094	0.232	0.136	0.280	0.076	0.210	0.119	0.262
B15111.00-B15112.00	588	247.0	8.0	0.064	1.976	0.094	0.254	0.137	0.299	0.076	0.225	0.120	0.275
B15112.00-B15243.00	6376	117.2	12.0	0.018	3.089	0.389	0.258	0.527	0.307	0.302	0.226	0.441	0.280
B15113.00-B15114.00	6367	257.0	8.0	0.005	0.552	0.001	0.057	0.002	0.077	0.002	0.052	0.003	0.075
B15114.00-B15127.00	762	479.0	8.0	0.012	0.856	0.006	0.060	0.012	0.082	0.004	0.049	0.010	0.074
B15115.00-B15117.00	6310	147.0	8.0	0.064	1.976	0.002	0.042	0.003	0.054	0.001	0.028	0.002	0.044
B15116.00-B15117.00	6303	253.0	8.0	0.005	0.552	0.002	0.052	0.003	0.066	0.001	0.035	0.002	0.054
B15117.00-B15114.00	6360	184.0	8.0	0.007	0.653	0.005	0.069	0.008	0.092	0.002	0.050	0.005	0.080
B15118.00-B15120.00	6296	204.0	8.0	0.013	0.890	0.002	0.042	0.003	0.052	0.001	0.025	0.002	0.040
B15119.00-B15120.00	6628	171.0	8.0	0.013	0.890	0.003	0.046	0.004	0.055	0.001	0.026	0.002	0.040
B15120.00-B15121.00	5880	363.0	8.0	0.029	1.330	0.007	0.055	0.010	0.067	0.002	0.034	0.006	0.051
B15121.00-B15122.00	6272	151.0	8.0	0.032	1.397	0.010	0.060	0.014	0.072	0.004	0.039	0.008	0.056
B15122.00-B15123.00	2698	295.0	8.0	0.045	1.657	0.012	0.063	0.018	0.075	0.005	0.042	0.011	0.059
B15123.00-B15126.00	3260	292.0	8.0	0.056	1.848	0.015	0.074	0.022	0.089	0.007	0.050	0.013	0.070
B15124.00-B15125.00	3258	405.0	8.0	0.056	1.848	0.002	0.031	0.003	0.038	0.001	0.024	0.003	0.033
B15125.00-B15126.00	3248	135.0	8.0	0.056	1.848	0.004	0.059	0.007	0.072	0.002	0.041	0.005	0.058
B15126.00-B15131.00	2025	223.0	8.0	0.039	1.542	0.022	0.085	0.032	0.105	0.010	0.062	0.020	0.087
B15127.00-B15128.00	6836	334.0	8.0	0.084	2.264	0.008	0.052	0.015	0.069	0.006	0.047	0.013	0.065
B15128.00-B15131.00	753	391.0	8.0	0.033	1.419	0.010	0.074	0.018	0.095	0.009	0.062	0.017	0.086
B15129.00-B15130.00	2481	213.0	8.0	0.019	1.077	0.001	0.025	0.002	0.035	0.001	0.024	0.002	0.034
B15130.00-B15131.00	5151	346.0	8.0	0.055	1.832	0.002	0.057	0.005	0.073	0.002	0.047	0.005	0.066
B15131.00-B15132.00	3284	369.0	8.0	0.085	2.277	0.036	0.095	0.057	0.119	0.021	0.074	0.043	0.104
B15132.00-B15144.00	3285	169.0	8.0	0.045	1.657	0.037	0.115	0.060	0.145	0.021	0.084	0.044	0.122

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B15133.00-B15134.00	5126	186.0	8.0	0.031	1.375	0.001	0.026	0.002	0.035	0.000	0.014	0.001	0.028
B15134.00-B15135.00	6825	64.0	8.0	0.028	1.307	0.003	0.028	0.005	0.039	0.001	0.017	0.003	0.032
B15135.00-B15136.00	1678	135.0	8.0	0.080	2.209	0.003	0.033	0.007	0.045	0.001	0.020	0.005	0.037
B15136.00-B15143.00	1662	178.0	8.0	0.064	1.976	0.005	0.058	0.009	0.075	0.002	0.035	0.006	0.059
B15137.00-B15139.00	6823	303.0	8.0	0.010	0.781	0.003	0.054	0.004	0.065	0.001	0.033	0.002	0.050
B15138.00-B15139.00	4570	125.0	8.0	0.046	1.675	0.002	0.046	0.003	0.057	0.001	0.030	0.002	0.045
B15139.00-B15140.00	4241	139.0	8.0	0.010	0.781	0.007	0.070	0.010	0.085	0.002	0.043	0.006	0.066
B15140.00-B15142.00	6802	193.0	8.0	0.010	0.781	0.009	0.088	0.013	0.106	0.003	0.052	0.008	0.079
B15141.00-B15142.00	6785	185.0	8.0	0.054	1.815	0.003	0.065	0.004	0.077	0.001	0.038	0.002	0.057
B15142.00-B15143.00	6768	238.0	8.0	0.011	0.819	0.014	0.091	0.021	0.110	0.004	0.053	0.011	0.083
B15143.00-B15144.00	3286	180.0	8.0	0.041	1.581	0.020	0.103	0.033	0.130	0.007	0.068	0.019	0.105
B15144.00-B15158.00	6751	347.0	8.0	0.056	1.848	0.064	0.139	0.103	0.176	0.030	0.095	0.070	0.145
B15145.00-B15146.00	6734	155.0	8.0	0.015	0.957	0.001	0.033	0.002	0.044	0.000	0.019	0.001	0.035
B15146.00-B15147.00	6015	400.0	8.0	0.020	1.104	0.004	0.046	0.006	0.057	0.001	0.026	0.003	0.043
B15147.00-B15148.00	2021	279.0	8.0	0.032	1.397	0.007	0.053	0.010	0.065	0.002	0.031	0.006	0.049
B15148.00-B15149.00	1652	121.0	8.0	0.032	1.397	0.009	0.056	0.013	0.071	0.003	0.033	0.007	0.054
B15149.00-B15150.00	3466	242.0	8.0	0.040	1.562	0.010	0.060	0.017	0.077	0.003	0.035	0.010	0.061
B15149.A0-B15149.00	1635	44.0	8.0	0.011	0.819	0.001	0.035	0.002	0.048	0.000	0.016	0.001	0.037
B15150.00-B15153.00	3467	383.0	8.0	0.031	1.375	0.011	0.068	0.019	0.087	0.003	0.041	0.011	0.069
B15151.00-B15152.00	4139	168.0	8.0	0.017	1.018	0.004	0.050	0.007	0.067	0.001	0.032	0.005	0.056
B15151.A0-B15151.B0	7586	123.8	8.0	0.000	0.000	0.001	0.067	0.002	0.086	0.000	0.042	0.002	0.072
B15151.B0-B15151.00	3468	176.0	8.0	0.029	1.330	0.003	0.040	0.005	0.053	0.001	0.024	0.003	0.043
B15152.00-B15155.00	6716	281.0	8.0	0.019	1.077	0.007	0.070	0.012	0.097	0.002	0.044	0.008	0.081
B15152.A0-B15152.00	7112	51.8	6.0	0.002	0.162	0.001	0.065	0.002	0.090	0.000	0.040	0.001	0.075
B15153.00-B15156.00	6699	190.0	8.0	0.028	1.307	0.014	0.133	0.023	0.175	0.005	0.081	0.014	0.141
B15154.00-B15155.00	3287	76.0	8.0	0.004	0.494	0.001	0.060	0.002	0.084	0.001	0.039	0.002	0.072
B15155.00-B15156.00	6682	87.0	8.0	0.005	0.552	0.008	0.139	0.016	0.189	0.003	0.085	0.011	0.154
B15156.00-B15157.00	4845	363.0	8.0	0.004	0.494	0.023	0.145	0.041	0.193	0.008	0.089	0.026	0.156
B15157.00-B15158.00	6282	183.0	8.0	0.028	1.307	0.027	0.124	0.046	0.160	0.009	0.081	0.029	0.130
B15158.00-B15159.00	6672	106.0	8.0	0.043	1.620	0.091	0.226	0.151	0.293	0.040	0.152	0.100	0.238
B15159.00-B15162.00	555	24.0	8.0	0.004	0.494	0.092	0.288	0.153	0.376	0.041	0.192	0.102	0.304
B15160.00-B15161.00	6656	322.0	8.0	0.008	0.699	0.002	0.045	0.003	0.059	0.001	0.027	0.002	0.047
B15161.00-B15162.00	6149	81.0	8.0	0.004	0.494	0.003	0.165	0.005	0.216	0.001	0.107	0.003	0.174
B15162.00-B15163.00	554	346.0	8.0	0.005	0.552	0.095	0.287	0.160	0.377	0.042	0.190	0.106	0.304
B15163.00-B15175.00	786	429.0	8.0	0.004	0.494	0.097	0.314	0.162	0.414	0.042	0.206	0.108	0.331
B15164.00-B15144.00	553	116.0	8.0	0.060	1.913	0.006	0.084	0.009	0.105	0.002	0.058	0.005	0.085
B15165.00-B15164.00	552	334.0	8.0	-0.045	Adverse	0.005	0.041	0.007	0.047	0.002	0.026	0.003	0.036
B15165.00-B15166.00	551	271.0	8.0	-0.014	Adverse	0.001	0.035	0.002	0.039	0.000	0.021	0.001	0.028
B15166.00-B15167.00	785	228.0	8.0	0.034	1.440	0.002	0.033	0.003	0.038	0.001	0.019	0.001	0.027
B15167.00-B15172.00	784	334.0	8.0	0.073	2.110	0.005	0.076	0.007	0.090	0.002	0.045	0.003	0.066
B15168.00-B15169.00	783	173.0	8.0	0.005	0.552	0.001	0.049	0.002	0.062	0.000	0.030	0.002	0.050
B15169.00-B15170.00	782	212.0	8.0	0.005	0.552	0.004	0.060	0.006	0.074	0.001	0.037	0.004	0.058
B15170.00-B15171.00	781	313.0	8.0	0.019	1.077	0.007	0.057	0.010	0.069	0.003	0.036	0.006	0.053
B15171.00-B15172.00	780	141.0	8.0	0.045	1.657	0.010	0.086	0.014	0.102	0.004	0.051	0.008	0.076
B15172.00-B15173.00	779	179.0	8.0	0.027	1.283	0.017	0.081	0.025	0.096	0.006	0.048	0.013	0.072
B15173.00-B15174.00	778	48.0	8.0	0.071	2.081	0.018	0.053	0.027	0.065	0.006	0.033	0.015	0.050
B15174.00-B15175.00	777	35.0	8.0	0.024	1.210	0.018	0.195	0.028	0.254	0.006	0.125	0.016	0.202
B15175.00-B15176.00	776	114.0	8.0	0.004	0.494	0.115	0.382	0.191	0.500	0.049	0.247	0.126	0.399
B15176.00-B15201.00	1509	181.0	8.0	0.004	0.494	0.115	0.320	0.193	0.417	0.049	0.211	0.127	0.337
B15177.00-B15179.00	774	464.0	8.0	0.070	2.066	0.002	0.031	0.003	0.038	0.010	0.049	0.011	0.054
B15178.00-B15179.00	773	192.0	8.0	0.040	1.562	0.001	0.030	0.002	0.038	0.001	0.033	0.002	0.041
B15179.00-B15180.00	772	191.0	8.0	0.092	2.369	0.006	0.043	0.010	0.053	0.011	0.054	0.015	0.062
B15180.00-B15182.00	771	128.0	8.0	0.054	1.815	0.008	0.050	0.013	0.064	0.012	0.059	0.017	0.070
B15181.00-B15182.00	2334	7.3	8.0	0.000	0.000	0.001	0.044	0.002	0.062	0.001	0.050	0.001	0.064
B15182.00-B15183.00	770	170.0	8.0	0.048	1.711	0.009	0.065	0.016	0.085	0.012	0.072	0.019	0.089

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B15183.00-B15185.00	769	391.0	8.0	0.016	0.988	0.012	0.079	0.021	0.103	0.013	0.080	0.022	0.103
B15183.A0-B15183.00	2333	5.5	8.0	0.000	0.000	0.001	0.070	0.002	0.094	0.001	0.075	0.002	0.096
B15184.00-B15185.00	2332	6.1	8.0	0.000	0.000	0.001	0.072	0.002	0.096	0.001	0.067	0.001	0.093
B15185.00-B15199.00	3291	345.0	8.0	0.022	1.158	0.015	0.102	0.027	0.133	0.014	0.086	0.025	0.122
B15186.00-B15187.00	768	212.0	8.0	0.035	1.461	0.004	0.039	0.006	0.050	0.001	0.022	0.003	0.038
B15186.A0-B15186.00	767	100.0	8.0	0.027	1.283	0.002	0.032	0.003	0.040	0.000	0.017	0.002	0.031
B15187.00-B15188.00	766	51.0	8.0	0.016	0.988	0.005	0.043	0.008	0.056	0.001	0.024	0.005	0.044
B15188.00-B15189.00	765	51.0	8.0	0.017	1.018	0.006	0.047	0.010	0.063	0.002	0.027	0.006	0.051
B15189.00-B15191.00	764	241.0	8.0	0.026	1.259	0.006	0.062	0.012	0.084	0.002	0.037	0.008	0.068
B15190.00-B15191.00	763	142.0	8.0	0.046	1.675	0.002	0.052	0.003	0.066	0.001	0.032	0.002	0.053
B15191.00-B15193.00	760	374.0	8.0	0.013	0.890	0.010	0.087	0.018	0.113	0.004	0.052	0.012	0.090
B15192.00-B15193.00	759	231.0	8.0	0.047	1.693	0.002	0.061	0.003	0.079	0.001	0.038	0.002	0.063
B15193.00-B15196.00	1515	185.0	8.0	0.008	0.699	0.014	0.125	0.025	0.160	0.005	0.076	0.015	0.127
B15194.00-B15195.00	1517	211.0	8.0	0.037	1.502	0.002	0.035	0.003	0.042	0.001	0.022	0.002	0.033
B15195.00-B15196.00	1516	188.0	8.0	0.036	1.482	0.005	0.097	0.007	0.121	0.002	0.058	0.004	0.095
B15196.00-B15197.00	1514	98.0	8.0	0.013	0.890	0.021	0.103	0.034	0.131	0.007	0.062	0.021	0.104
B15197.00-B15198.00	1513	69.0	8.0	0.076	2.153	0.022	0.066	0.036	0.086	0.007	0.041	0.022	0.069
B15198.00-B15199.00	1512	137.0	8.0	0.048	1.711	0.022	0.101	0.038	0.133	0.008	0.072	0.024	0.112
B15199.00-B15200.00	1511	380.0	8.0	0.022	1.158	0.038	0.147	0.067	0.194	0.022	0.112	0.050	0.170
B15200.00-B15201.00	1510	111.0	8.0	0.006	0.605	0.038	0.188	0.068	0.247	0.022	0.135	0.051	0.210
B15201.00-B15202.00	1508	354.8	8.0	0.046	1.675	0.154	0.208	0.262	0.271	0.071	0.143	0.180	0.224
B15202.00-B15215.00	841	382.8	8.0	0.046	1.675	0.156	0.206	0.265	0.269	0.072	0.141	0.182	0.223
B15203.00-B15204.00	5282	116.0	8.0	0.010	0.781	0.001	0.036	0.002	0.049	0.000	0.019	0.001	0.039
B15204.00-B15207.00	1472	267.0	8.0	0.010	0.781	0.003	0.045	0.005	0.062	0.001	0.026	0.003	0.051
B15205.00-B15206.00	6555	202.0	8.0	0.029	1.330	0.001	0.026	0.002	0.037	0.000	0.008	0.001	0.029
B15206.00-B15207.00	6538	118.0	8.0	0.023	1.184	0.002	0.039	0.004	0.056	0.000	0.021	0.003	0.046
B15207.00-B15208.00	1471	193.0	8.0	0.023	1.184	0.005	0.052	0.011	0.074	0.002	0.029	0.007	0.061
B15208.00-B15209.00	286	270.0	8.0	0.023	1.184	0.007	0.070	0.015	0.098	0.002	0.039	0.010	0.080
B15208.A0-B15208.00	3288	104.0	8.0	0.031	1.375	0.000	0.034	0.001	0.052	0.000	0.015	0.001	0.043
B15209.00-B15210.00	1470	133.0	8.0	0.007	0.653	0.009	0.088	0.019	0.121	0.003	0.049	0.012	0.098
B15210.00-B15213.00	1467	245.0	8.0	0.010	0.781	0.011	0.083	0.021	0.114	0.003	0.048	0.014	0.092
B15211.00-B15212.00	1469	385.0	8.0	0.025	1.235	0.001	0.030	0.002	0.041	0.000	0.021	0.002	0.035
B15212.00-B15213.00	1468	135.0	8.0	0.016	0.988	0.002	0.055	0.005	0.075	0.001	0.035	0.003	0.062
B15213.00-B15214.00	843	162.0	8.0	0.048	1.711	0.015	0.067	0.029	0.090	0.005	0.040	0.019	0.074
B15214.00-B15215.00	842	161.0	8.0	0.090	2.343	0.016	0.130	0.031	0.173	0.005	0.086	0.020	0.142
B15215.00-B15215.A0	840	113.0	8.0	0.053	1.798	0.172	0.267	0.298	0.355	0.077	0.201	0.203	0.306
B15215.A0-B15216.00	839	342.8	10.0	0.006	1.097	0.172	0.268	0.299	0.357	0.109	0.213	0.236	0.316
B15216.00-B15217.00	838	301.8	10.0	0.006	1.097	0.172	0.269	0.300	0.360	0.109	0.214	0.238	0.318
B15217.00-B15238.00	1463	144.7	10.0	0.006	1.097	0.173	0.298	0.303	0.390	0.109	0.244	0.239	0.348
B15218.00-B15219.00	837	157.7	8.0	0.099	2.457	0.001	0.021	0.002	0.029	0.000	0.011	0.001	0.024
B15219.00-B15220.00	836	238.8	8.0	0.064	1.976	0.003	0.034	0.005	0.043	0.001	0.017	0.003	0.033
B15220.00-B15221.00	834	79.1	8.0	0.034	1.440	0.005	0.044	0.009	0.056	0.001	0.021	0.005	0.042
B15221.00-B15222.00	833	61.7	8.0	0.017	1.018	0.006	0.047	0.010	0.062	0.001	0.022	0.006	0.047
B15222.00-B15223.00	832	75.4	8.0	0.027	1.283	0.006	0.048	0.011	0.064	0.001	0.022	0.007	0.049
B15223.00-B15224.00	831	386.4	8.0	0.046	1.675	0.009	0.063	0.016	0.081	0.002	0.029	0.009	0.060
B15224.00-B15235.00	749	72.5	8.0	0.015	0.957	0.012	0.107	0.020	0.126	0.002	0.084	0.010	0.110
B15225.00-B15226.00	830	31.9	8.0	0.003	0.428	0.001	0.030	0.002	0.048	0.000	0.020	0.002	0.043
B15226.00-B15227.00	372	154.9	8.0	0.008	0.699	0.001	0.028	0.003	0.049	0.000	0.019	0.003	0.045
B15227.00-B15228.00	371	235.4	8.0	0.033	1.419	0.001	0.087	0.004	0.100	0.001	0.091	0.004	0.105
B15228.00-B15229.00	370	347.0	8.0	0.042	1.601	0.057	0.128	0.061	0.133	0.066	0.138	0.070	0.142
B15229.00-B15230.00	369	95.8	8.0	0.065	1.991	0.057	0.103	0.063	0.108	0.066	0.110	0.072	0.115
B15230.00-B15233.00	367	124.2	8.0	0.084	2.264	0.058	0.111	0.065	0.119	0.066	0.116	0.073	0.124
B15231.00-B15232.00	368	219.6	8.0	-0.090	Adverse	0.002	0.515	0.003	0.518	0.001	0.508	0.002	0.513
B15232.00-B15233.A0	3289	243.9	8.0	0.159	3.114	0.005	0.036	0.007	0.045	0.003	0.019	0.004	0.033
B15233.00-B15234.00	366	75.6	8.0	0.039	1.542	0.064	0.140	0.075	0.150	0.068	0.149	0.079	0.158

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B15233.A0-B15233.00	3290	57.1	8.0	0.019	1.077	0.005	0.081	0.009	0.091	0.001	0.073	0.005	0.086
B15234.00-B15235.00	750	77.0	8.0	0.028	1.307	0.064	0.150	0.076	0.164	0.068	0.155	0.081	0.168
B15235.00-B15236.00	1466	36.9	8.0	0.016	0.988	0.077	0.144	0.098	0.163	0.071	0.139	0.092	0.158
B15236.00-B15237.00	1465	163.2	8.0	0.043	1.620	0.077	0.165	0.100	0.188	0.071	0.159	0.094	0.183
B15237.00-B15238.00	1464	128.7	8.0	0.019	1.077	0.077	0.295	0.101	0.367	0.071	0.259	0.095	0.338
B15238.00-B15239.00	1462	296.4	10.0	0.006	1.097	0.251	0.400	0.406	0.507	0.180	0.342	0.335	0.460
B15239.00-B15240.00	1461	241.0	10.0	0.006	1.097	0.294	0.343	0.449	0.428	0.222	0.298	0.378	0.390
B15240.00-B15241.00	1460	103.9	10.0	0.034	2.611	0.294	0.248	0.450	0.308	0.222	0.216	0.379	0.282
B15241.00-B15242.00	1459	226.9	10.0	0.027	2.327	0.294	0.238	0.451	0.296	0.222	0.207	0.380	0.272
B15242.00-B15243.00	1458	65.0	10.0	0.027	2.327	0.294	0.262	0.453	0.320	0.222	0.229	0.381	0.292
B15244.00-B15245.00	1457	249.0	8.0	0.017	1.018	0.001	0.021	0.002	0.033	0.001	0.023	0.002	0.035
B15245.00-B15246.00	1456	72.0	8.0	0.026	1.259	0.001	0.025	0.004	0.039	0.002	0.026	0.004	0.040
B15246.00-B15247.00	1455	245.0	8.0	0.040	1.562	0.002	0.025	0.005	0.041	0.002	0.024	0.005	0.041
B15247.00-B15251.00	1451	383.0	8.0	0.075	2.139	0.002	0.031	0.006	0.053	0.002	0.033	0.006	0.054
B15248.00-B15250.00	1454	233.0	8.0	0.132	2.838	0.001	0.017	0.002	0.028	0.001	0.023	0.002	0.031
B15249.00-B15250.00	1453	193.0	8.0	0.075	2.139	0.001	0.018	0.002	0.029	0.002	0.025	0.003	0.033
B15250.00-B15251.00	1452	86.0	8.0	0.050	1.746	0.002	0.032	0.005	0.051	0.003	0.036	0.007	0.054
B15251.00-B15260.00	1196	330.0	8.0	0.040	1.562	0.005	0.102	0.014	0.145	0.006	0.088	0.015	0.135
B15252.00-B15253.00	1450	275.0	8.0	0.024	1.210	0.002	0.052	0.003	0.063	0.001	0.034	0.002	0.049
B15253.00-B15254.00	1449	385.0	8.0	0.004	0.494	0.005	0.072	0.008	0.086	0.002	0.046	0.004	0.066
B15254.00-B15257.00	1446	96.0	8.0	0.010	0.781	0.008	0.071	0.011	0.087	0.003	0.047	0.006	0.070
B15255.00-B15256.00	1448	177.0	8.0	0.107	2.555	0.001	0.020	0.002	0.028	0.001	0.016	0.002	0.025
B15256.00-B15257.00	1447	117.0	8.0	0.078	2.181	0.002	0.047	0.005	0.061	0.001	0.033	0.004	0.052
B15257.00-B15259.00	1445	361.0	8.0	0.018	1.048	0.011	0.082	0.018	0.103	0.005	0.055	0.012	0.084
B15258.00-B15259.00	1444	361.0	8.0	0.022	1.158	0.001	0.059	0.002	0.075	0.001	0.040	0.002	0.061
B15259.00-B15260.00	1195	171.0	8.0	0.013	0.890	0.015	0.127	0.025	0.169	0.007	0.097	0.016	0.147
B15260.00-B15263.00	2114	146.0	8.0	0.007	0.653	0.020	0.121	0.040	0.167	0.013	0.098	0.033	0.152
B15261.00-B15262.00	1194	155.0	8.0	0.034	1.440	0.001	0.019	0.002	0.030	0.000	0.016	0.002	0.028
B15262.00-B15263.00	1193	81.0	8.0	0.037	1.502	0.002	0.051	0.004	0.073	0.001	0.041	0.003	0.067
B15263.00-B15267.00	2115	114.0	8.0	0.043	1.620	0.022	0.081	0.045	0.116	0.014	0.071	0.037	0.109
B15264.00-B15265.00	1192	190.0	8.0	0.096	2.420	0.000	0.004	0.001	0.021	0.002	0.015	0.002	0.024
B15265.00-B15266.00	1191	194.2	8.0	0.111	2.602	0.001	0.009	0.003	0.029	0.001	0.029	0.003	0.039
B15266.00-B15267.00	1189	189.0	8.0	0.059	1.897	0.000	0.046	0.004	0.076	0.006	0.059	0.010	0.084
B15267.00-B15270.00	1185	238.0	8.0	0.046	1.675	0.023	0.089	0.050	0.130	0.020	0.084	0.048	0.127
B15268.00-B15269.00	1187	225.0	8.0	0.037	1.502	0.001	0.024	0.002	0.031	0.001	0.017	0.002	0.027
B15269.00-B15270.00	1186	95.0	8.0	0.070	2.066	0.003	0.061	0.005	0.087	0.002	0.054	0.004	0.083
B15270.00-B15278.00	1396	426.0	8.0	0.029	1.330	0.026	0.147	0.057	0.209	0.022	0.140	0.053	0.205
B15271.00-B15272.00	1184	313.0	8.0	0.040	1.562	0.002	0.031	0.003	0.038	0.008	0.052	0.010	0.056
B15272.00-B15273.00	1181	131.0	8.0	0.067	2.022	0.004	0.036	0.007	0.044	0.009	0.049	0.012	0.055
B15273.00-B15275.00	1188	164.0	8.0	0.071	2.081	0.006	0.043	0.009	0.055	0.010	0.053	0.013	0.063
B15274.00-B15275.00	1180	95.0	8.0	0.010	0.781	0.001	0.039	0.002	0.052	0.001	0.043	0.002	0.055
B15275.00-B15277.00	1399	132.0	8.0	0.052	1.781	0.008	0.054	0.014	0.071	0.011	0.061	0.017	0.076
B15276.00-B15277.00	1400	296.0	8.0	0.073	2.110	0.003	0.044	0.005	0.058	0.001	0.042	0.004	0.057
B15276.A0-B15276.00	2986	244.0	8.0	0.039	1.542	0.002	0.026	0.003	0.034	0.001	0.017	0.002	0.028
B15277.00-B15278.00	1397	239.0	8.0	0.044	1.638	0.012	0.128	0.021	0.179	0.013	0.126	0.022	0.177
B15278.00-B15279.00	1395	469.0	8.0	0.012	0.856	0.040	0.147	0.081	0.208	0.036	0.141	0.078	0.204
B15279.00-B15280.00	1394	343.0	8.0	0.067	2.022	0.040	0.100	0.082	0.142	0.036	0.096	0.079	0.139
B15280.00-B15297.00	180	267.0	8.0	0.055	1.832	0.041	0.199	0.084	0.274	0.037	0.166	0.080	0.250
B15281.00-B15284.00	1390	157.0	8.0	0.084	2.264	0.001	0.027	0.002	0.038	0.001	0.016	0.002	0.032
B15282.00-B15283.00	1392	158.9	8.0	0.013	0.890	0.000	0.020	0.001	0.036	0.000	0.013	0.001	0.032
B15283.00-B15284.00	1391	55.0	8.0	0.012	0.856	0.001	0.030	0.004	0.046	0.000	0.018	0.003	0.039
B15284.00-B15285.00	1389	153.0	8.0	0.044	1.638	0.004	0.041	0.008	0.058	0.001	0.024	0.006	0.048
B15285.00-B15286.00	1388	268.0	8.0	0.030	1.353	0.006	0.056	0.012	0.074	0.002	0.032	0.008	0.058
B15286.00-B15287.00	1387	387.0	8.0	0.027	1.283	0.010	0.121	0.017	0.150	0.003	0.068	0.010	0.113
B15287.00-B15288.00	1386	397.0	8.0	0.005	0.552	0.015	0.116	0.023	0.142	0.005	0.066	0.013	0.106

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
B15288.00-B15294.00	1380	159.0	8.0	0.145	2.974	0.018	0.527	0.027	0.533	0.006	0.515	0.015	0.524
B15289.00-B15290.00	1385	240.0	8.0	0.025	1.235	0.001	0.031	0.002	0.040	0.000	0.018	0.001	0.032
B15290.00-B15293.00	1382	372.0	8.0	0.030	1.353	0.004	0.044	0.007	0.053	0.001	0.025	0.004	0.039
B15291.00-B15292.00	1384	198.0	8.0	0.020	1.104	0.004	0.057	0.005	0.064	0.001	0.031	0.002	0.043
B15292.00-B15293.00	1383	277.0	8.0	0.016	0.988	0.007	0.060	0.009	0.068	0.002	0.033	0.004	0.047
B15293.00-B15294.00	1381	230.0	8.0	0.166	3.182	0.013	0.523	0.019	0.528	0.004	0.513	0.010	0.520
B15294.00-B15295.00	1379	144.0	8.0	-0.113	Adverse	0.033	0.558	0.049	0.570	0.011	0.534	0.026	0.552
B15295.00-B15296.00	1378	154.4	8.0	0.024	1.210	0.034	0.119	0.051	0.146	0.010	0.068	0.028	0.108
B15296.00-B15297.00	1377	56.3	8.0	0.012	0.856	0.035	0.209	0.053	0.277	0.011	0.152	0.029	0.235
B15297.00-B15298.00	1376	362.0	8.0	0.007	0.653	0.076	0.229	0.139	0.311	0.048	0.183	0.111	0.277
B15298.00-B15299.00	1375	299.0	15.0	0.013	4.760	0.076	0.092	0.140	0.124	0.048	0.074	0.112	0.112
B15299.00-B15303.00	1374	297.1	15.0	0.010	4.175	0.077	0.094	0.142	0.126	0.048	0.075	0.113	0.113
B15300.00-B15301.00	1371	150.6	8.0	0.007	0.653	0.001	0.058	0.002	0.076	0.001	0.043	0.002	0.065
B15301.00-B15302.00	1372	79.1	8.0	0.010	0.781	0.011	0.089	0.019	0.114	0.006	0.065	0.014	0.098
B15302.00-B15303.00	1373	258.6	8.0	0.008	0.699	0.013	0.132	0.022	0.174	0.007	0.102	0.016	0.153
B15303.00-B15304.00	1341	305.3	15.0	0.025	6.601	0.090	0.082	0.166	0.109	0.055	0.065	0.131	0.097
B15304.00-B15329.00	1340	294.7	15.0	0.041	8.454	0.091	0.092	0.168	0.125	0.055	0.075	0.132	0.114
B15305.00-B15301.00	1723	233.0	8.0	0.021	1.132	0.009	0.074	0.015	0.094	0.005	0.054	0.011	0.080
B15306.00-B15305.00	1370	264.3	8.0	0.013	0.890	0.007	0.064	0.011	0.080	0.004	0.047	0.008	0.068
B15307.00-B15306.00	1369	225.4	8.0	0.095	2.407	0.004	0.047	0.008	0.060	0.003	0.036	0.006	0.052
B15308.00-B15307.00	1368	284.1	8.0	0.075	2.139	0.003	0.029	0.005	0.038	0.001	0.023	0.004	0.034
B15309.00-B15308.00	1367	139.8	8.0	0.099	2.457	0.001	0.021	0.002	0.029	0.001	0.015	0.002	0.025
B15310.00-B15310.A0	1356	208.5	8.0	0.000	0.000	0.001	0.070	0.002	0.090	0.001	0.057	0.002	0.082
B15310.A0-B15312.00	1360	197.0	8.0	0.113	2.625	0.002	0.026	0.005	0.036	0.002	0.023	0.004	0.034
B15311.00-B15312.00	1359	210.7	8.0	0.024	1.210	0.001	0.023	0.002	0.035	0.000	0.019	0.002	0.033
B15312.00-B15313.00	1361	221.8	8.0	0.118	2.683	0.004	0.032	0.009	0.046	0.003	0.029	0.008	0.044
B15313.00-B15318.00	1366	183.6	8.0	0.080	2.209	0.005	0.046	0.011	0.063	0.004	0.039	0.010	0.058
B15314.00-B15315.00	1357	336.6	8.0	0.032	1.397	0.001	0.026	0.002	0.035	0.001	0.020	0.002	0.031
B15315.00-B15316.00	1362	200.6	8.0	0.061	1.929	0.003	0.038	0.005	0.050	0.002	0.029	0.004	0.043
B15316.00-B15317.00	1363	272.8	8.0	0.029	1.330	0.005	0.045	0.009	0.058	0.003	0.034	0.006	0.049
B15317.00-B15318.00	1365	197.8	8.0	0.071	2.081	0.008	0.049	0.012	0.065	0.004	0.039	0.009	0.057
B15318.00-B15329.00	1339	219.4	8.0	0.078	2.181	0.013	0.131	0.025	0.180	0.009	0.110	0.020	0.165
B15319.00-B15320.00	1355	296.7	8.0	0.089	2.330	0.000	0.015	0.001	0.027	0.001	0.031	0.003	0.037
B15320.00-B15321.00	1354	294.7	8.0	0.050	1.746	0.001	0.037	0.004	0.059	0.006	0.074	0.008	0.086
B15321.00-B15322.00	1338	171.0	8.0	0.012	0.856	0.002	0.035	0.005	0.056	0.008	0.068	0.012	0.080
B15322.00-B15326.00	1769	43.0	8.0	0.081	2.223	0.003	0.022	0.007	0.035	0.009	0.037	0.014	0.045
B15323.00-B15324.00	1353	304.4	8.0	0.020	1.104	0.001	0.030	0.002	0.042	0.001	0.031	0.002	0.043
B15324.00-B15325.00	1352	442.1	8.0	0.020	1.104	0.002	0.034	0.005	0.046	0.002	0.035	0.005	0.047
B15325.00-B15326.00	178	269.9	8.0	0.084	2.264	0.003	0.026	0.006	0.040	0.004	0.036	0.007	0.047
B15326.00-B15327.00	1724	125.0	8.0	0.152	3.045	0.005	0.030	0.014	0.048	0.014	0.047	0.023	0.060
B15327.00-B15328.C0	2997	313.0	8.0	0.015	0.957	0.005	0.033	0.016	0.054	0.014	0.052	0.024	0.067
B15328.00-B15329.00	1337	96.0	8.0	0.004	0.494	0.013	0.159	0.035	0.233	0.018	0.153	0.040	0.227
B15328.A0-B15328.B0	2988	266.7	8.0	0.051	1.764	0.002	0.037	0.003	0.044	0.001	0.024	0.002	0.037
B15328.B0-B15328.D0	2998	171.0	8.0	0.012	0.856	0.003	0.045	0.006	0.060	0.001	0.041	0.004	0.059
B15328.C0-B15328.D0	2996	29.7	8.0	0.003	0.428	0.005	0.062	0.017	0.105	0.014	0.096	0.025	0.126
B15328.D0-B15328.H0	2995	100.8	8.0	0.086	2.290	0.009	0.050	0.024	0.078	0.015	0.061	0.030	0.086
B15328.E0-B15328.F0	2989	215.9	8.0	0.008	0.699	0.002	0.045	0.003	0.054	0.002	0.038	0.003	0.050
B15328.F0-B15328.G0	2991	134.0	8.0	0.009	0.741	0.003	0.047	0.006	0.062	0.002	0.039	0.004	0.055
B15328.G0-B15328.H0	2992	69.1	8.0	0.011	0.819	0.003	0.052	0.007	0.078	0.002	0.054	0.006	0.079
B15328.H0-B15328.I0	2994	90.5	8.0	0.050	1.746	0.012	0.055	0.032	0.085	0.018	0.065	0.037	0.092
B15328.I0-B15328.00	2993	64.5	8.0	0.049	1.729	0.013	0.081	0.034	0.129	0.018	0.094	0.039	0.137
B15329.00-B15330.00	1336	498.4	15.0	0.024	6.468	0.117	0.093	0.228	0.128	0.082	0.079	0.193	0.119
OV1001.00-OV1002.00	3630	5.0	10.0	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.078	0.012	0.085
OV1002.00-OV1004.00	3437	212.1	10.0	0.075	3.878	0.000	0.000	0.000	0.000	0.012	0.041	0.016	0.047
OV1003.00-OV1004.00	7950	132.0	8.0	0.011	0.819	0.000	0.000	0.000	0.000	0.091	0.225	0.134	0.274

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
OV1003.A0-OV1003.D0	7955	206.4	8.0	0.086	2.290	0.000	0.000	0.000	0.000	0.002	0.034	0.004	0.048
OV1003.B0-OV1003.C0	7971	205.7	8.0	0.011	0.819	0.000	0.000	0.000	0.000	0.003	0.050	0.005	0.067
OV1003.C0-OV1003.D0	7965	83.8	8.0	0.010	0.781	0.000	0.000	0.000	0.000	0.004	0.051	0.008	0.071
OV1003.D0-OV1003.E0	7956	283.5	8.0	0.058	1.881	0.000	0.000	0.000	0.000	0.008	0.060	0.017	0.081
OV1003.E0-OV1003.F0	7957	173.5	8.0	0.023	1.184	0.000	0.000	0.000	0.000	0.012	0.078	0.023	0.106
OV1003.F0-OV1003.G0	7961	144.9	8.0	0.013	0.890	0.000	0.000	0.000	0.000	0.013	0.107	0.026	0.146
OV1003.G0-OV1003.H0	7962	64.2	8.0	0.011	0.819	0.000	0.000	0.000	0.000	0.015	0.087	0.030	0.119
OV1003.H0-OV1003.LA	7963	67.4	8.0	0.090	2.343	0.000	0.000	0.000	0.000	0.016	0.060	0.033	0.085
OV1003.I0-OV1003.J0	7966	158.0	8.0	0.021	1.132	0.000	0.000	0.000	0.000	0.056	0.152	0.058	0.156
OV1003.J0-OV1003.K0	7967	90.1	8.0	0.021	1.132	0.000	0.000	0.000	0.000	0.060	0.158	0.064	0.164
OV1003.K0-OV1003.L0	7968	238.3	8.0	0.019	1.077	0.000	0.000	0.000	0.000	0.061	0.190	0.068	0.212
OV1003.L0-OV1003.M0	7969	219.4	8.0	0.009	0.741	0.000	0.000	0.000	0.000	0.078	0.260	0.105	0.300
OV1003.LA-OV1003.L0	7964	6.0	8.0	0.003	0.428	0.000	0.000	0.000	0.000	0.016	0.147	0.035	0.181
OV1003.M0-OV1003.R0	7970	255.2	8.0	0.008	0.699	0.000	0.000	0.000	0.000	0.080	0.223	0.109	0.260
OV1003.N0-OV1003.O0	7944	146.0	8.0	0.124	2.750	0.000	0.000	0.000	0.000	0.004	0.037	0.006	0.046
OV1003.O0-OV1003.P0	7945	77.3	8.0	0.030	1.353	0.000	0.000	0.000	0.000	0.007	0.072	0.011	0.091
OV1003.P0-OV1003.Q0	7946	125.7	8.0	0.011	0.819	0.000	0.000	0.000	0.000	0.009	0.072	0.015	0.092
OV1003.Q0-OV1003.R0	7947	80.6	8.0	0.056	1.848	0.000	0.000	0.000	0.000	0.010	0.095	0.018	0.117
OV1003.R0-OV1003.S0	7948	145.2	8.0	0.064	1.976	0.000	0.000	0.000	0.000	0.090	0.183	0.129	0.219
OV1003.S0-OV1003.00	7949	18.6	8.0	0.003	0.428	0.000	0.000	0.000	0.000	0.090	0.225	0.132	0.273
OV1004.00-OV1005.00	3438	347.3	10.0	0.015	1.734	0.000	0.000	0.000	0.000	0.104	0.166	0.154	0.200
OV1005.00-OV1006.00	3439	334.7	10.0	0.022	2.100	0.000	0.000	0.000	0.000	0.110	0.172	0.161	0.207
OV1006.00-OV1007.00	2206	380.0	10.0	0.011	1.485	0.000	0.000	0.000	0.000	0.115	0.192	0.168	0.233
OV1007.00-OV1008.00	2207	320.0	10.0	0.011	1.485	0.000	0.000	0.000	0.000	0.125	0.239	0.187	0.292
OV1007.A0-OV1007.B0	3453	94.0	8.0	0.002	0.349	0.000	0.000	0.000	0.000	0.005	0.085	0.007	0.106
OV1007.B0-OV1007.C0	2208	255.0	8.0	0.002	0.349	0.000	0.000	0.000	0.000	0.006	0.116	0.010	0.157
OV1007.C0-OV1007.00	2209	37.0	8.0	0.001	0.247	0.000	0.000	0.000	0.000	0.008	0.193	0.014	0.248
OV1008.00-OV1009.00	2210	280.0	10.0	0.008	1.267	0.000	0.000	0.000	0.000	0.128	0.211	0.192	0.258
OV1009.00-OV1015.00	2211	96.9	10.0	0.032	2.533	0.000	0.000	0.000	0.000	0.129	0.196	0.195	0.243
OV1010.00-OV1011.00	2212	313.7	8.0	0.095	2.407	0.000	0.000	0.000	0.000	0.007	0.045	0.009	0.052
OV1011.00-OV1012.00	2213	239.5	8.0	0.075	2.139	0.000	0.000	0.000	0.000	0.011	0.057	0.015	0.069
OV1012.00-OV1014.00	2214	302.6	8.0	0.056	1.848	0.000	0.000	0.000	0.000	0.015	0.071	0.023	0.089
OV1012.A0-OV1012.00	3631	5.7	8.0	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.060	0.004	0.077
OV1013.00-OV1014.00	3632	8.4	8.0	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.067	0.003	0.090
OV1014.00-OV1015.00	2215	405.0	8.0	0.035	1.461	0.000	0.000	0.000	0.000	0.018	0.195	0.030	0.245
OV1015.00-OV1016.00	2216	228.4	12.0	0.018	3.089	0.000	0.000	0.000	0.000	0.292	0.255	0.455	0.321
OV1016.00-OV1017.00	2217	178.2	12.0	0.004	1.456	0.000	0.000	0.000	0.000	0.295	0.304	0.460	0.385
OV1017.00-OV1018.00	2781	129.5	12.0	0.004	1.456	0.000	0.000	0.000	0.000	0.296	0.306	0.463	0.388
OV1018.00-OV1019.00	2782	135.2	12.0	0.004	1.456	0.000	0.000	0.000	0.000	0.298	0.308	0.467	0.391
OV1019.00-OV1020.00	2783	123.9	12.0	0.004	1.456	0.000	0.000	0.000	0.000	0.302	0.310	0.473	0.393
OV1020.00-OV1021.00	2784	138.1	12.0	0.004	1.456	0.000	0.000	0.000	0.000	0.303	0.313	0.476	0.398
OV1021.00-OV1022.00	2785	226.0	12.0	0.004	1.456	0.000	0.000	0.000	0.000	0.309	0.353	0.484	0.447
OV1022.00-OV1023.00	2786	200.0	12.0	0.004	1.456	0.000	0.000	0.000	0.000	0.310	0.303	0.487	0.381
OV1023.00-OV1024.00	2787	181.0	12.0	0.019	3.174	0.000	0.000	0.000	0.000	0.323	0.217	0.502	0.271
OV1024.00-OV1025.00	2788	163.8	12.0	0.019	3.174	0.000	0.000	0.000	0.000	0.328	0.271	0.509	0.341
OV1025.00-OV1026.00	1892	227.5	12.0	0.004	1.456	0.000	0.000	0.000	0.000	0.332	0.326	0.515	0.412
OV1026.00-OV1027.00	1893	100.0	12.0	0.004	1.456	0.000	0.000	0.000	0.000	0.341	0.345	0.526	0.453
OV1027.00-OV1028.00	1894	286.1	8.0	0.007	0.653	0.000	0.000	0.000	0.000	0.349	0.512	0.536	0.671
OV1028.00-OV1029.00	1895	292.6	12.0	0.005	1.628	0.000	0.000	0.000	0.000	0.352	0.318	0.542	0.399
OV1029.00-OV1030.00	1896	280.0	12.0	0.005	1.628	0.000	0.000	0.000	0.000	0.354	0.489	0.546	0.606
OV1030.00-OV1031.00	3452	280.0	12.0	0.000	0.000	0.000	0.000	0.000	0.000	0.354	0.485	0.548	0.600
OV1032.00-OV1033.00	3627	226.3	8.0	0.007	0.653	0.000	0.000	0.000	0.000	0.022	0.125	0.024	0.131
OV1033.00-OV1034.00	3628	82.6	8.0	0.009	0.741	0.000	0.000	0.000	0.000	0.022	0.120	0.026	0.132
OV1034.00-OV1036.00	3633	241.6	8.0	0.008	0.699	0.000	0.000	0.000	0.000	0.022	0.137	0.028	0.161
OV1035.00-OV1036.00	3635	143.6	8.0	0.081	2.223	0.000	0.000	0.000	0.000	0.001	0.084	0.005	0.110

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
OV1035.A0-OV1035.00	3634	8.0	8.0	0.003	0.428	0.000	0.000	0.000	0.000	0.001	0.020	0.003	0.034
OV1036.00-OV1037.00	3636	252.2	8.0	0.010	0.781	0.000	0.000	0.000	0.000	0.024	0.120	0.036	0.146
OV1037.00-OV1045.00	7060	220.3	8.0	0.043	1.620	0.000	0.000	0.000	0.000	0.026	0.137	0.040	0.169
OV1038.00-OV1039.00	7458	144.6	8.0	0.011	0.819	0.000	0.000	0.000	0.000	0.020	0.115	0.022	0.122
OV1039.00-OV1040.00	7459	119.8	8.0	0.010	0.781	0.000	0.000	0.000	0.000	0.025	0.123	0.029	0.135
OV1040.00-OV1042.00	7457	92.5	8.0	0.010	0.781	0.000	0.000	0.000	0.000	0.026	0.130	0.032	0.147
OV1041.00-OV1042.00	7059	173.4	8.0	0.060	1.913	0.000	0.000	0.000	0.000	0.004	0.085	0.006	0.099
OV1042.00-OV1043.00	7456	93.5	8.0	0.010	0.781	0.000	0.000	0.000	0.000	0.031	0.151	0.041	0.174
OV1043.00-OV1044.00	7455	126.7	8.0	0.011	0.819	0.000	0.000	0.000	0.000	0.032	0.134	0.044	0.157
OV1044.00-OV1045.00	7065	179.2	8.0	0.036	1.482	0.000	0.000	0.000	0.000	0.033	0.144	0.047	0.176
OV1045.00-OV1046.00	7061	189.3	8.0	0.010	0.781	0.000	0.000	0.000	0.000	0.059	0.202	0.090	0.251
OV1046.00-OV1047.00	7062	186.0	8.0	0.010	0.781	0.000	0.000	0.000	0.000	0.060	0.185	0.093	0.229
OV1047.00-OV1048.00	7063	177.0	8.0	0.028	1.307	0.000	0.000	0.000	0.000	0.064	0.150	0.099	0.186
OV1048.00-OV1053.00	7064	296.0	8.0	0.031	1.375	0.000	0.000	0.000	0.000	0.066	0.198	0.103	0.246
OV1049.00-OV1050.00	7460	202.4	8.0	0.011	0.819	0.000	0.000	0.000	0.000	0.018	0.104	0.021	0.109
OV1050.00-OV1051.00	7461	76.4	8.0	0.029	1.330	0.000	0.000	0.000	0.000	0.020	0.079	0.024	0.087
OV1051.00-OV1052.00	7462	158.7	8.0	0.049	1.729	0.000	0.000	0.000	0.000	0.022	0.084	0.028	0.096
OV1052.00-OV1053.00	7463	180.0	8.0	0.032	1.397	0.000	0.000	0.000	0.000	0.023	0.168	0.032	0.205
OV1053.00-OV1054.00	7465	194.3	8.0	0.008	0.699	0.000	0.000	0.000	0.000	0.090	0.248	0.138	0.308
OV1054.00-OV1055.00	7466	161.0	8.0	0.007	0.653	0.000	0.000	0.000	0.000	0.092	0.250	0.142	0.311
OV1055.00-OV1056.00	7464	320.3	8.0	0.008	0.699	0.000	0.000	0.000	0.000	0.095	0.249	0.146	0.311
OV1056.00-OV1057.00	7467	81.4	8.0	0.008	0.699	0.000	0.000	0.000	0.000	0.095	0.303	0.148	0.380
OV1057.00-OV1058.00	7468	190.2	8.0	0.010	0.781	0.000	0.000	0.000	0.000	0.096	0.233	0.151	0.293
OV1058.00-OV1059.00	7469	102.4	8.0	0.123	2.739	0.000	0.000	0.000	0.000	0.096	0.130	0.154	0.164
OV1059.00-OV1060.00	7470	67.9	8.0	0.034	1.440	0.000	0.000	0.000	0.000	0.097	0.157	0.157	0.201
OV1060.00-OV1061.00	7471	131.3	8.0	0.047	1.693	0.000	0.000	0.000	0.000	0.097	0.164	0.159	0.207
OV1061.00-OV1062.00	7472	170.0	8.0	0.064	1.976	0.000	0.000	0.000	0.000	0.117	0.249	0.181	0.311
OV1062.00-OV1063.00	7473	165.4	8.0	0.008	0.699	0.000	0.000	0.000	0.000	0.117	0.274	0.183	0.344
OV1063.00-OV1064.00	7474	350.7	8.0	0.023	1.184	0.000	0.000	0.000	0.000	0.119	0.251	0.187	0.316
OV1064.00-OV1065.00	7475	224.2	8.0	0.008	0.699	0.000	0.000	0.000	0.000	0.124	0.291	0.194	0.367
OV1065.00-OV1066.00	7476	206.4	8.0	0.008	0.699	0.000	0.000	0.000	0.000	0.132	0.330	0.204	0.409
OV1066.00-OV1067.00	7477	34.7	8.0	0.005	0.552	0.000	0.000	0.000	0.000	0.140	0.271	0.215	0.333
OV1067.00-OV1068.00	7478	158.1	8.0	0.070	2.066	0.000	0.000	0.000	0.000	0.141	0.204	0.218	0.253
OV1068.00-OV1069.00	7479	158.1	8.0	0.039	1.542	0.000	0.000	0.000	0.000	0.144	0.207	0.223	0.257
OV1069.00-OV1070.00	7480	238.6	8.0	0.078	2.181	0.000	0.000	0.000	0.000	0.144	0.174	0.225	0.217
OV1070.00-OV1015.00	7481	64.2	8.0	0.041	1.581	0.000	0.000	0.000	0.000	0.144	0.239	0.227	0.299
OV2001.00-OV2002.00	1899	267.4	8.0	0.057	1.865	0.000	0.000	0.000	0.000	0.036	0.108	0.039	0.112
OV2002.00-OV2005.00	1900	305.0	8.0	0.029	1.330	0.000	0.000	0.000	0.000	0.040	0.122	0.044	0.131
OV2003.00-OV2004.00	1901	178.8	8.0	0.045	1.657	0.000	0.000	0.000	0.000	0.003	0.037	0.005	0.051
OV2004.00-OV2005.00	1902	260.8	8.0	0.016	0.988	0.000	0.000	0.000	0.000	0.003	0.084	0.008	0.100
OV2005.00-OV2012.00	1903	305.0	8.0	0.035	1.461	0.000	0.000	0.000	0.000	0.048	0.138	0.058	0.158
OV2006.00-OV2007.00	1904	245.0	8.0	0.030	1.353	0.000	0.000	0.000	0.000	0.001	0.023	0.003	0.039
OV2007.00-OV2009.00	2789	297.4	8.0	0.056	1.848	0.000	0.000	0.000	0.000	0.003	0.041	0.007	0.059
OV2008.00-OV2009.00	3451	320.0	8.0	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.121	0.006	0.146
OV2009.00-OV2011.00	2790	162.1	8.0	0.037	1.502	0.000	0.000	0.000	0.000	0.008	0.058	0.016	0.081
OV2010.00-OV2011.00	3450	275.0	6.0	0.053	0.835	0.000	0.000	0.000	0.000	0.003	0.065	0.005	0.088
OV2011.00-OV2012.00	2791	374.6	8.0	0.038	1.522	0.000	0.000	0.000	0.000	0.012	0.108	0.025	0.134
OV2012.00-OV2013.00	2792	248.9	8.0	0.026	1.259	0.000	0.000	0.000	0.000	0.063	0.163	0.087	0.192
OV2013.00-OV2014.00	2794	262.7	8.0	0.017	1.018	0.000	0.000	0.000	0.000	0.067	0.214	0.094	0.254
OV2014.00-OV2016.00	3440	221.0	8.0	0.004	0.494	0.000	0.000	0.000	0.000	0.069	0.303	0.098	0.365
OV2015.00-OV2016.00	3637	17.1	8.0	0.001	0.247	0.000	0.000	0.000	0.000	0.003	0.326	0.004	0.401
OV2016.00-OV2017.00	3441	297.9	8.0	0.004	0.494	0.000	0.000	0.000	0.000	0.073	0.256	0.106	0.309
OV2017.00-OV2018.00	3442	357.6	8.0	0.035	1.461	0.000	0.000	0.000	0.000	0.077	0.156	0.112	0.187
OV2018.00-OV2019.00	3443	78.3	8.0	0.027	1.283	0.000	0.000	0.000	0.000	0.078	0.189	0.115	0.229
OV2019.00-OV2020.00	2848	125.4	8.0	0.011	0.819	0.000	0.000	0.000	0.000	0.078	0.209	0.118	0.256

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OV2020.00-OV2021.00	2849	42.9	8.0	0.007	0.653	0.000	0.000	0.000	0.000	0.078	0.196	0.120	0.243
OV2021.00-OV2022.00	2850	44.0	8.0	0.007	0.653	0.000	0.000	0.000	0.000	0.078	0.206	0.122	0.257
OV2022.00-OV2024.00	2851	292.1	8.0	0.011	0.819	0.000	0.000	0.000	0.000	0.078	0.269	0.124	0.324
OV2023.00-OV2024.00	3449	125.0	8.0	0.027	1.283	0.000	0.000	0.000	0.000	0.039	0.224	0.047	0.257
OV2023.A0-OV2023.B0	3446	295.0	8.0	0.080	2.209	0.000	0.000	0.000	0.000	0.018	0.077	0.020	0.081
OV2023.B0-OV2023.C0	3447	300.0	8.0	0.080	2.209	0.000	0.000	0.000	0.000	0.036	0.090	0.040	0.095
OV2023.C0-OV2023.00	3448	85.6	8.0	0.049	1.729	0.000	0.000	0.000	0.000	0.039	0.105	0.045	0.114
OV2024.00-OV2026.00	2852	241.2	8.0	0.005	0.552	0.000	0.000	0.000	0.000	0.117	0.312	0.173	0.387
OV2025.00-OV2026.00	184	59.3	8.0	0.031	1.375	0.000	0.000	0.000	0.000	0.039	0.187	0.091	0.254
OV2025.A0-OV2025.B0	2853	306.0	8.0	0.027	1.283	0.000	0.000	0.000	0.000	0.001	0.027	0.003	0.042
OV2025.B0-OV2025.E0	2854	195.0	8.0	0.041	1.581	0.000	0.000	0.000	0.000	0.003	0.037	0.007	0.057
OV2025.C0-OV2025.D0	2855	157.0	8.0	0.004	0.494	0.000	0.000	0.000	0.000	0.001	0.045	0.003	0.074
OV2025.D0-OV2025.E0	2856	360.0	8.0	0.004	0.494	0.000	0.000	0.000	0.000	0.002	0.047	0.006	0.077
OV2025.E0-OV2025.F0	2857	260.0	8.0	0.061	1.929	0.000	0.000	0.000	0.000	0.006	0.043	0.017	0.067
OV2025.F0-OV2025.G0	2858	310.1	8.0	0.082	2.236	0.000	0.000	0.000	0.000	0.008	0.060	0.020	0.094
OV2025.G0-OV2025.H0	2859	215.0	8.0	0.010	0.781	0.000	0.000	0.000	0.000	0.009	0.092	0.024	0.142
OV2025.H0-OV2025.I0	2860	213.4	8.0	0.010	0.781	0.000	0.000	0.000	0.000	0.011	0.081	0.027	0.127
OV2025.I0-OV2025.J0	3444	187.6	8.0	0.058	1.881	0.000	0.000	0.000	0.000	0.012	0.076	0.030	0.112
OV2025.J0-OV2025.K0	3445	349.6	8.0	0.017	1.018	0.000	0.000	0.000	0.000	0.019	0.105	0.040	0.150
OV2025.K0-OV2025.L0	2861	211.3	8.0	0.008	0.699	0.000	0.000	0.000	0.000	0.020	0.119	0.042	0.174
OV2025.L0-OV2025.M0	2862	164.0	8.0	0.006	0.605	0.000	0.000	0.000	0.000	0.020	0.162	0.045	0.237
OV2025.M0-OV2025.N0	2863	240.0	8.0	0.005	0.552	0.000	0.000	0.000	0.000	0.022	0.135	0.049	0.198
OV2025.N0-OV2025.W0	1	215.4	8.0	0.084	2.264	0.000	0.000	0.000	0.000	0.022	0.122	0.051	0.180
OV2025.O0-OV2025.P0	2864	168.7	8.0	0.073	2.110	0.000	0.000	0.000	0.000	0.002	0.025	0.004	0.037
OV2025.P0-OV2025.Q0	2865	206.3	8.0	0.065	1.991	0.000	0.000	0.000	0.000	0.003	0.040	0.007	0.055
OV2025.Q0-OV2025.R0	2866	340.0	8.0	0.044	1.638	0.000	0.000	0.000	0.000	0.008	0.066	0.014	0.085
OV2025.R0-OV2025.Z0	2867	335.7	8.0	0.023	1.184	0.000	0.000	0.000	0.000	0.010	0.066	0.018	0.087
OV2025.S0-OV2025.T0	2868	164.7	8.0	0.027	1.283	0.000	0.000	0.000	0.000	0.002	0.030	0.004	0.046
OV2025.T0-OV2025.Z0	2869	300.7	8.0	0.027	1.283	0.000	0.000	0.000	0.000	0.002	0.041	0.007	0.060
OV2025.U0-OV2025.V0	2870	143.2	8.0	0.093	2.382	0.000	0.000	0.000	0.000	0.015	0.061	0.031	0.087
OV2025.V0-OV2025.W0	2871	67.0	8.0	0.027	1.283	0.000	0.000	0.000	0.000	0.016	0.120	0.034	0.177
OV2025.W0-OV2025.00	185	122.2	8.0	0.021	1.132	0.000	0.000	0.000	0.000	0.039	0.126	0.089	0.187
OV2025.Z0-OV2025.U0	2872	201.9	8.0	0.135	2.870	0.000	0.000	0.000	0.000	0.013	0.052	0.028	0.074
OV2026.00-OV2027.00	2873	300.4	8.0	0.011	0.819	0.000	0.000	0.000	0.000	0.157	0.337	0.266	0.449
OV2027.00-OV2028.00	2874	216.6	8.0	0.005	0.552	0.000	0.000	0.000	0.000	0.161	0.429	0.272	0.590
OV2028.00-OV2029.00	2875	104.9	8.0	0.002	0.349	0.000	0.000	0.000	0.000	0.164	0.515	0.277	0.678
OV2029.00-OV2030.00	2876	42.0	8.0	0.001	0.247	0.000	0.000	0.000	0.000	0.164	0.316	0.277	0.400
OV2032.A0-OV2032.B0	7206	157.1	8.0	0.099	2.457	0.000	0.000	0.000	0.000	0.003	0.033	0.005	0.040
OV2032.B0-OV2032.C0	7207	216.0	8.0	0.146	2.984	0.000	0.000	0.000	0.000	0.008	0.061	0.012	0.075
OV2032.C0-OV2032.D0	7205	100.0	8.0	0.010	0.781	0.000	0.000	0.000	0.000	0.011	0.121	0.017	0.140
OV2032.D0-OV2032.E0	7204	118.9	8.0	0.006	0.605	0.000	0.000	0.000	0.000	0.032	0.191	0.040	0.209
OV2032.E0-OV2032.F0	7203	230.0	8.0	0.006	0.605	0.000	0.000	0.000	0.000	0.064	0.296	0.075	0.319
OV2032.F0-OV2032.00	7201	31.0	8.0	0.000	0.000	0.000	0.000	0.000	0.000	0.064	0.291	0.077	0.315
OV3001.00-OV3002.00	3469	65.0	8.0	0.047	1.693	0.000	0.000	0.000	0.000	0.001	0.111	0.003	0.145
OV3002.00-OV3005.00	7343	384.9	8.0	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.132	0.009	0.172
OV3003.00-OV3004.00	3470	257.5	8.0	0.007	0.653	0.000	0.000	0.000	0.000	0.000	0.015	0.002	0.041
OV4001.00-OV4002.00	6484	334.4	8.0	0.052	1.781	0.000	0.000	0.000	0.000	0.002	0.035	0.004	0.047
OV4002.00-OV4003.00	4829	170.8	8.0	0.072	2.096	0.000	0.000	0.000	0.000	0.004	0.033	0.008	0.046
OV4003.00-OV4025.00	7609	33.5	8.0	0.064	1.976	0.000	0.000	0.000	0.000	0.005	0.051	0.011	0.068
OV4004.00-OV4005.00	7223	5.0	8.0	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.046	0.002	0.062
OV4005.00-OV4006.00	6173	160.0	8.0	0.027	1.283	0.000	0.000	0.000	0.000	0.007	0.054	0.011	0.070
OV4006.00-OV4007.00	5740	304.1	8.0	0.021	1.132	0.000	0.000	0.000	0.000	0.007	0.060	0.013	0.083
OV4007.00-OV4008.00	4490	24.8	8.0	0.006	0.605	0.000	0.000	0.000	0.000	0.007	0.052	0.015	0.076
OV4008.00-OV4010.00	4772	158.2	8.0	0.094	2.394	0.000	0.000	0.000	0.000	0.007	0.070	0.017	0.088
OV4009.00-OV4010.00	7600	335.0	8.0	0.046	1.675	0.000	0.000	0.000	0.000	0.042	0.109	0.044	0.114

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
OV4010.00-OV4011.00	7225	82.0	8.0	0.045	1.657	0.000	0.000	0.000	0.000	0.048	0.187	0.063	0.211
OV4011.00-OV4014.00	7226	350.0	8.0	0.005	0.552	0.000	0.000	0.000	0.000	0.052	0.205	0.068	0.235
OV4012.00-OV4013.00	5059	10.0	8.0	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.032	0.003	0.055
OV4013.00-OV4014.00	5058	200.0	8.0	0.020	1.104	0.000	0.000	0.000	0.000	0.001	0.081	0.005	0.107
OV4014.00-OV4030.00	7227	15.9	10.0	0.003	0.776	0.000	0.000	0.000	0.000	0.053	0.167	0.076	0.199
OV4015.00-OV4016.00	7414	188.6	8.0	0.078	2.181	0.000	0.000	0.000	0.000	0.000	0.015	0.002	0.032
OV4016.00-OV4017.00	7415	188.4	8.0	0.066	2.006	0.000	0.000	0.000	0.000	0.002	0.064	0.006	0.080
OV4017.00-OV4018.00	7045	192.8	8.0	0.011	0.819	0.000	0.000	0.000	0.000	0.019	0.112	0.025	0.130
OV4018.00-OV4019.00	7044	160.8	8.0	0.007	0.653	0.000	0.000	0.000	0.000	0.020	0.140	0.028	0.163
OV4019.00-OV4020.00	7043	99.9	8.0	0.005	0.552	0.000	0.000	0.000	0.000	0.031	0.189	0.041	0.219
OV4020.00-OV4021.00	7042	191.1	8.0	0.007	0.653	0.000	0.000	0.000	0.000	0.031	0.147	0.043	0.172
OV4021.00-OV4022.00	7041	104.0	8.0	0.074	2.125	0.000	0.000	0.000	0.000	0.031	0.085	0.046	0.103
OV4022.00-OV4023.00	7040	216.1	8.0	0.051	1.764	0.000	0.000	0.000	0.000	0.032	0.126	0.048	0.156
OV4023.00-OV4024.00	7039	83.0	8.0	0.006	0.605	0.000	0.000	0.000	0.000	0.033	0.210	0.051	0.262
OV4024.00-OV4025.00	7038	80.0	8.0	0.004	0.494	0.000	0.000	0.000	0.000	0.033	0.170	0.053	0.214
OV4025.00-OV4026.00	7606	179.2	8.0	0.148	3.005	0.000	0.000	0.000	0.000	0.038	0.129	0.067	0.170
OV4026.00-OV4027.00	7607	207.0	8.0	0.008	0.699	0.000	0.000	0.000	0.000	0.038	0.157	0.069	0.210
OV4027.00-OV4028.00	7608	204.3	10.0	0.012	1.551	0.000	0.000	0.000	0.000	0.038	0.210	0.071	0.275
OV4028.00-OV4029.00	7046	95.7	10.0	0.000	0.000	0.000	0.000	0.000	0.000	0.038	0.217	0.073	0.288
OV4030.00-OV4031.00	7228	162.0	10.0	0.005	1.001	0.000	0.000	0.000	0.000	0.053	0.153	0.078	0.184
OV4031.00-OV4032.00	7485	188.0	10.0	0.069	3.720	0.000	0.000	0.000	0.000	0.053	0.124	0.080	0.153
OV4032.00-OV4033.00	7486	188.0	10.0	0.004	0.896	0.000	0.000	0.000	0.000	0.053	0.165	0.082	0.205
OV4033.00-OV4034.00	7487	400.0	10.0	0.004	0.896	0.000	0.000	0.000	0.000	0.053	0.165	0.084	0.208
OV4034.00-OV4035.00	7489	400.0	10.0	0.004	0.896	0.000	0.000	0.000	0.000	0.053	0.277	0.086	0.344
OV4035.00-OV4036.00	7490	322.0	10.0	0.000	0.000	0.000	0.000	0.000	0.000	0.053	0.267	0.088	0.334
OV5015.00-OV5016.00	3624	100.0	8.0	0.046	1.675	0.000	0.000	0.000	0.000	0.002	0.035	0.004	0.051
OV5016.00-OV5017.00	3625	312.0	8.0	0.010	0.781	0.000	0.000	0.000	0.000	0.003	0.061	0.007	0.089
OV5017.00-OV5019.00	3114	319.0	8.0	0.004	0.494	0.000	0.000	0.000	0.000	0.006	0.074	0.012	0.106
OV5018.00-OV5019.00	3471	200.9	8.0	0.091	2.356	0.000	0.000	0.000	0.000	0.003	0.050	0.005	0.069
OV5019.00-OV5025.00	3116	206.1	8.0	0.013	0.890	0.000	0.000	0.000	0.000	0.010	0.126	0.020	0.168
OV5020.00-OV5022.00	3120	115.0	8.0	0.047	1.693	0.000	0.000	0.000	0.000	0.002	0.041	0.004	0.058
OV5021.00-OV5022.00	3117	243.0	8.0	0.128	2.794	0.000	0.000	0.000	0.000	0.009	0.050	0.018	0.069
OV5021.A0-OV5021.B0	3108	9.0	8.0	0.004	0.494	0.000	0.000	0.000	0.000	0.004	0.032	0.006	0.040
OV5021.B0-OV5021.C0	3483	213.6	8.0	0.178	3.295	0.000	0.000	0.000	0.000	0.004	0.031	0.008	0.042
OV5021.C0-OV5021.00	3482	208.0	8.0	0.137	2.891	0.000	0.000	0.000	0.000	0.006	0.039	0.013	0.052
OV5022.00-OV5023.00	3118	195.0	8.0	0.053	1.798	0.000	0.000	0.000	0.000	0.012	0.104	0.024	0.148
OV5023.00-OV5024.00	3119	135.2	8.0	0.005	0.552	0.000	0.000	0.000	0.000	0.013	0.103	0.027	0.148
OV5024.00-OV5025.00	3472	215.0	8.0	0.127	2.783	0.000	0.000	0.000	0.000	0.017	0.117	0.038	0.157
OV5024.A0-OV5024.B0	1920	291.0	8.0	0.074	2.125	0.000	0.000	0.000	0.000	0.003	0.035	0.005	0.047
OV5024.B0-OV5024.00	1919	63.0	8.0	0.019	1.077	0.000	0.000	0.000	0.000	0.004	0.048	0.008	0.069
OV5025.00-OV5026.00	3115	71.7	12.0	0.015	2.820	0.000	0.000	0.000	0.000	0.092	0.107	0.162	0.140
OV5025.A0-OV5025.B0	8168	116.2	8.0	0.032	1.397	0.000	0.000	0.000	0.000	0.020	0.083	0.022	0.087
OV5025.B0-OV5025.C0	8169	59.3	8.0	0.034	1.440	0.000	0.000	0.000	0.000	0.020	0.069	0.024	0.078
OV5025.C0-OV5025.F0	8167	61.3	8.0	0.031	1.375	0.000	0.000	0.000	0.000	0.020	0.087	0.026	0.099
OV5025.D0-OV5025.E0	8170	72.4	8.0	0.016	0.988	0.000	0.000	0.000	0.000	0.008	0.063	0.010	0.073
OV5025.E0-OV5025.F0	8171	98.9	8.0	0.018	1.048	0.000	0.000	0.000	0.000	0.008	0.084	0.013	0.097
OV5025.F0-OV5025.G0	8166	32.6	8.0	0.016	0.988	0.000	0.000	0.000	0.000	0.040	0.103	0.052	0.119
OV5025.G0-OV5025.H0	8165	35.5	8.0	0.017	1.018	0.000	0.000	0.000	0.000	0.040	0.104	0.054	0.122
OV5025.H0-OV5025.J0	8164	92.3	8.0	0.038	1.522	0.000	0.000	0.000	0.000	0.040	0.134	0.056	0.159
OV5025.I0-OV5025.J0	8155	292.4	8.0	0.028	1.307	0.000	0.000	0.000	0.000	0.008	0.109	0.010	0.128
OV5025.J0-OV5025.K0	8163	106.4	8.0	0.011	0.819	0.000	0.000	0.000	0.000	0.048	0.163	0.068	0.195
OV5025.K0-OV5025.O0	8162	86.0	8.0	0.011	0.819	0.000	0.000	0.000	0.000	0.048	0.177	0.070	0.214
OV5025.L0-OV5025.M0	8156	191.8	8.0	0.038	1.522	0.000	0.000	0.000	0.000	0.003	0.039	0.005	0.053
OV5025.M0-OV5025.N0	8160	305.0	8.0	0.017	1.018	0.000	0.000	0.000	0.000	0.004	0.065	0.008	0.083
OV5025.N0-OV5025.O0	8161	58.4	8.0	0.009	0.741	0.000	0.000	0.000	0.000	0.013	0.139	0.019	0.167

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OV5025.O0-OV5025.P0	8159	50.7	8.0	0.007	0.653	0.000	0.000	0.000	0.000	0.064	0.189	0.095	0.230
OV5025.P0-OV5025.Q0	8158	80.4	8.0	0.012	0.856	0.000	0.000	0.000	0.000	0.064	0.198	0.097	0.240
OV5025.Q0-OV5025.00	8157	59.4	8.0	0.008	0.699	0.000	0.000	0.000	0.000	0.064	0.194	0.099	0.242
OV5025.R0-OV5025.00	3639	4.4	8.0	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.172	0.003	0.226
OV5026.00-OV5027.00	3619	184.0	12.0	0.046	4.939	0.000	0.000	0.000	0.000	0.092	0.126	0.164	0.167
OV5027.00-OV5028.00	3623	288.0	12.0	0.006	1.784	0.000	0.000	0.000	0.000	0.093	0.273	0.167	0.351
OV5028.00-OV5030.00	3621	234.5	12.0	0.000	0.000	0.000	0.000	0.000	0.000	0.100	0.252	0.177	0.321
OV5029.00-OV5030.00	3638	19.5	8.0	0.009	0.741	0.000	0.000	0.000	0.000	0.005	0.105	0.007	0.135
OV5030.00-OV5031.00	3622	320.1	12.0	0.030	3.988	0.000	0.000	0.000	0.000	0.109	0.113	0.189	0.148
OV5031.00-OV5032.00	3611	322.0	12.0	0.033	4.183	0.000	0.000	0.000	0.000	0.112	0.188	0.194	0.246
OV5032.00-OV5035.00	3618	373.6	12.0	0.004	1.456	0.000	0.000	0.000	0.000	0.115	0.184	0.200	0.241
OV5033.00-OV5035.00	3112	6.9	12.0	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.097	0.004	0.129
OV5034.00-OV5035.00	3113	5.6	12.0	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.099	0.007	0.131
OV5035.00-OV5037.00	3614	261.0	12.0	0.054	5.351	0.000	0.000	0.000	0.000	0.122	0.156	0.213	0.205
OV5036.00-OV5037.00	3110	3.9	12.0	0.002	1.030	0.000	0.000	0.000	0.000	0.005	0.114	0.007	0.148
OV5037.00-OV5039.00	3615	441.0	12.0	0.004	1.456	0.000	0.000	0.000	0.000	0.130	0.196	0.224	0.257
OV5038.00-OV5039.00	3111	5.0	12.0	0.003	1.261	0.000	0.000	0.000	0.000	0.003	0.099	0.005	0.130
OV5039.00-OV5041.00	676	78.2	12.0	0.005	1.628	0.000	0.000	0.000	0.000	0.134	0.184	0.233	0.241
OV5040.00-OV5041.00	682	6.8	12.0	0.003	1.261	0.000	0.000	0.000	0.000	0.007	0.104	0.009	0.135
OV5041.00-OV5042.00	677	183.9	12.0	0.007	1.927	0.000	0.000	0.000	0.000	0.141	0.188	0.244	0.247
OV5042.00-OV5043.00	3616	133.5	12.0	0.013	2.625	0.000	0.000	0.000	0.000	0.141	0.157	0.246	0.205
OV5043.00-OV5044.00	3542	269.7	12.0	0.040	4.605	0.000	0.000	0.000	0.000	0.142	0.148	0.249	0.196
OV5044.00-OV5046.00	3605	310.8	12.0	0.008	2.060	0.000	0.000	0.000	0.000	0.144	0.184	0.253	0.243
OV5045.00-OV5046.00	1921	2.0	8.0	0.003	0.428	0.000	0.000	0.000	0.000	0.007	0.164	0.009	0.213
OV5046.00-OV5047.00	3592	341.0	12.0	0.007	1.927	0.000	0.000	0.000	0.000	0.154	0.209	0.267	0.275
OV5047.00-OV5048.00	3593	330.3	12.0	0.004	1.456	0.000	0.000	0.000	0.000	0.154	0.220	0.270	0.291
OV5048.00-OV5049.00	3606	315.4	12.0	0.004	1.456	0.000	0.000	0.000	0.000	0.156	0.219	0.273	0.291
OV5049.00-OV5050.00	1923	266.6	12.0	0.004	1.456	0.000	0.000	0.000	0.000	0.159	0.251	0.279	0.333
OV5050.00-OV5051.00	1922	288.0	12.0	0.003	1.261	0.000	0.000	0.000	0.000	0.162	0.242	0.284	0.321
OV5051.00-OV5052.00	3607	262.0	12.0	0.007	1.927	0.000	0.000	0.000	0.000	0.162	0.195	0.286	0.259
OV5052.00-OV5053.00	3594	346.0	12.0	0.023	3.492	0.000	0.000	0.000	0.000	0.164	0.147	0.290	0.194
OV5053.00-OV5054.00	1926	254.0	12.0	0.088	6.831	0.000	0.000	0.000	0.000	0.175	0.170	0.302	0.224
OV5054.00-OV5076.00	1925	71.6	12.0	0.004	1.456	0.000	0.000	0.000	0.000	0.175	0.256	0.305	0.345
OV5055.00-OV5058.00	3609	300.0	8.0	0.125	2.761	0.000	0.000	0.000	0.000	0.010	0.052	0.012	0.061
OV5056.00-OV5057.00	3475	120.0	8.0	0.093	2.382	0.000	0.000	0.000	0.000	0.001	0.017	0.003	0.031
OV5057.00-OV5058.00	3474	214.0	8.0	0.077	2.167	0.000	0.000	0.000	0.000	0.002	0.040	0.006	0.056
OV5058.00-OV5059.00	3538	263.0	8.0	0.067	2.022	0.000	0.000	0.000	0.000	0.014	0.083	0.022	0.105
OV5059.00-OV5060.00	3603	248.0	8.0	0.007	0.653	0.000	0.000	0.000	0.000	0.016	0.110	0.026	0.142
OV5060.00-OV5061.00	3604	269.0	8.0	0.007	0.653	0.000	0.000	0.000	0.000	0.017	0.123	0.030	0.164
OV5061.00-OV5062.00	3587	177.0	8.0	0.005	0.552	0.000	0.000	0.000	0.000	0.021	0.144	0.040	0.192
OV5061.A0-OV5061.00	3539	214.0	8.0	0.150	3.025	0.000	0.000	0.000	0.000	0.003	0.078	0.007	0.108
OV5061.B0-OV5061.A0	3612	149.0	8.0	0.101	2.482	0.000	0.000	0.000	0.000	0.002	0.022	0.004	0.032
OV5062.00-OV5063.00	3598	469.0	8.0	0.004	0.494	0.000	0.000	0.000	0.000	0.025	0.152	0.046	0.204
OV5063.00-OV5064.00	3588	149.0	8.0	0.005	0.552	0.000	0.000	0.000	0.000	0.026	0.165	0.048	0.221
OV5064.00-OV5071.00	3589	101.0	8.0	0.005	0.552	0.000	0.000	0.000	0.000	0.027	0.150	0.052	0.207
OV5065.00-OV5066.00	3620	152.0	8.0	0.003	0.428	0.000	0.000	0.000	0.000	0.001	0.039	0.003	0.062
OV5066.00-OV5067.00	3610	236.0	8.0	0.055	1.832	0.000	0.000	0.000	0.000	0.002	0.029	0.007	0.048
OV5067.00-OV5068.00	3617	286.0	8.0	0.050	1.746	0.000	0.000	0.000	0.000	0.003	0.030	0.009	0.053
OV5068.00-OV5069.00	3613	275.0	8.0	0.066	2.006	0.000	0.000	0.000	0.000	0.003	0.037	0.012	0.072
OV5069.00-OV5070.00	3540	183.0	8.0	0.019	1.077	0.000	0.000	0.000	0.000	0.003	0.040	0.014	0.078
OV5070.00-OV5071.00	3590	283.0	8.0	0.061	1.929	0.000	0.000	0.000	0.000	0.005	0.078	0.017	0.121
OV5071.00-OV5072.C0	3599	25.8	8.0	0.005	0.552	0.000	0.000	0.000	0.000	0.032	0.161	0.071	0.241
OV5072.00-OV5073.00	3600	348.0	8.0	0.030	1.353	0.000	0.000	0.000	0.000	0.042	0.121	0.093	0.179
OV5072.A0-OV5072.B0	3541	319.0	8.0	0.072	2.096	0.000	0.000	0.000	0.000	0.003	0.029	0.005	0.040
OV5072.B0-OV5072.C0	3591	172.0	8.0	0.080	2.209	0.000	0.000	0.000	0.000	0.004	0.117	0.008	0.175

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
OV5072.C0-OV5072.E0	3477	261.5	8.0	0.003	0.428	0.000	0.000	0.000	0.000	0.036	0.225	0.081	0.334
OV5072.D0-OV5072.E0	3478	170.0	8.0	0.006	0.605	0.000	0.000	0.000	0.000	0.005	0.156	0.007	0.218
OV5072.E0-OV5072.00	3476	76.3	8.0	0.004	0.494	0.000	0.000	0.000	0.000	0.041	0.184	0.090	0.269
OV5073.00-OV5074.00	3547	346.0	8.0	0.034	1.440	0.000	0.000	0.000	0.000	0.046	0.127	0.104	0.190
OV5073.A0-OV5073.B0	1930	240.0	8.0	0.061	1.929	0.000	0.000	0.000	0.000	0.002	0.031	0.004	0.044
OV5073.B0-OV5073.00	1929	226.3	8.0	0.031	1.375	0.000	0.000	0.000	0.000	0.004	0.081	0.008	0.118
OV5074.00-OV5075.00	3553	278.0	8.0	0.025	1.235	0.000	0.000	0.000	0.000	0.046	0.146	0.106	0.221
OV5075.00-OV5076.00	3554	118.0	8.0	0.011	0.819	0.000	0.000	0.000	0.000	0.046	0.292	0.108	0.412
OV5076.00-OV5077.00	1924	233.5	12.0	0.006	1.784	0.000	0.000	0.000	0.000	0.225	0.233	0.419	0.317
OV5077.00-OV5078.00	1928	278.0	12.0	0.018	3.089	0.000	0.000	0.000	0.000	0.229	0.224	0.425	0.307
OV5078.00-OV5079.00	3559	343.5	12.0	0.004	1.456	0.000	0.000	0.000	0.000	0.231	0.268	0.429	0.370
OV5079.00-OV5080.00	3561	337.5	12.0	0.004	1.456	0.000	0.000	0.000	0.000	0.237	0.281	0.438	0.384
OV5079.A0-OV5079.00	7340	16.3	12.0	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.255	0.002	0.359
OV5080.00-OV5081.00	3562	349.0	12.0	0.010	2.303	0.000	0.000	0.000	0.000	0.247	0.221	0.453	0.300
OV5080.A0-OV5080.00	7341	16.8	12.0	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.273	0.006	0.376
OV5081.00-OV5083.00	1937	347.9	12.0	0.045	4.885	0.000	0.000	0.000	0.000	0.247	0.162	0.457	0.220
OV5081.A0-OV5081.00	7342	16.1	12.0	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.137	0.002	0.191
OV5082.00-OV5083.00	3527	344.6	8.0	0.004	0.494	0.000	0.000	0.000	0.000	0.008	0.173	0.010	0.223
OV5083.00-OV5084.A0	3528	33.0	12.0	0.008	2.060	0.000	0.000	0.000	0.000	0.255	0.203	0.469	0.276
OV5084.00-OV5121.00	3529	300.0	12.0	0.008	2.060	0.000	0.000	0.000	0.000	0.262	0.250	0.480	0.353
OV5084.A0-OV5084.00	3530	300.0	12.0	0.009	2.184	0.000	0.000	0.000	0.000	0.255	0.237	0.471	0.324
OV5085.00-OV5086.00	3543	246.0	8.0	0.056	1.848	0.000	0.000	0.000	0.000	0.001	0.017	0.002	0.029
OV5085.00-OV5122.00	3544	169.0	8.0	0.041	1.581	0.000	0.000	0.000	0.000	0.001	0.016	0.001	0.028
OV5086.00-OV5087.00	3608	111.0	8.0	0.056	1.848	0.000	0.000	0.000	0.000	0.001	0.023	0.004	0.044
OV5087.00-OV5088.00	3595	88.0	8.0	0.044	1.638	0.000	0.000	0.000	0.000	0.003	0.028	0.012	0.057
OV5087.A0-OV5087.B0	1932	31.0	8.0	0.050	1.746	0.000	0.000	0.000	0.000	0.001	0.019	0.003	0.037
OV5087.B0-OV5087.00	1931	96.0	8.0	0.014	0.924	0.000	0.000	0.000	0.000	0.001	0.027	0.005	0.055
OV5088.00-OV5089.00	3601	128.0	8.0	0.063	1.960	0.000	0.000	0.000	0.000	0.003	0.029	0.014	0.060
OV5089.00-OV5093.00	3548	132.0	8.0	0.075	2.139	0.000	0.000	0.000	0.000	0.003	0.041	0.017	0.088
OV5090.00-OV5091.00	3597	133.0	8.0	0.051	1.764	0.000	0.000	0.000	0.000	0.001	0.019	0.003	0.038
OV5091.00-OV5092.00	3549	346.0	8.0	0.026	1.259	0.000	0.000	0.000	0.000	0.001	0.027	0.006	0.051
OV5092.00-OV5093.00	3580	161.0	8.0	0.037	1.502	0.000	0.000	0.000	0.000	0.002	0.042	0.008	0.085
OV5093.00-OV5094.00	3581	206.0	8.0	0.021	1.132	0.000	0.000	0.000	0.000	0.006	0.052	0.028	0.108
OV5094.00-OV5095.00	3555	291.0	8.0	0.035	1.461	0.000	0.000	0.000	0.000	0.007	0.049	0.030	0.100
OV5095.00-OV5106.00	3563	123.0	8.0	0.040	1.562	0.000	0.000	0.000	0.000	0.007	0.071	0.033	0.146
OV5096.00-OV5097.00	3550	218.0	8.0	0.037	1.502	0.000	0.000	0.000	0.000	0.001	0.017	0.003	0.035
OV5097.00-OV5099.00	3582	217.0	8.0	0.054	1.815	0.000	0.000	0.000	0.000	0.001	0.037	0.005	0.071
OV5098.00-OV5099.00	3583	134.8	8.0	0.010	0.781	0.000	0.000	0.000	0.000	0.003	0.050	0.009	0.089
OV5098.A0-OV5098.B0	8174	196.0	8.0	0.008	0.699	0.000	0.000	0.000	0.000	0.001	0.036	0.003	0.058
OV5098.B0-OV5098.00	8175	50.8	8.0	0.006	0.605	0.000	0.000	0.000	0.000	0.003	0.044	0.007	0.072
OV5099.00-OV5100.00	3556	286.0	8.0	0.012	0.856	0.000	0.000	0.000	0.000	0.005	0.052	0.017	0.097
OV5100.00-OV5104.00	3564	120.0	8.0	0.020	1.104	0.000	0.000	0.000	0.000	0.005	0.058	0.020	0.112
OV5101.00-OV5102.00	3584	90.0	8.0	0.059	1.897	0.000	0.000	0.000	0.000	0.000	0.503	0.002	0.511
OV5102.00-OV5103.00	3585	198.0	8.0	-0.040	Adverse	0.000	0.000	0.000	0.000	0.001	0.509	0.006	0.521
OV5103.00-OV5104.00	3557	198.0	8.0	0.078	2.181	0.000	0.000	0.000	0.000	0.001	0.042	0.007	0.087
OV5104.00-OV5105.00	3565	130.0	8.0	0.013	0.890	0.000	0.000	0.000	0.000	0.007	0.062	0.029	0.124
OV5105.00-OV5106.00	3566	137.0	8.0	0.020	1.104	0.000	0.000	0.000	0.000	0.007	0.075	0.032	0.154
OV5106.00-OV5107.00	3567	140.0	8.0	0.015	0.957	0.000	0.000	0.000	0.000	0.015	0.087	0.067	0.180
OV5107.00-OV5110.00	3568	191.0	8.0	0.014	0.924	0.000	0.000	0.000	0.000	0.015	0.088	0.070	0.185
OV5108.00-OV5109.00	3569	107.0	8.0	0.019	1.077	0.000	0.000	0.000	0.000	0.000	0.020	0.002	0.045
OV5109.00-OV5110.00	3570	215.0	8.0	0.012	0.856	0.000	0.000	0.000	0.000	0.001	0.060	0.005	0.128
OV5110.00-OV5111.00	1938	328.0	8.0	0.021	1.132	0.000	0.000	0.000	0.000	0.017	0.085	0.078	0.177
OV5111.00-OV5112.00	3531	173.0	8.0	0.042	1.601	0.000	0.000	0.000	0.000	0.018	0.074	0.081	0.154
OV5112.00-OV5113.00	3532	69.0	8.0	0.024	1.210	0.000	0.000	0.000	0.000	0.018	0.075	0.083	0.157
OV5113.00-OV5120.00	3533	72.0	8.0	0.025	1.235	0.000	0.000	0.000	0.000	0.018	0.104	0.085	0.223

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
OV5114.00-OV5115.00	3571	234.0	8.0	0.048	1.711	0.000	0.000	0.000	0.000	0.001	0.029	0.002	0.046
OV5114.00-OV5128.00	3572	372.0	8.0	0.033	1.419	0.000	0.000	0.000	0.000	0.001	0.019	0.002	0.033
OV5115.00-OV5116.00	3573	295.0	8.0	0.005	0.552	0.000	0.000	0.000	0.000	0.002	0.047	0.005	0.080
OV5116.00-OV5117.00	3574	172.0	8.0	0.005	0.552	0.000	0.000	0.000	0.000	0.002	0.045	0.007	0.081
OV5117.00-OV5118.00	3575	146.0	8.0	0.026	1.259	0.000	0.000	0.000	0.000	0.003	0.034	0.010	0.063
OV5118.00-OV5119.00	1939	82.0	8.0	0.035	1.461	0.000	0.000	0.000	0.000	0.003	0.030	0.012	0.059
OV5119.00-OV5120.00	3534	125.0	8.0	0.066	2.006	0.000	0.000	0.000	0.000	0.003	0.081	0.015	0.173
OV5120.00-OV5121.00	3535	159.0	8.0	0.005	0.552	0.000	0.000	0.000	0.000	0.021	0.261	0.102	0.426
OV5121.00-OV5137.00	3536	241.2	12.0	0.008	2.060	0.000	0.000	0.000	0.000	0.283	0.251	0.583	0.364
OV5122.00-OV5123.00	3596	269.0	8.0	0.071	2.081	0.000	0.000	0.000	0.000	0.001	0.043	0.004	0.055
OV5123.00-OV5124.00	3545	225.0	8.0	0.076	2.153	0.000	0.000	0.000	0.000	0.021	0.072	0.026	0.082
OV5124.00-OV5125.00	3551	284.0	8.0	0.057	1.865	0.000	0.000	0.000	0.000	0.022	0.085	0.029	0.097
OV5125.00-OV5126.00	3558	81.0	8.0	0.023	1.184	0.000	0.000	0.000	0.000	0.022	0.087	0.031	0.103
OV5126.00-OV5127.00	3576	178.0	8.0	0.045	1.657	0.000	0.000	0.000	0.000	0.022	0.081	0.033	0.100
OV5127.00-OV5129.00	3577	81.0	8.0	0.031	1.375	0.000	0.000	0.000	0.000	0.022	0.098	0.036	0.126
OV5128.00-OV5129.00	3578	98.0	8.0	0.025	1.235	0.000	0.000	0.000	0.000	0.001	0.069	0.004	0.096
OV5129.00-OV5130.00	3579	34.0	8.0	0.007	0.653	0.000	0.000	0.000	0.000	0.023	0.098	0.042	0.129
OV5130.00-OV5136.00	1940	147.0	8.0	0.054	1.815	0.000	0.000	0.000	0.000	0.023	0.083	0.044	0.115
OV5131.00-OV5132.00	3473	115.0	8.0	0.078	2.181	0.000	0.000	0.000	0.000	0.006	0.039	0.008	0.046
OV5132.00-OV5133.00	3586	204.0	8.0	0.059	1.897	0.000	0.000	0.000	0.000	0.006	0.041	0.010	0.053
OV5133.00-OV5134.00	3546	240.0	8.0	0.077	2.167	0.000	0.000	0.000	0.000	0.006	0.039	0.012	0.056
OV5134.00-OV5135.00	3552	191.0	8.0	0.071	2.081	0.000	0.000	0.000	0.000	0.006	0.040	0.014	0.062
OV5135.00-OV5136.00	1941	220.0	8.0	0.062	1.945	0.000	0.000	0.000	0.000	0.006	0.063	0.016	0.094
OV5136.00-OV5137.00	3537	174.0	8.0	0.060	1.913	0.000	0.000	0.000	0.000	0.029	0.224	0.062	0.324
OV5137.00-OV5138.00	3522	350.0	12.0	0.011	2.415	0.000	0.000	0.000	0.000	0.313	0.241	0.647	0.351
OV5138.00-OV5139.00	3523	350.0	12.0	0.011	2.415	0.000	0.000	0.000	0.000	0.313	0.259	0.648	0.374
OV5139.00-OV5140.00	3524	350.0	12.0	0.008	2.060	0.000	0.000	0.000	0.000	0.341	0.276	0.681	0.396
OV5139.A0-OV5139.00	1934	84.1	8.0	0.035	1.461	0.000	0.000	0.000	0.000	0.029	0.253	0.032	0.344
OV5140.00-OV5141.00	3525	350.0	12.0	0.008	2.060	0.000	0.000	0.000	0.000	0.341	0.301	0.682	0.428
OV5141.00-OV5142.00	3526	320.0	12.0	0.008	2.060	0.000	0.000	0.000	0.000	0.383	0.290	0.724	0.404
OV5142.00-OV5143.00	3515	310.0	12.0	0.022	3.415	0.000	0.000	0.000	0.000	0.382	0.224	0.726	0.311
OV5143.00-OV5144.00	3520	239.4	12.0	0.039	4.547	0.000	0.000	0.000	0.000	0.382	0.273	0.728	0.374
OV5144.00-OV5145.00	3521	50.0	12.0	0.004	1.456	0.000	0.000	0.000	0.000	0.382	0.281	0.729	0.385
OV5145.00-OV5146.00	3516	250.0	12.0	0.029	3.921	0.000	0.000	0.000	0.000	0.382	0.217	0.731	0.301
OV5146.00-OV5147.00	3519	349.3	12.0	0.023	3.492	0.000	0.000	0.000	0.000	0.382	0.239	0.733	0.332
OV5147.00-OV5148.00	3505	342.5	12.0	0.023	3.492	0.000	0.000	0.000	0.000	0.382	0.222	0.735	0.309
OV5148.00-OV5152.00	3513	327.5	12.0	0.045	4.885	0.000	0.000	0.000	0.000	0.382	0.259	0.736	0.353
OV5149.00-OV5150.00	3518	300.0	8.0	0.002	0.349	0.000	0.000	0.000	0.000	0.000	0.181	0.002	0.212
OV5150.00-OV5151.00	3506	350.0	8.0	0.002	0.349	0.000	0.000	0.000	0.000	0.097	0.361	0.101	0.371
OV5151.00-OV5152.00	3514	350.0	8.0	0.002	0.349	0.000	0.000	0.000	0.000	0.097	0.426	0.103	0.519
OV5152.00-OV5153.00	3509	325.6	12.0	0.008	2.060	0.000	0.000	0.000	0.000	0.479	0.328	0.839	0.445
OV5153.00-OV5154.00	3510	243.2	12.0	0.008	2.060	0.000	0.000	0.000	0.000	0.479	0.357	0.841	0.483
OV5154.00-OV5155.00	3511	240.0	12.0	0.008	2.060	0.000	0.000	0.000	0.000	0.479	0.323	0.843	0.435
OV5155.00-OV5156.00	3512	380.9	12.0	0.020	3.256	0.000	0.000	0.000	0.000	0.483	0.261	0.849	0.349
OV5156.00-OV5157.00	3507	350.0	12.0	0.020	3.256	0.000	0.000	0.000	0.000	0.488	0.507	0.855	0.675
OV5157.00-OV5158.00	3508	242.0	12.0	0.000	0.000	0.000	0.000	0.000	0.000	0.496	0.559	0.865	0.744
V01001.00-V01002.00	2892	349.0	8.0	0.022	1.158	0.020	0.124	0.022	0.131	0.018	0.123	0.020	0.129
V01002.00-V01003.00	2891	197.0	8.0	0.004	0.494	0.023	0.145	0.027	0.157	0.023	0.145	0.027	0.157
V01003.00-V01003.A0	2890	234.0	8.0	0.007	0.653	0.023	0.152	0.030	0.173	0.023	0.151	0.029	0.172
V01003.A0-V01004.00	2889	109.7	8.0	0.003	0.428	0.023	0.152	0.032	0.176	0.023	0.152	0.032	0.176
V01004.00-V01005.00	2888	66.0	8.0	0.004	0.494	0.027	0.142	0.037	0.166	0.028	0.143	0.039	0.169
V01005.00-V01006.00	2887	163.4	8.0	0.005	0.552	0.027	0.150	0.039	0.180	0.028	0.157	0.041	0.187
V01006.00-V01007.00	2886	201.5	8.0	0.006	0.605	0.027	0.172	0.042	0.203	0.033	0.163	0.048	0.195
V01007.00-V01023.00	2885	205.0	8.0	0.006	0.605	0.053	0.281	0.069	0.347	0.037	0.273	0.053	0.340
V01008.00-V01010.00	3371	127.0	8.0	0.033	1.419	0.001	0.029	0.003	0.047	0.001	0.024	0.003	0.045

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V01009.00-V01010.00	2058	210.0	8.0	0.006	0.605	0.002	0.040	0.004	0.058	0.002	0.040	0.004	0.058
V01010.00-V01011.00	2057	184.0	8.0	0.031	1.375	0.003	0.037	0.009	0.061	0.003	0.036	0.009	0.060
V01011.00-V01014.00	3369	310.0	8.0	0.043	1.620	0.005	0.047	0.013	0.076	0.005	0.051	0.013	0.078
V01012.00-V01014.00	3370	215.0	6.0	0.011	0.380	0.001	0.052	0.003	0.090	0.001	0.057	0.003	0.092
V01013.00-V01014.00	3127	273.0	8.0	0.002	0.349	0.002	0.050	0.004	0.079	0.003	0.065	0.005	0.088
V01014.00-V01015.00	2031	372.0	8.0	0.039	1.542	0.008	0.050	0.022	0.083	0.011	0.059	0.025	0.089
V01015.00-V01016.K0	2056	376.0	8.0	0.065	1.991	0.008	0.158	0.024	0.228	0.013	0.208	0.029	0.266
V01016.00-V01017.00	2048	328.0	8.0	0.034	1.440	0.043	0.129	0.088	0.178	0.077	0.161	0.122	0.203
V01016.A0-V01016.D0	3130	115.0	8.0	0.050	1.746	0.004	0.045	0.010	0.068	0.004	0.043	0.010	0.067
V01016.AA-V01016.AB	3124	101.0	8.0	0.002	0.349	0.001	0.062	0.003	0.099	0.001	0.055	0.003	0.096
V01016.AB-V01016.A0	3128	171.5	8.0	0.002	0.349	0.003	0.060	0.007	0.093	0.002	0.051	0.006	0.089
V01016.B0-V01016.C0	3126	240.0	8.0	0.053	1.798	0.001	0.025	0.003	0.039	0.001	0.022	0.003	0.038
V01016.C0-V01016.D0	3125	300.0	8.0	0.041	1.581	0.003	0.043	0.007	0.065	0.002	0.041	0.007	0.064
V01016.D0-V01016.E0	3129	287.0	8.0	0.037	1.502	0.009	0.074	0.021	0.113	0.008	0.070	0.020	0.111
V01016.E0-V01016.G0	3131	43.0	8.0	0.003	0.428	0.010	0.094	0.024	0.147	0.009	0.089	0.023	0.145
V01016.F0-V01016.G0	3132	277.0	8.0	0.069	2.052	0.001	0.056	0.003	0.090	0.001	0.054	0.003	0.089
V01016.G0-V01016.H0	3133	181.0	8.0	0.006	0.605	0.011	0.104	0.030	0.168	0.010	0.099	0.029	0.166
V01016.H0-V01016.I0	2030	364.0	8.0	0.003	0.428	0.011	0.141	0.032	0.201	0.010	0.129	0.031	0.193
V01016.I0-V01016.J0	3487	352.0	8.0	0.005	0.552	0.034	0.168	0.057	0.218	0.027	0.188	0.050	0.235
V01016.J0-V01016.K0	3486	350.0	8.0	0.005	0.552	0.034	0.219	0.059	0.299	0.063	0.293	0.087	0.357
V01016.K0-V01016.00	3359	156.0	8.0	0.004	0.494	0.043	0.194	0.086	0.273	0.076	0.258	0.120	0.322
V01017.00-V01019.00	2035	315.0	8.0	0.029	1.330	0.055	0.144	0.102	0.191	0.079	0.167	0.126	0.209
V01018.00-V01019.00	2045	216.0	6.0	0.170	1.495	0.021	0.142	0.023	0.172	0.016	0.149	0.018	0.177
V01019.00-V01020.00	2044	237.0	8.0	0.040	1.562	0.076	0.150	0.128	0.193	0.096	0.168	0.147	0.207
V01020.00-V01021.C0	3360	24.7	8.0	0.009	0.741	0.080	0.157	0.133	0.202	0.099	0.175	0.152	0.216
V01021.00-V01022.00	3379	282.0	8.0	0.038	1.522	0.092	0.166	0.154	0.214	0.118	0.188	0.180	0.232
V01021.A0-V01021.B0	3374	78.0	8.0	0.005	0.552	0.000	0.058	0.003	0.079	0.000	0.055	0.002	0.084
V01021.B0-V01021.C0	3373	300.0	8.0	0.005	0.552	0.010	0.129	0.014	0.161	0.014	0.147	0.018	0.176
V01021.C0-V01021.00	3375	189.7	8.0	0.039	1.542	0.090	0.175	0.150	0.225	0.114	0.197	0.174	0.242
V01022.00-V01023.00	2884	219.0	8.0	0.066	2.006	0.093	0.256	0.157	0.328	0.121	0.274	0.185	0.343
V01023.00-V01024.00	2883	306.0	8.0	0.004	0.494	0.146	0.372	0.229	0.478	0.158	0.389	0.241	0.741
V01024.00-V01050.00	2882	326.0	8.0	0.004	0.494	0.148	0.521	0.232	0.744	0.161	0.571	0.245	1.000
V01027.00-V01028.00	2054	52.0	6.0	0.058	0.873	0.000	0.014	0.002	0.046	0.000	0.016	0.002	0.047
V01028.00-V01030.00	2053	107.7	8.0	0.035	1.461	0.001	0.045	0.007	0.081	0.001	0.044	0.008	0.080
V01028.A0-V01028.00	7605	66.0	8.0	0.002	0.349	0.001	0.029	0.003	0.054	0.001	0.034	0.003	0.057
V01029.00-V01030.00	2047	340.0	8.0	0.080	2.209	0.003	0.049	0.005	0.074	0.003	0.046	0.005	0.072
V01030.00-V01031.00	2052	191.6	8.0	0.031	1.375	0.013	0.073	0.036	0.118	0.012	0.069	0.035	0.116
V01030.A0-V01030.B0	1704	319.9	8.0	0.098	2.445	0.001	0.028	0.003	0.039	0.001	0.025	0.003	0.037
V01030.B0-V01030.C0	1705	244.7	8.0	0.055	1.832	0.005	0.055	0.009	0.071	0.004	0.046	0.008	0.065
V01030.C0-V01030.E0	1706	218.6	8.0	0.011	0.819	0.007	0.067	0.014	0.090	0.005	0.058	0.012	0.083
V01030.D0-V01030.E0	2340	5.0	8.0	0.000	0.000	0.001	0.056	0.003	0.086	0.002	0.059	0.004	0.087
V01030.E0-V01030.F0	1707	252.8	8.0	0.051	1.764	0.009	0.050	0.019	0.073	0.007	0.045	0.017	0.070
V01030.F0-V01030.00	1708	30.0	8.0	0.027	1.283	0.009	0.054	0.021	0.085	0.007	0.050	0.019	0.083
V01031.00-V01034.00	2050	201.0	8.0	0.022	1.158	0.014	0.088	0.039	0.134	0.012	0.095	0.037	0.140
V01032.00-V01033.00	2046	193.0	6.0	0.053	0.835	0.001	0.028	0.003	0.049	0.003	0.049	0.006	0.063
V01033.00-V01034.00	2049	259.0	6.0	0.080	1.026	0.002	0.080	0.006	0.122	0.005	0.104	0.009	0.138
V01034.00-V01035.00	2034	186.0	8.0	0.027	1.283	0.026	0.111	0.057	0.155	0.038	0.124	0.069	0.165
V01035.00-V01036.00	2043	197.0	8.0	0.022	1.158	0.037	0.146	0.070	0.194	0.043	0.154	0.076	0.199
V01036.00-V01037.00	2042	218.0	8.0	0.010	0.781	0.050	0.223	0.085	0.294	0.054	0.233	0.089	0.301
V01037.00-V01041.00	2041	66.0	8.0	0.003	0.428	0.050	0.227	0.087	0.294	0.054	0.236	0.091	0.301
V01038.00-V01039.00	2055	164.0	8.0	0.083	2.250	0.006	0.052	0.008	0.059	0.005	0.049	0.007	0.055
V01039.00-V01040.00	2033	223.0	8.0	0.070	2.066	0.019	0.080	0.023	0.090	0.016	0.081	0.020	0.090
V01040.00-V01041.00	2040	240.0	8.0	0.023	1.184	0.021	0.134	0.027	0.163	0.025	0.141	0.031	0.168
V01041.00-V01042.00	3484	336.0	8.0	0.021	1.132	0.077	0.195	0.122	0.245	0.081	0.199	0.127	0.249
V01042.00-V01045.00	3485	281.5	8.0	0.011	0.819	0.081	0.221	0.128	0.278	0.083	0.224	0.131	0.281

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V01043.00-V01044.00	2039	281.0	8.0	0.020	1.104	0.012	0.075	0.014	0.083	0.010	0.070	0.012	0.079
V01044.00-V01045.00	2038	208.0	8.0	0.020	1.104	0.013	0.152	0.017	0.187	0.012	0.152	0.016	0.187
V01045.00-V01046.00	2037	47.5	8.0	0.006	0.605	0.093	0.238	0.147	0.301	0.096	0.242	0.149	0.304
V01046.00-V01048.00	2036	227.0	8.0	0.008	0.699	0.094	0.295	0.149	0.380	0.097	0.309	0.153	0.392
V01047.00-V01048.E0	3362	99.0	8.0	0.041	1.581	0.007	0.048	0.009	0.063	0.008	0.060	0.010	0.071
V01048.00-V01049.00	2032	280.0	8.0	0.009	0.741	0.103	0.250	0.173	0.325	0.118	0.267	0.188	0.338
V01048.A0-V01048.B0	3367	92.0	8.0	0.034	1.440	0.002	0.025	0.004	0.037	0.011	0.059	0.014	0.064
V01048.B0-V01048.C0	3366	141.0	8.0	0.044	1.638	0.002	0.022	0.006	0.039	0.011	0.052	0.016	0.060
V01048.C0-V01048.D0	3365	50.0	8.0	0.044	1.638	0.002	0.060	0.008	0.115	0.013	0.132	0.019	0.160
V01048.D0-V01048.E0	3364	51.0	8.0	0.000	0.000	0.002	0.074	0.010	0.132	0.013	0.143	0.021	0.175
V01048.E0-V01048.00	3368	45.4	8.0	0.021	1.132	0.009	0.195	0.022	0.260	0.021	0.219	0.033	0.278
V01049.00-V01050.00	3378	265.0	8.0	0.065	1.991	0.109	0.411	0.181	0.602	0.122	0.456	0.194	0.605
V01050.00-V01051.00	3377	72.0	8.0	0.002	0.349	0.257	0.682	0.415	1.000	0.284	0.773	0.442	1.000
V01051.00-V01052.00	3376	313.0	12.0	0.008	2.060	0.901	0.550	1.708	0.961	1.130	0.633	1.891	1.000
V01052.00-V01056.00	2881	364.0	10.0	0.010	1.416	0.901	0.546	1.710	0.737	1.130	0.626	1.893	0.751
V01053.00-V01054.00	3382	190.0	8.0	0.008	0.699	0.000	0.051	0.002	0.078	0.002	0.063	0.004	0.079
V01054.00-V01055.00	3381	206.0	8.0	0.008	0.699	0.009	0.077	0.013	0.093	0.007	0.070	0.011	0.087
V01055.00-V01056.00	3380	110.0	8.0	0.050	1.746	0.010	0.235	0.019	0.330	0.010	0.260	0.018	0.347
V01055.A0-V01055.00	4033	22.5	8.0	0.001	0.247	0.000	0.027	0.002	0.062	0.001	0.049	0.004	0.070
V02100.00-V01051.00	4032	210.6	10.0	0.043	2.936	0.645	0.440	1.313	0.735	0.846	0.505	1.479	0.752
V02001.00-V02002.00	3383	139.0	8.0	0.007	0.653	0.002	0.040	0.004	0.058	0.002	0.043	0.004	0.060
V02002.00-V02003.00	2673	335.0	8.0	0.009	0.741	0.004	0.053	0.008	0.074	0.005	0.058	0.009	0.078
V02003.00-V02006.00	2674	339.0	8.0	0.022	1.158	0.007	0.094	0.013	0.133	0.008	0.114	0.014	0.147
V02004.00-V02005.00	2681	83.0	6.0	0.003	0.199	0.001	0.052	0.003	0.086	0.002	0.074	0.004	0.100
V02005.00-V02006.00	2660	356.0	6.0	0.048	0.795	0.002	0.107	0.006	0.158	0.006	0.143	0.010	0.184
V02006.00-V02008.00	2661	180.0	8.0	0.006	0.605	0.011	0.092	0.023	0.132	0.017	0.115	0.030	0.149
V02008.00-V02011.00	2662	279.0	8.0	0.093	2.382	0.012	0.082	0.027	0.125	0.019	0.095	0.033	0.134
V02009.00-V02010.00	2668	325.0	8.0	0.052	1.781	0.002	0.027	0.004	0.038	0.002	0.028	0.004	0.039
V02010.00-V02011.00	2670	325.0	8.0	0.098	2.445	0.004	0.071	0.008	0.109	0.004	0.079	0.008	0.114
V02011.00-V02014.00	2669	259.0	8.0	0.033	1.419	0.038	0.122	0.095	0.191	0.049	0.138	0.107	0.202
V02012.00-V02013.00	4034	112.5	8.0	0.071	2.081	0.020	0.532	0.055	0.552	0.023	0.534	0.058	0.553
V02012.A0-V02012.B0	2893	345.0	8.0	0.034	1.440	0.002	0.029	0.004	0.040	0.002	0.029	0.004	0.040
V02012.B0-V02012.C0	2897	107.0	8.0	0.069	2.052	0.003	0.029	0.007	0.044	0.003	0.031	0.007	0.045
V02012.C0-V02012.E0	2895	165.0	8.0	0.078	2.181	0.004	0.039	0.010	0.060	0.005	0.041	0.011	0.062
V02012.D0-V02012.E0	2894	271.0	8.0	0.076	2.153	0.001	0.031	0.003	0.050	0.001	0.031	0.003	0.050
V02012.E0-V02012.H0	2896	223.0	8.0	0.044	1.638	0.006	0.066	0.017	0.106	0.007	0.072	0.017	0.109
V02012.F0-V02012.G0	2899	145.0	8.0	0.116	2.660	0.001	0.026	0.003	0.040	0.002	0.029	0.004	0.042
V02012.G0-V02012.H0	2900	160.0	8.0	0.025	1.235	0.003	0.061	0.007	0.097	0.003	0.068	0.008	0.101
V02012.H0-V02012.L0	2898	152.0	8.0	0.011	0.819	0.010	0.077	0.026	0.122	0.012	0.082	0.028	0.125
V02012.I0-V02012.J0	2658	133.0	8.0	0.064	1.976	0.001	0.023	0.003	0.037	0.001	0.022	0.003	0.036
V02012.J0-V02012.K0	2656	303.0	8.0	0.062	1.945	0.003	0.030	0.007	0.044	0.003	0.030	0.007	0.044
V02012.K0-V02012.L0	2666	81.0	8.0	0.059	1.897	0.005	0.049	0.011	0.074	0.005	0.049	0.011	0.075
V02012.L0-V02012.P0	2665	250.0	8.0	0.051	1.764	0.015	0.065	0.040	0.103	0.016	0.068	0.041	0.105
V02012.M0-V02012.N0	2657	186.0	6.0	0.045	0.769	0.000	0.023	0.002	0.048	0.001	0.030	0.003	0.052
V02012.N0-V02012.O0	2901	300.0	6.0	0.062	0.903	0.001	0.041	0.006	0.072	0.002	0.051	0.006	0.078
V02012.O0-V02012.P0	2663	207.0	6.0	0.027	0.596	0.003	0.054	0.009	0.093	0.005	0.069	0.011	0.102
V02012.P0-V02012.00	2664	26.0	6.0	0.008	0.324	0.004	0.057	0.012	0.101	0.006	0.072	0.014	0.112
V02013.00-V02011.00	2672	94.0	8.0	-0.017	Adverse	0.021	0.556	0.058	0.588	0.025	0.564	0.062	0.593
V02014.00-V02020.00	2677	253.0	8.0	0.019	1.077	0.039	0.157	0.099	0.251	0.051	0.177	0.110	0.264
V02015.00-V02016.00	3393	195.0	8.0	0.007	0.653	0.002	0.038	0.004	0.055	0.002	0.040	0.004	0.056
V02016.00-V02017.00	3391	350.0	8.0	0.050	1.746	0.004	0.039	0.008	0.053	0.005	0.046	0.009	0.058
V02017.00-V02018.00	3386	269.0	8.0	0.092	2.369	0.006	0.038	0.013	0.052	0.009	0.045	0.015	0.057
V02018.00-V02019.00	3385	25.0	8.0	0.024	1.210	0.007	0.037	0.015	0.055	0.010	0.045	0.018	0.061
V02019.00-V02020.00	3387	49.0	8.0	0.026	1.259	0.007	0.112	0.017	0.180	0.011	0.128	0.021	0.191
V02020.00-V02025.C0	3392	336.0	8.0	0.012	0.856	0.050	0.163	0.130	0.263	0.066	0.188	0.146	0.279

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V02020.A0-V02020.B0	2676	115.0	8.0	0.056	1.848	0.001	0.017	0.003	0.032	0.001	0.022	0.003	0.035
V02020.B0-V02020.D0	2671	275.0	8.0	0.086	2.290	0.001	0.024	0.006	0.044	0.002	0.028	0.006	0.046
V02020.C0-V02020.D0	2678	120.0	8.0	0.038	1.522	0.002	0.028	0.004	0.044	0.002	0.030	0.004	0.046
V02020.D0-V02020.00	2679	279.0	8.0	0.087	2.304	0.004	0.106	0.012	0.174	0.005	0.119	0.013	0.182
V02021.00-V02022.00	2682	352.0	6.0	0.050	0.811	0.001	0.036	0.003	0.054	0.002	0.046	0.004	0.061
V02022.00-V02024.00	4035	129.2	8.0	0.051	1.764	0.004	0.039	0.008	0.057	0.005	0.046	0.010	0.062
V02023.00-V02024.00	3397	88.0	6.0	0.051	0.819	0.002	0.048	0.004	0.069	0.002	0.053	0.004	0.072
V02024.00-V02025.A0	3395	324.0	6.0	0.059	0.881	0.006	0.088	0.015	0.126	0.008	0.110	0.017	0.143
V02025.00-V02026.00	3396	183.0	8.0	0.022	1.158	0.060	0.163	0.156	0.264	0.084	0.193	0.181	0.284
V02025.A0-V02025.B0	3390	130.0	6.0	0.024	0.562	0.009	0.088	0.019	0.127	0.016	0.115	0.026	0.146
V02025.B0-V02025.C0	3388	106.0	6.0	0.107	1.186	0.009	0.126	0.022	0.198	0.016	0.152	0.028	0.216
V02025.C0-V02025.00	3389	336.0	8.0	0.029	1.330	0.060	0.149	0.154	0.239	0.084	0.176	0.179	0.257
V02026.00-V02028.00	3644	192.0	8.0	0.014	0.924	0.060	0.177	0.159	0.291	0.084	0.216	0.183	0.318
V02027.00-V02028.00	3641	52.0	6.0	0.041	0.734	0.000	0.122	0.002	0.217	0.007	0.180	0.009	0.253
V02028.00-V02031.00	3642	319.0	8.0	0.019	1.077	0.060	0.160	0.163	0.264	0.095	0.201	0.198	0.291
V02029.00-V02030.00	3669	257.0	6.0	0.095	1.118	0.002	0.038	0.005	0.052	0.004	0.049	0.006	0.060
V02030.00-V02031.00	3671	245.0	6.0	0.107	1.186	0.004	0.113	0.008	0.179	0.006	0.142	0.010	0.199
V02031.00-V02032.00	3674	192.0	8.0	0.040	1.562	0.064	0.138	0.173	0.226	0.103	0.176	0.212	0.251
V02032.00-V02039.00	3666	187.0	8.0	0.039	1.542	0.064	0.153	0.175	0.255	0.106	0.197	0.217	0.285
V02033.00-V02037.00	3645	206.2	6.0	0.036	0.688	0.000	0.021	0.002	0.052	0.000	0.021	0.002	0.055
V02034.00-V02035.00	3647	24.0	6.0	0.006	0.281	0.001	0.028	0.003	0.052	0.002	0.041	0.004	0.060
V02035.00-V02037.00	8193	219.7	6.0	0.068	0.946	0.001	0.023	0.005	0.056	0.002	0.037	0.006	0.062
V02037.00-V02039.00	3650	209.3	6.0	0.134	1.327	0.001	0.125	0.010	0.220	0.004	0.166	0.013	0.246
V02038.00-V02039.00	3659	50.0	6.0	0.039	0.716	0.001	0.124	0.003	0.208	0.001	0.157	0.003	0.230
V02039.00-V02040.00	3660	228.5	8.0	0.019	1.077	0.067	0.174	0.190	0.294	0.112	0.225	0.236	0.328
V02040.00-V02051.00	3661	225.8	8.0	0.015	0.957	0.068	0.255	0.194	0.428	0.114	0.320	0.239	0.473
V02041.00-V02042.00	3663	213.0	6.0	0.060	0.888	0.001	0.039	0.003	0.057	0.001	0.038	0.004	0.056
V02042.00-V02043.00	3664	320.0	6.0	0.052	0.827	0.004	0.054	0.008	0.077	0.003	0.052	0.007	0.076
V02043.00-V02045.00	3675	138.0	8.0	0.032	1.397	0.006	0.048	0.012	0.069	0.005	0.045	0.011	0.067
V02044.00-V02045.00	3672	320.0	6.0	0.063	0.910	0.001	0.045	0.003	0.068	0.001	0.043	0.003	0.067
V02045.00-V02050.00	3667	340.4	8.0	0.054	1.815	0.009	0.050	0.019	0.074	0.007	0.046	0.018	0.072
V02046.00-V02048.00	3670	227.0	6.0	0.090	1.088	0.001	0.036	0.003	0.057	0.001	0.032	0.003	0.055
V02047.00-V02048.00	3658	128.0	8.0	0.039	1.542	0.001	0.027	0.003	0.044	0.001	0.027	0.003	0.044
V02048.00-V02049.00	3673	273.0	8.0	0.043	1.620	0.003	0.035	0.009	0.056	0.003	0.033	0.009	0.055
V02049.00-V02050.00	3668	192.0	8.0	0.060	1.913	0.005	0.043	0.013	0.067	0.004	0.040	0.012	0.065
V02050.00-V02051.00	3662	125.0	8.0	0.098	2.445	0.014	0.189	0.034	0.314	0.012	0.227	0.032	0.340
V02051.00-V02054.00	3665	33.0	8.0	0.008	0.699	0.082	0.226	0.231	0.377	0.126	0.278	0.275	0.413
V02052.00-V02053.00	3676	395.0	8.0	0.019	1.077	0.001	0.027	0.003	0.042	0.001	0.022	0.003	0.038
V02053.00-V02054.00	3688	192.0	8.0	0.114	2.637	0.002	0.073	0.007	0.119	0.002	0.086	0.006	0.128
V02054.00-V02055.00	3689	20.0	8.0	0.015	0.957	0.086	0.272	0.240	0.434	0.129	0.326	0.284	0.470
V02055.00-V02057.00	3690	154.0	8.0	0.000	0.000	0.086	0.330	0.242	0.539	0.130	0.398	0.286	0.585
V02056.00-V02057.00	3691	68.8	8.0	0.040	1.562	0.001	0.128	0.003	0.219	0.001	0.153	0.003	0.238
V02057.00-V02063.00	3692	218.7	8.0	0.008	0.699	0.088	0.248	0.248	0.430	0.131	0.299	0.292	0.467
V02058.00-V02062.00	8198	217.0	8.0	0.015	0.957	0.001	0.038	0.003	0.066	0.001	0.039	0.003	0.066
V02059.00-V02062.00	3651	304.0	6.0	0.072	0.973	0.001	0.049	0.003	0.082	0.001	0.044	0.003	0.080
V02060.00-V02061.00	3655	240.0	6.0	0.074	0.986	0.001	0.035	0.003	0.052	0.001	0.026	0.003	0.047
V02061.00-V02062.00	3652	140.0	6.0	0.077	1.006	0.003	0.057	0.007	0.092	0.002	0.050	0.006	0.088
V02062.00-V02063.00	3654	192.6	8.0	0.082	2.236	0.013	0.156	0.040	0.270	0.011	0.178	0.038	0.287
V02062.A0-V02062.C0	3656	270.0	8.0	0.030	1.353	0.006	0.048	0.018	0.081	0.006	0.048	0.019	0.082
V02062.AA-V02062.AB	7054	141.0	8.0	0.034	1.440	0.001	0.037	0.003	0.055	0.001	0.036	0.003	0.055
V02062.AB-V02062.AC	7055	154.7	8.0	0.013	0.890	0.003	0.041	0.007	0.063	0.003	0.040	0.007	0.062
V02062.AC-V02062.AD	7056	128.0	8.0	0.059	1.897	0.003	0.036	0.009	0.060	0.003	0.038	0.010	0.061
V02062.AD-V02062.AE	7057	102.9	8.0	0.028	1.307	0.004	0.042	0.013	0.071	0.005	0.045	0.013	0.072
V02062.AE-V02062.A0	7058	44.8	8.0	0.015	0.957	0.005	0.047	0.015	0.079	0.006	0.049	0.016	0.081
V02062.B0-V02062.C0	3657	38.0	8.0	0.021	1.132	0.001	0.034	0.003	0.058	0.001	0.031	0.003	0.056

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V02062.C0-V02062.00	3653	236.0	8.0	0.066	2.006	0.008	0.050	0.024	0.085	0.007	0.048	0.024	0.084
V02063.00-V02065.00	3683	127.3	8.0	0.008	0.699	0.103	0.260	0.292	0.453	0.144	0.308	0.333	0.488
V02064.00-V02065.00	3684	246.0	8.0	0.097	2.432	0.002	0.141	0.003	0.243	0.001	0.164	0.003	0.260
V02065.00-V02068.00	3686	289.6	8.0	0.008	0.699	0.105	0.293	0.299	0.488	0.146	0.327	0.339	0.513
V02066.00-V02068.00	3680	179.1	8.0	0.017	1.018	0.036	0.225	0.048	0.333	0.013	0.211	0.026	0.321
V02066.A0-V02066.B0	3693	278.0	6.0	0.020	0.513	0.002	0.062	0.005	0.079	0.001	0.038	0.003	0.063
V02066.B0-V02066.E0	3694	298.0	6.0	0.030	0.628	0.007	0.100	0.011	0.118	0.002	0.060	0.006	0.088
V02066.C0-V02066.D0	3704	274.0	6.0	0.020	0.513	0.021	0.156	0.023	0.163	0.009	0.103	0.011	0.114
V02066.D0-V02066.E0	3695	91.0	6.0	0.017	0.473	0.023	0.151	0.028	0.163	0.010	0.098	0.014	0.116
V02066.E0-V02066.00	3679	110.1	6.0	0.062	0.903	0.033	0.149	0.043	0.171	0.012	0.093	0.022	0.126
V02067.00-V02068.00	3687	175.2	8.0	0.025	1.235	0.003	0.179	0.005	0.282	0.002	0.188	0.004	0.288
V02068.00-V02069.00	3682	174.3	8.0	0.016	0.988	0.145	0.258	0.355	0.411	0.162	0.274	0.372	0.422
V02069.00-V02070.00	3700	70.0	8.0	0.029	1.330	0.145	0.347	0.357	0.551	0.163	0.365	0.375	0.565
V02070.00-V02072.00	4036	85.9	8.0	0.003	0.428	0.146	0.372	0.360	0.592	0.163	0.395	0.378	0.609
V02071.00-V02072.00	3699	162.0	6.0	0.020	0.513	0.000	0.162	0.002	0.280	0.010	0.224	0.012	0.319
V02072.00-V02073.00	3701	183.0	8.0	0.023	1.184	0.152	0.252	0.370	0.396	0.178	0.270	0.396	0.409
V02073.00-V02075.00	3702	92.0	8.0	0.020	1.104	0.170	0.267	0.390	0.415	0.190	0.283	0.411	0.427
V02074.00-V02075.00	3703	297.0	6.0	0.031	0.638	0.000	0.181	0.002	0.303	0.000	0.192	0.002	0.311
V02075.00-V02077.00	3698	214.0	8.0	0.018	1.048	0.170	0.324	0.394	0.484	0.190	0.332	0.415	0.490
V02076.00-V02077.00	3705	101.0	6.0	0.006	0.281	0.039	0.379	0.043	0.497	0.031	0.364	0.035	0.483
V02076.A0-V02076.00	4037	25.1	6.0	0.001	0.115	0.002	0.206	0.002	0.219	0.031	0.266	0.033	0.277
V02077.00-V02079.00	3706	260.0	8.0	0.017	1.018	0.244	0.332	0.475	0.477	0.244	0.332	0.501	0.569
V02078.00-V02079.00	3715	191.0	6.0	0.019	0.500	0.002	0.214	0.004	0.304	0.003	0.218	0.005	0.489
V02079.00-V02080.00	3716	281.0	8.0	0.031	1.375	0.246	0.448	0.481	0.704	0.247	0.459	0.482	0.842
V02080.00-V02081.00	3718	336.0	8.0	0.003	0.428	0.248	0.533	0.485	1.000	0.266	0.556	0.502	1.000
V02081.00-V02084.00	3722	324.0	8.0	0.005	0.552	0.248	0.534	0.487	1.000	0.271	0.591	0.509	1.000
V02082.00-V02083.A0	7515	289.0	8.0	0.006	0.605	0.364	0.546	0.789	1.000	0.500	0.692	0.903	1.000
V02083.00-V02084.00	7516	244.0	8.0	0.004	0.494	0.364	0.645	0.794	1.000	0.501	0.811	0.908	1.000
V02083.A0-V02083.00	8339	15.0	8.0	0.002	0.349	0.364	0.580	0.791	1.000	0.500	0.811	0.904	1.000
V02084.00-V02085.A0	8338	54.0	10.0	0.005	1.001	0.612	0.525	1.253	1.000	0.773	0.608	1.371	1.000
V02085.00-V02097.00	3723	351.0	10.0	0.004	0.896	0.615	0.584	1.258	1.000	0.779	0.688	1.381	1.000
V02085.A0-V02085.00	3721	334.0	10.0	0.005	1.001	0.614	0.584	1.256	1.000	0.773	0.679	1.374	1.000
V02086.00-V02087.D0	3677	264.2	8.0	0.019	1.077	0.000	0.034	0.004	0.068	0.001	0.041	0.005	0.071
V02086.A0-V02086.00	7812	143.0	8.0	0.049	1.729	0.001	0.012	0.002	0.037	0.001	0.024	0.003	0.042
V02087.00-V02090.00	3681	392.0	8.0	0.020	1.104	0.007	0.060	0.022	0.101	0.007	0.089	0.021	0.122
V02087.A0-V02087.B0	3696	83.0	6.0	0.009	0.344	0.001	0.046	0.004	0.070	0.000	0.043	0.003	0.072
V02087.B0-V02087.C0	3697	152.0	6.0	0.025	0.573	0.001	0.051	0.006	0.081	0.004	0.061	0.008	0.087
V02087.C0-V02087.D0	3685	272.0	6.0	0.031	0.638	0.005	0.068	0.012	0.107	0.005	0.068	0.011	0.106
V02087.D0-V02087.00	3678	84.9	8.0	0.018	1.048	0.006	0.056	0.019	0.094	0.007	0.056	0.019	0.093
V02088.00-V02089.00	3714	116.0	6.0	0.058	0.873	0.001	0.031	0.003	0.052	0.026	0.123	0.029	0.129
V02089.00-V02090.00	3713	351.0	6.0	0.058	0.873	0.002	0.058	0.006	0.099	0.031	0.145	0.036	0.167
V02090.00-V02091.00	3707	230.0	8.0	0.029	1.330	0.010	0.070	0.031	0.121	0.042	0.139	0.062	0.170
V02091.00-V02092.00	3708	250.0	8.0	0.019	1.077	0.010	0.068	0.033	0.120	0.042	0.134	0.064	0.166
V02092.00-V02092.A0	3717	426.0	8.0	0.016	0.988	0.010	0.069	0.035	0.127	0.042	0.137	0.066	0.173
V02092.A0-V02093.00	3719	426.0	8.0	0.009	0.741	0.010	0.101	0.037	0.165	0.042	0.168	0.068	0.213
V02093.00-V02096.00	3720	338.0	8.0	0.014	0.924	0.021	0.105	0.050	0.159	0.049	0.158	0.078	0.198
V02094.00-V02095.00	3727	68.0	8.0	0.009	0.741	0.000	0.022	0.002	0.053	0.001	0.047	0.003	0.064
V02095.00-V02096.00	3725	349.0	8.0	0.010	0.781	0.003	0.067	0.007	0.103	0.007	0.104	0.011	0.130
V02096.00-V02097.00	3726	334.4	8.0	0.033	1.419	0.024	0.091	0.059	0.140	0.061	0.141	0.096	0.177
V02097.00-V02098.00	3724	340.0	10.0	0.006	1.097	0.643	0.567	1.306	1.000	0.841	0.679	1.470	1.000
V02098.00-V02099.00	3728	345.0	10.0	0.005	1.001	0.643	0.665	1.308	1.000	0.841	0.791	1.471	1.000
V02099.00-V02100.00	3729	214.0	10.0	0.005	1.001	0.644	0.540	1.311	0.735	0.844	0.633	1.476	0.752
V03191.00-V02082.00	7514	246.0	8.0	0.009	0.741	0.364	0.558	0.788	1.000	0.498	0.647	0.899	1.000
V03001.00-V03002.00	3929	242.0	8.0	0.015	0.957	0.001	0.038	0.003	0.056	0.001	0.038	0.004	0.056
V03002.00-V03003.00	3927	350.0	8.0	0.007	0.653	0.004	0.057	0.008	0.080	0.003	0.057	0.007	0.080

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V03003.00-V03009.AA	9	350.0	8.0	0.013	0.890	0.006	0.063	0.013	0.089	0.007	0.065	0.013	0.090
V03006.00-V03007.B0	8	273.0	8.0	0.074	2.125	0.001	0.507	0.003	0.514	0.005	0.518	0.007	0.521
V03007.A0-V03008.A0	7699	185.4	8.0	0.020	1.104	0.004	0.053	0.012	0.090	0.013	0.089	0.021	0.114
V03007.AA-V03007.A0	7555	318.6	8.0	0.061	1.929	0.002	0.033	0.004	0.053	0.006	0.058	0.008	0.071
V03007.B0-V03007.A0	7556	41.2	8.0	-0.026	Adverse	0.003	0.522	0.006	0.537	0.006	0.538	0.010	0.548
V03008.A0-V03009.A0	7700	166.7	8.0	0.007	0.653	0.005	0.077	0.015	0.126	0.015	0.112	0.025	0.150
V03009.A0-V03011.A0	7701	73.2	8.0	0.008	0.699	0.012	0.118	0.033	0.191	0.022	0.154	0.043	0.215
V03009.AA-V03009.A0	3903	42.0	8.0	0.006	0.605	0.007	0.079	0.015	0.120	0.007	0.094	0.016	0.131
V03011.A0-V03017.A0	7704	105.0	8.0	0.005	0.552	0.015	0.109	0.041	0.179	0.025	0.141	0.052	0.199
V03011.AA-V03011.A0	7703	93.8	8.0	0.031	1.375	0.002	0.085	0.006	0.141	0.002	0.109	0.007	0.156
V03011.AB-V03011.AA	7702	288.3	8.0	0.030	1.353	0.001	0.024	0.003	0.040	0.002	0.028	0.004	0.043
V03015.00-V03017.00	3905	324.0	6.0	0.035	0.678	0.002	0.084	0.004	0.129	0.002	0.098	0.004	0.139
V03016.00-V03017.00	3906	170.0	8.0	-0.027	Adverse	0.003	0.547	0.009	0.576	0.003	0.558	0.009	0.583
V03017.00-V03019.00	3907	320.0	8.0	0.021	1.132	0.021	0.124	0.056	0.201	0.032	0.149	0.067	0.215
V03017.A0-V03017.00	7705	245.5	8.0	0.032	1.397	0.015	0.084	0.044	0.137	0.026	0.105	0.055	0.150
V03018.00-V03019.00	3897	160.0	8.0	0.004	0.494	0.001	0.097	0.003	0.155	0.002	0.112	0.004	0.163
V03019.00-V03020.00	3861	344.0	8.0	0.004	0.494	0.025	0.152	0.064	0.243	0.036	0.184	0.075	0.263
V03020.00-V03049.00	3862	304.0	8.0	0.005	0.552	0.028	0.155	0.069	0.238	0.039	0.178	0.080	0.254
V03023.00-V03041.D0	3918	240.0	8.0	0.005	0.552	0.038	0.176	0.065	0.230	0.029	0.154	0.056	0.215
V03023.A0-V03023.B0	3935	243.0	8.0	0.008	0.699	0.002	0.048	0.004	0.065	0.002	0.042	0.004	0.062
V03023.B0-V03023.D0	3936	126.0	8.0	0.009	0.741	0.004	0.065	0.008	0.095	0.003	0.061	0.007	0.092
V03023.C0-V03023.D0	3934	181.0	8.0	0.082	2.236	0.001	0.045	0.003	0.070	0.002	0.047	0.004	0.071
V03023.D0-V03023.G0	3921	188.0	8.0	0.004	0.494	0.006	0.115	0.014	0.150	0.006	0.103	0.014	0.141
V03023.E0-V03023.F0	3919	294.0	8.0	0.010	0.781	0.022	0.116	0.025	0.121	0.016	0.099	0.018	0.105
V03023.F0-V03023.G0	3920	56.0	8.0	0.057	1.865	0.025	0.108	0.029	0.126	0.017	0.092	0.021	0.113
V03023.G0-V03023.J0	3922	236.0	8.0	0.006	0.605	0.031	0.169	0.045	0.211	0.023	0.151	0.037	0.195
V03023.H0-V03023.I0	3923	54.0	8.0	0.007	0.653	0.001	0.022	0.003	0.042	0.002	0.033	0.004	0.047
V03023.I0-V03023.J0	3924	110.0	8.0	0.087	2.304	0.002	0.102	0.006	0.135	0.003	0.096	0.007	0.128
V03023.J0-V03023.00	3925	236.0	8.0	0.003	0.428	0.033	0.183	0.053	0.232	0.026	0.162	0.047	0.217
V03023.K0-V03023.L0	3930	295.0	8.0	0.008	0.699	0.003	0.048	0.005	0.061	0.002	0.040	0.004	0.055
V03023.L0-V03023.00	3931	56.0	8.0	0.063	1.960	0.005	0.105	0.009	0.133	0.003	0.089	0.007	0.123
V03025.00-V03026.00	3928	76.0	8.0	0.009	0.741	0.001	0.024	0.003	0.044	0.001	0.026	0.003	0.045
V03026.00-V03041.D0	3912	54.0	8.0	0.045	1.657	0.001	0.094	0.006	0.132	0.001	0.086	0.006	0.125
V03027.00-V03041.D0	3911	186.0	8.0	0.036	1.482	0.002	0.100	0.004	0.135	0.003	0.093	0.005	0.130
V03032.00-V03041.C0	7709	227.8	8.0	0.054	1.815	0.007	0.060	0.020	0.094	0.011	0.071	0.023	0.102
V03032.A0-V03032.B0	5951	138.0	8.0	0.031	1.375	0.002	0.027	0.004	0.040	0.002	0.034	0.004	0.045
V03032.B0-V03032.C0	5953	96.0	8.0	0.054	1.815	0.003	0.036	0.007	0.053	0.006	0.048	0.011	0.061
V03032.C0-V03032.00	5952	335.0	8.0	0.029	1.330	0.005	0.045	0.011	0.069	0.008	0.056	0.014	0.076
V03032.D0-V03032.00	3926	102.0	6.0	0.060	0.888	0.002	0.047	0.006	0.077	0.001	0.051	0.005	0.080
V03032.DA-V03032.D0	962	58.0	8.0	0.028	1.307	0.000	0.012	0.002	0.034	0.001	0.018	0.003	0.035
V03038.00-V03039.00	3859	94.0	6.0	0.043	0.752	0.001	0.051	0.003	0.075	0.001	0.052	0.004	0.076
V03039.00-V03041.00	3855	235.0	6.0	0.010	0.363	0.004	0.158	0.008	0.230	0.004	0.155	0.008	0.228
V03040.00-V03041.00	3856	168.0	6.0	0.068	0.946	0.001	0.137	0.003	0.201	0.002	0.135	0.004	0.199
V03041.00-V03048.00	3857	321.0	8.0	0.012	0.856	0.064	0.257	0.136	0.367	0.060	0.254	0.132	0.366
V03041.A0-V03041.B0	7710	326.0	8.0	0.040	1.562	0.001	0.030	0.003	0.045	0.001	0.033	0.003	0.048
V03041.B0-V03041.C0	7711	279.3	8.0	0.021	1.132	0.003	0.057	0.007	0.086	0.004	0.065	0.008	0.092
V03041.C0-V03041.F0	7713	279.3	8.0	0.020	1.104	0.012	0.136	0.031	0.199	0.017	0.139	0.036	0.200
V03041.D0-V03041.E0	7714	73.0	8.0	0.007	0.653	0.042	0.173	0.077	0.234	0.034	0.155	0.069	0.221
V03041.E0-V03041.F0	7716	98.8	8.0	0.007	0.653	0.043	0.186	0.080	0.260	0.034	0.174	0.071	0.251
V03041.F0-V03041.H0	7715	84.2	8.0	0.007	0.653	0.056	0.216	0.114	0.308	0.052	0.209	0.110	0.302
V03041.G0-V03041.H0	7712	169.3	8.0	0.027	1.283	0.001	0.126	0.003	0.184	0.001	0.123	0.003	0.181
V03041.H0-V03041.I0	7717	55.8	8.0	0.008	0.699	0.057	0.175	0.118	0.249	0.053	0.169	0.115	0.245
V03041.I0-V03041.00	3858	276.0	8.0	0.069	2.052	0.057	0.150	0.121	0.217	0.054	0.145	0.117	0.214
V03042.00-V03043.00	3854	225.0	8.0	0.082	2.236	0.001	0.025	0.003	0.035	0.002	0.028	0.004	0.038
V03043.00-V03046.00	3851	310.0	8.0	0.102	2.494	0.004	0.034	0.008	0.050	0.005	0.041	0.009	0.055

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V03044.00-V03045.00	3848	225.0	8.0	0.119	2.694	0.001	0.019	0.003	0.032	0.005	0.037	0.007	0.044
V03045.00-V03046.00	3849	348.0	8.0	0.073	2.110	0.002	0.031	0.006	0.050	0.007	0.046	0.011	0.059
V03046.00-V03047.00	3852	310.0	8.0	0.038	1.522	0.007	0.066	0.017	0.100	0.012	0.083	0.022	0.112
V03047.00-V03048.00	3853	317.0	8.0	0.004	0.494	0.009	0.212	0.021	0.303	0.014	0.222	0.027	0.312
V03048.00-V03049.00	3863	46.0	8.0	0.003	0.428	0.074	0.245	0.161	0.353	0.076	0.249	0.163	0.356
V03049.00-V03054.00	3843	352.0	8.0	0.056	1.848	0.103	0.184	0.233	0.277	0.116	0.195	0.246	0.285
V03050.00-V03051.00	3847	110.0	8.0	0.052	1.781	0.001	0.021	0.003	0.037	0.001	0.025	0.003	0.039
V03051.00-V03052.00	3842	185.0	8.0	0.046	1.675	0.002	0.034	0.006	0.057	0.003	0.039	0.007	0.060
V03052.00-V03053.00	3844	303.0	8.0	0.048	1.711	0.004	0.034	0.010	0.054	0.004	0.037	0.010	0.056
V03053.00-V03054.00	3845	50.0	8.0	0.046	1.675	0.005	0.116	0.014	0.176	0.006	0.123	0.014	0.181
V03054.00-V03055.00	3846	272.0	8.0	0.022	1.158	0.109	0.263	0.250	0.401	0.124	0.280	0.264	0.413
V03055.00-V03060.00	3836	179.0	8.0	0.010	0.781	0.112	0.255	0.254	0.388	0.126	0.270	0.268	0.399
V03056.00-V03058.00	3838	89.0	8.0	0.004	0.494	0.001	0.035	0.003	0.057	0.001	0.028	0.003	0.053
V03057.00-V03058.00	3833	89.0	8.0	0.004	0.494	0.001	0.034	0.003	0.056	0.001	0.036	0.003	0.057
V03058.00-V03059.00	3834	212.0	8.0	0.178	3.295	0.003	0.029	0.009	0.048	0.003	0.028	0.009	0.048
V03059.00-V03060.00	3837	151.0	8.0	0.065	1.991	0.005	0.113	0.013	0.173	0.004	0.117	0.012	0.176
V03060.00-V03061.00	3828	224.0	8.0	0.036	1.482	0.117	0.414	0.270	0.623	0.131	0.437	0.283	0.640
V03061.00-V03064.00	3829	162.0	8.0	0.000	0.000	0.119	0.465	0.273	0.707	0.133	0.491	0.287	0.727
V03062.00-V03063.00	3825	250.0	8.0	0.118	2.683	0.001	0.018	0.003	0.030	0.001	0.020	0.003	0.031
V03063.00-V03064.00	3827	265.0	8.0	0.155	3.075	0.002	0.156	0.006	0.245	0.003	0.166	0.007	0.253
V03064.00-V03065.00	3830	210.0	8.0	0.007	0.653	0.122	0.378	0.283	0.595	0.137	0.403	0.298	0.613
V03065.00-V03072.00	3165	225.0	8.0	0.004	0.494	0.124	0.331	0.286	0.517	0.139	0.352	0.302	0.532
V03066.00-V03070.00	3172	115.0	8.0	0.004	0.494	0.002	0.044	0.004	0.064	0.003	0.054	0.005	0.070
V03067.00-V03068.00	3826	228.0	8.0	0.118	2.683	0.001	0.031	0.003	0.047	0.002	0.033	0.004	0.048
V03068.00-V03069.00	3832	176.0	8.0	0.011	0.819	0.003	0.061	0.007	0.092	0.003	0.063	0.008	0.093
V03069.00-V03070.00	3173	264.0	8.0	0.010	0.781	0.005	0.055	0.011	0.082	0.005	0.057	0.011	0.083
V03070.00-V03071.A0	3164	100.0	8.0	0.133	2.848	0.008	0.050	0.018	0.075	0.009	0.053	0.019	0.077
V03071.00-V03072.00	5954	110.0	8.0	0.017	1.018	0.010	0.133	0.024	0.204	0.011	0.141	0.025	0.209
V03071.A0-V03071.00	5947	71.0	8.0	0.012	0.856	0.009	0.069	0.021	0.105	0.010	0.072	0.022	0.107
V03072.00-V03073.00	3167	124.0	8.0	0.042	1.601	0.134	0.197	0.314	0.302	0.151	0.209	0.330	0.310
V03073.00-V03080.00	3170	125.0	8.0	0.041	1.581	0.136	0.599	0.317	0.652	0.153	0.605	0.334	0.656
V03074.00-V03076.00	3839	287.0	8.0	0.068	2.037	0.002	0.029	0.004	0.040	0.002	0.030	0.004	0.041
V03075.00-V03076.00	3841	206.0	8.0	0.023	1.184	0.002	0.033	0.004	0.046	0.002	0.035	0.004	0.047
V03076.00-V03077.00	3840	280.0	8.0	0.114	2.637	0.006	0.042	0.012	0.058	0.006	0.045	0.013	0.060
V03077.00-V03080.00	3166	350.0	8.0	0.050	1.746	0.008	0.525	0.016	0.534	0.009	0.526	0.018	0.535
V03078.00-V03079.00	3162	253.0	8.0	0.004	0.494	0.001	0.028	0.003	0.054	0.001	0.033	0.003	0.055
V03079.00-V03080.00	3163	350.0	8.0	0.025	1.235	0.001	0.511	0.005	0.523	0.003	0.518	0.007	0.527
V03080.00-V03111.00	3171	160.0	8.0	-0.011	Adverse	0.145	0.620	0.341	0.688	0.165	0.629	0.361	0.695
V03081.00-V03082.00	3908	233.0	8.0	0.029	1.330	0.001	0.031	0.003	0.052	0.001	0.034	0.003	0.054
V03082.00-V03083.00	3899	300.0	8.0	0.008	0.699	0.002	0.043	0.006	0.072	0.003	0.046	0.007	0.073
V03083.00-V03084.00	3898	306.0	8.0	0.020	1.104	0.004	0.041	0.010	0.066	0.004	0.044	0.010	0.068
V03084.00-V03086.00	3893	365.0	8.0	0.079	2.195	0.006	0.051	0.014	0.074	0.007	0.057	0.015	0.079
V03085.00-V03086.00	3894	306.0	8.0	0.059	1.897	0.005	0.050	0.009	0.070	0.007	0.059	0.012	0.077
V03085.A0-V03085.00	3904	181.3	8.0	0.031	1.375	0.002	0.034	0.005	0.045	0.005	0.045	0.007	0.054
V03086.00-V03088.00	3895	248.0	8.0	0.041	1.581	0.013	0.066	0.028	0.094	0.017	0.075	0.032	0.101
V03087.00-V03088.00	3896	36.0	8.0	0.001	0.247	0.001	0.056	0.003	0.084	0.002	0.064	0.004	0.089
V03088.00-V03096.00	3872	336.0	8.0	0.050	1.746	0.016	0.136	0.034	0.208	0.020	0.151	0.039	0.218
V03089.00-V03090.00	4040	243.8	8.0	0.059	1.897	0.003	0.035	0.009	0.056	0.004	0.036	0.010	0.057
V03089.A0-V03089.00	3892	234.5	8.0	0.043	1.620	0.001	0.027	0.006	0.046	0.002	0.028	0.006	0.047
V03089.B0-V03089.A0	7344	2.4	8.0	0.001	0.247	0.000	0.011	0.002	0.035	0.000	0.012	0.002	0.035
V03090.00-V03095.00	3873	310.0	8.0	0.048	1.711	0.005	0.061	0.013	0.098	0.005	0.064	0.013	0.100
V03091.00-V03092.00	3866	104.0	8.0	0.010	0.781	0.001	0.032	0.003	0.048	0.001	0.032	0.003	0.048
V03092.00-V03093.00	3864	292.0	8.0	0.075	2.139	0.003	0.055	0.007	0.082	0.003	0.059	0.008	0.085
V03093.00-V03094.00	3868	160.0	8.0	0.011	0.819	0.005	0.053	0.011	0.079	0.005	0.056	0.011	0.081
V03094.00-V03095.D0	3869	207.0	8.0	0.035	1.461	0.005	0.036	0.014	0.057	0.006	0.038	0.014	0.059

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V03095.00-V03096.00	3876	310.0	8.0	0.020	1.104	0.015	0.144	0.042	0.226	0.017	0.157	0.044	0.235
V03095.A0-V03095.B0	3865	350.0	8.0	0.085	2.277	0.002	0.038	0.004	0.056	0.002	0.043	0.004	0.060
V03095.B0-V03095.C0	3880	124.0	8.0	0.004	0.494	0.003	0.062	0.007	0.095	0.004	0.068	0.008	0.099
V03095.C0-V03095.D0	3871	66.0	8.0	0.004	0.494	0.004	0.059	0.010	0.092	0.004	0.062	0.011	0.094
V03095.D0-V03095.00	3870	207.0	8.0	0.073	2.110	0.010	0.065	0.026	0.106	0.011	0.070	0.028	0.109
V03096.00-V03099.00	3877	290.0	8.0	0.011	0.819	0.033	0.135	0.080	0.208	0.040	0.148	0.087	0.216
V03097.00-V03098.00	3879	340.0	8.0	0.048	1.711	0.003	0.031	0.005	0.042	0.003	0.036	0.005	0.045
V03098.00-V03099.00	3874	230.0	8.0	0.076	2.153	0.004	0.048	0.008	0.071	0.006	0.054	0.010	0.075
V03099.00-V03100.00	3878	290.0	8.0	0.013	0.890	0.038	0.104	0.091	0.160	0.046	0.115	0.100	0.167
V03100.00-V03104.00	3875	802.0	8.0	0.012	0.856	0.038	0.149	0.094	0.230	0.048	0.164	0.103	0.240
V03101.00-V03102.00	3881	326.0	8.0	0.078	2.181	0.000	0.014	0.002	0.033	0.000	0.014	0.002	0.033
V03102.00-V03103.00	3882	326.0	8.0	0.043	1.620	0.002	0.040	0.006	0.061	0.002	0.040	0.006	0.061
V03103.00-V03104.00	3883	277.0	8.0	0.014	0.924	0.005	0.103	0.011	0.157	0.005	0.111	0.011	0.162
V03104.00-V03108.00	3884	340.0	8.0	0.013	0.890	0.045	0.192	0.109	0.294	0.055	0.210	0.119	0.306
V03105.00-V03106.00	3887	60.0	8.0	0.018	1.048	0.002	0.033	0.004	0.045	0.002	0.032	0.004	0.045
V03106.00-V03107.00	3891	61.0	8.0	0.046	1.675	0.002	0.032	0.006	0.054	0.003	0.036	0.007	0.056
V03107.00-V03108.00	3890	292.0	8.0	0.013	0.890	0.003	0.137	0.009	0.212	0.004	0.150	0.010	0.220
V03108.00-V03109.00	3178	55.0	8.0	0.004	0.494	0.050	0.190	0.122	0.292	0.060	0.207	0.132	0.303
V03109.00-V03110.00	3176	180.0	8.0	0.019	1.077	0.050	0.149	0.124	0.232	0.060	0.162	0.134	0.241
V03110.00-V03111.00	3177	83.0	8.0	0.016	0.988	0.052	0.195	0.128	0.305	0.062	0.210	0.138	0.316
V03111.00-V03112.00	4039	70.0	8.0	0.024	1.210	0.196	0.258	0.470	0.409	0.227	0.278	0.501	0.423
V03112.00-V03113.00	3174	191.0	8.0	0.023	1.184	0.198	0.282	0.474	0.451	0.228	0.305	0.504	0.468
V03113.00-V03114.00	3175	184.0	8.0	0.020	1.104	0.198	0.312	0.476	0.506	0.231	0.340	0.509	0.529
V03114.00-V03115.00	3824	149.0	8.0	0.011	0.819	0.198	0.339	0.478	0.558	0.235	0.372	0.515	0.585
V03115.00-V03128.00	3154	214.0	8.0	0.010	0.781	0.198	0.390	0.480	0.737	0.236	0.434	0.518	0.797
V03116.00-V03117.00	3888	251.0	8.0	0.038	1.522	0.000	0.027	0.002	0.048	0.000	0.038	0.002	0.057
V03117.00-V03118.00	3160	349.0	8.0	0.082	2.236	0.013	0.064	0.021	0.082	0.026	0.087	0.034	0.101
V03117.A0-V03117.B0	3886	181.0	8.0	0.036	1.482	0.009	0.056	0.011	0.063	0.022	0.086	0.025	0.090
V03117.B0-V03117.00	3889	188.0	8.0	0.053	1.798	0.011	0.055	0.015	0.066	0.024	0.080	0.028	0.087
V03118.00-V03129.00	3159	215.0	8.0	0.037	1.502	0.017	0.335	0.029	0.548	0.031	0.393	0.043	0.558
V03118.A0-V03118.00	7053	303.8	8.0	0.012	0.856	0.001	0.050	0.003	0.070	0.002	0.068	0.004	0.083
V03121.00-V03124.00	1965	281.0	8.0	0.064	1.976	0.005	0.040	0.011	0.061	0.009	0.054	0.015	0.071
V03121.A0-V03121.00	7669	239.4	8.0	0.045	1.657	0.002	0.032	0.004	0.045	0.002	0.037	0.004	0.049
V03121.B0-V03121.00	3168	295.2	8.0	0.067	2.022	0.001	0.029	0.003	0.042	0.005	0.041	0.007	0.052
V03122.00-V03123.00	1964	222.0	8.0	0.066	2.006	0.001	0.021	0.003	0.034	0.004	0.032	0.006	0.042
V03123.00-V03124.00	1966	222.0	8.0	0.079	2.195	0.002	0.033	0.006	0.054	0.004	0.047	0.009	0.063
V03124.00-V03125.00	1967	48.0	8.0	0.023	1.184	0.007	0.044	0.019	0.072	0.015	0.061	0.027	0.083
V03125.00-V03126.00	1962	147.0	8.0	0.064	1.976	0.007	0.060	0.022	0.103	0.015	0.084	0.029	0.118
V03126.00-V03127.00	3156	277.0	8.0	0.007	0.653	0.007	0.077	0.024	0.183	0.015	0.111	0.031	0.575
V03127.00-V03128.00	3157	69.0	8.0	0.006	0.605	0.008	0.258	0.031	0.573	0.018	0.305	0.070	1.000
V03128.00-V03129.00	3155	266.0	8.0	0.004	0.494	0.206	0.517	0.505	0.955	0.254	0.590	0.558	1.000
V03129.00-V03130.00	1945	347.0	8.0	0.005	0.552	0.224	0.422	0.536	0.694	0.286	0.483	0.603	0.707
V03130.00-V03131.00	1946	209.0	8.0	0.047	1.693	0.225	0.247	0.539	0.390	0.287	0.280	0.606	0.415
V03131.00-V03149.00	1947	60.5	8.0	0.023	1.184	0.225	0.255	0.541	0.401	0.288	0.288	0.609	0.428
V03137.00-V03138.00	1960	22.0	8.0	0.010	0.781	0.003	0.071	0.005	0.079	0.003	0.043	0.005	0.053
V03138.00-V03139.00	1961	101.0	8.0	0.024	1.210	0.029	0.091	0.033	0.097	0.006	0.043	0.010	0.056
V03139.00-V03145.00	1948	140.0	8.0	0.079	2.195	0.029	0.123	0.035	0.145	0.006	0.107	0.012	0.132
V03140.00-V03141.00	3153	128.0	8.0	0.025	1.235	0.000	0.000	0.002	0.036	0.000	0.000	0.002	0.036
V03141.00-V03143.00	3158	32.0	8.0	0.010	0.781	0.000	0.000	0.004	0.067	0.000	0.000	0.004	0.059
V03142.00-V03143.00	7517	60.0	8.0	0.019	1.077	0.000	0.000	0.002	0.062	0.000	0.000	0.002	0.054
V03143.00-V03144.00	1963	126.0	8.0	0.008	0.699	0.000	0.000	0.008	0.076	0.000	0.047	0.008	0.092
V03144.00-V03145.00	1955	225.0	8.0	0.037	1.502	0.000	0.082	0.010	0.130	0.027	0.134	0.037	0.159
V03145.00-V03148.00	1956	167.0	8.0	0.010	0.781	0.029	0.132	0.048	0.167	0.033	0.140	0.052	0.173
V03146.00-V03147.00	1943	264.0	8.0	0.044	1.638	0.000	0.012	0.002	0.036	0.001	0.011	0.002	0.036
V03147.00-V03148.00	1944	255.0	8.0	0.028	1.307	0.000	0.056	0.004	0.087	0.000	0.058	0.004	0.090

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V03148.00-V03149.00	1906	75.2	8.0	0.023	1.184	0.029	0.181	0.054	0.272	0.033	0.201	0.058	0.288
V03149.00-V03150.00	1905	175.4	8.0	0.046	1.675	0.255	0.272	0.598	0.422	0.322	0.308	0.670	0.450
V03150.00-V03154.A0	1951	88.0	12.0	0.015	2.820	0.255	0.190	0.600	0.292	0.328	0.216	0.679	0.312
V03151.00-V03152.00	1957	127.0	8.0	0.017	1.018	0.001	0.025	0.003	0.040	0.001	0.025	0.003	0.041
V03152.00-V03153.C0	1958	136.3	8.0	0.101	2.482	0.002	0.110	0.007	0.165	0.003	0.104	0.007	0.161
V03153.00-V03154.00	1952	58.0	12.0	0.008	2.060	0.006	0.123	0.019	0.191	0.007	0.137	0.019	0.202
V03153.A0-V03153.C0	1949	253.0	8.0	0.152	3.045	0.002	0.108	0.004	0.160	0.002	0.099	0.003	0.155
V03153.B0-V03153.C0	1959	142.0	8.0	0.110	2.590	0.001	0.104	0.003	0.158	0.001	0.097	0.003	0.155
V03153.C0-V03153.00	1950	217.0	8.0	0.000	0.000	0.006	0.124	0.016	0.189	0.005	0.119	0.016	0.186
V03154.00-V03155.00	3501	330.0	12.0	0.015	2.820	0.273	0.210	0.636	0.322	0.352	0.238	0.721	0.344
V03154.A0-V03154.B0	1953	96.0	12.0	0.017	3.002	0.255	0.188	0.602	0.289	0.332	0.214	0.684	0.309
V03154.B0-V03154.00	1954	32.0	12.0	0.005	1.628	0.255	0.198	0.604	0.304	0.332	0.224	0.686	0.324
V03155.00-V03156.00	3496	79.0	12.0	0.011	2.415	0.273	0.208	0.638	0.321	0.358	0.239	0.729	0.344
V03156.00-V03157.00	3489	277.0	12.0	0.015	2.820	0.274	0.211	0.641	0.324	0.362	0.244	0.735	0.349
V03157.00-V03158.00	3490	236.0	12.0	0.015	2.820	0.283	0.215	0.653	0.329	0.379	0.249	0.754	0.673
V03158.00-V03161.00	3491	126.0	12.0	0.015	2.820	0.283	0.225	0.655	0.346	0.383	0.262	0.760	1.000
V03159.00-V03160.00	3141	207.0	8.0	0.018	1.048	0.000	0.000	0.002	0.042	0.002	0.032	0.004	0.521
V03160.00-V03161.00	3492	207.0	8.0	0.011	0.819	0.000	0.176	0.004	0.297	0.002	0.222	0.057	1.000
V03161.00-V03166.A0	3151	187.0	12.0	0.011	2.415	0.284	0.257	0.662	0.407	0.387	0.301	0.754	1.000
V03162.00-V03163.00	1942	362.0	8.0	0.016	0.988	0.002	0.042	0.007	0.060	0.002	0.037	0.006	0.057
V03162.A0-V03162.00	3152	188.0	8.0	0.004	0.494	0.001	0.035	0.003	0.057	0.001	0.031	0.003	0.054
V03163.00-V03164.00	3495	350.0	8.0	0.061	1.929	0.008	0.049	0.014	0.064	0.007	0.046	0.013	0.062
V03164.00-V03165.00	3488	351.0	8.0	0.065	1.991	0.009	0.049	0.017	0.066	0.008	0.047	0.017	0.065
V03165.00-V03166.A0	3493	307.0	8.0	0.083	2.250	0.009	0.233	0.020	0.372	0.008	0.269	0.019	0.532
V03166.00-V03167.00	3147	396.0	12.0	0.010	2.303	0.307	0.245	0.699	0.914	0.409	0.283	0.758	1.000
V03166.A0-V03166.00	3150	159.8	12.0	0.006	1.784	0.293	0.269	0.713	0.619	0.395	0.313	0.756	1.000
V03166.B0-V03166.00	3149	388.0	8.0	0.006	0.605	0.014	0.245	0.016	0.555	0.013	0.273	0.117	1.000
V03167.00-V03191.00	3148	322.0	12.0	0.013	2.625	0.308	0.284	0.701	1.000	0.414	0.339	0.756	1.000
V03168.00-V03172.00	3730	314.0	8.0	0.007	0.653	0.000	0.038	0.002	0.086	0.003	0.077	0.005	0.105
V03169.00-V03170.00	3734	240.0	6.0	0.002	0.162	0.002	0.079	0.006	0.131	0.004	0.104	0.008	0.147
V03169.A0-V03169.00	3831	8.0	6.0	0.000	0.000	0.001	0.108	0.004	0.184	0.002	0.140	0.004	0.205
V03170.00-V03171.00	3731	31.0	6.0	0.023	0.550	0.002	0.040	0.009	0.066	0.006	0.055	0.012	0.075
V03171.00-V03172.00	3732	145.0	6.0	0.155	1.428	0.006	0.074	0.014	0.121	0.009	0.099	0.017	0.138
V03172.00-V03173.00	3733	332.0	8.0	0.004	0.494	0.006	0.079	0.018	0.139	0.012	0.112	0.024	0.160
V03173.00-V03175.00	3737	94.0	8.0	0.003	0.428	0.006	0.097	0.020	0.180	0.013	0.141	0.027	0.207
V03174.00-V03175.00	3736	257.1	8.0	0.065	1.991	0.003	0.071	0.014	0.136	0.008	0.106	0.019	0.157
V03174.A0-V03174.B0	3134	184.0	8.0	0.007	0.653	0.001	0.035	0.003	0.053	0.002	0.041	0.004	0.057
V03174.B0-V03174.C0	3749	124.0	8.0	0.055	1.832	0.002	0.028	0.007	0.043	0.003	0.029	0.007	0.045
V03174.C0-V03174.D0	3739	68.0	8.0	0.045	1.657	0.003	0.027	0.009	0.045	0.004	0.031	0.010	0.047
V03174.D0-V03174.00	3735	91.0	8.0	0.081	2.223	0.003	0.028	0.011	0.052	0.005	0.039	0.013	0.059
V03175.00-V03176.00	3738	267.0	8.0	0.006	0.605	0.009	0.086	0.036	0.166	0.021	0.129	0.048	0.191
V03176.00-V03182.00	3740	250.0	8.0	0.026	1.259	0.009	0.074	0.038	0.127	0.023	0.101	0.052	0.144
V03177.00-V03180.00	3744	181.0	8.0	0.071	2.081	0.001	0.029	0.003	0.049	0.002	0.034	0.004	0.052
V03178.00-V03179.00	3746	22.0	8.0	0.011	0.819	0.005	0.039	0.013	0.064	0.006	0.046	0.015	0.068
V03178.A0-V03178.B0	3135	94.0	8.0	0.002	0.349	0.001	0.059	0.003	0.087	0.002	0.066	0.004	0.092
V03178.B0-V03178.C0	3747	201.0	8.0	0.002	0.349	0.004	0.093	0.008	0.136	0.004	0.103	0.008	0.143
V03178.C0-V03178.00	3748	105.0	8.0	0.002	0.349	0.004	0.074	0.010	0.112	0.006	0.086	0.012	0.120
V03179.00-V03180.00	3745	338.0	8.0	0.039	1.542	0.005	0.043	0.016	0.071	0.007	0.049	0.017	0.075
V03180.00-V03181.00	3743	349.0	8.0	0.082	2.236	0.007	0.054	0.021	0.079	0.009	0.059	0.024	0.082
V03181.00-V03182.00	3741	312.0	8.0	0.085	2.277	0.021	0.077	0.037	0.112	0.024	0.090	0.040	0.121
V03182.00-V03183.00	3742	243.0	8.0	0.064	1.976	0.031	0.130	0.078	0.300	0.050	0.166	0.097	0.575
V03183.00-V03184.00	3136	362.0	8.0	0.005	0.552	0.032	0.164	0.089	0.735	0.052	0.209	0.130	1.000
V03184.00-V03187.00	3138	105.5	8.0	0.007	0.653	0.034	0.177	0.142	1.000	0.054	0.217	0.190	1.000
V03185.00-V03186.00	3137	299.0	8.0	0.057	1.865	0.020	0.082	0.037	0.111	0.024	0.089	0.040	0.551
V03185.A0-V03185.B0	3504	270.0	8.0	0.103	2.507	0.002	0.029	0.004	0.038	0.002	0.035	0.004	0.043

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V03185.B0-V03185.D0	3494	295.0	8.0	0.082	2.236	0.005	0.045	0.009	0.064	0.010	0.062	0.014	0.076
V03185.C0-V03185.D0	4038	3.0	8.0	0.000	0.000	0.001	0.051	0.003	0.080	0.001	0.071	0.003	0.092
V03185.D0-V03185.F0	3502	119.0	8.0	0.017	1.018	0.006	0.074	0.014	0.100	0.011	0.074	0.019	0.099
V03185.E0-V03185.F0	3503	180.0	8.0	0.098	2.445	0.013	0.073	0.015	0.087	0.001	0.042	0.003	0.063
V03185.F0-V03185.G0	3143	225.0	8.0	0.020	1.104	0.019	0.092	0.032	0.116	0.012	0.081	0.024	0.108
V03185.G0-V03185.00	3142	306.0	8.0	0.033	1.419	0.019	0.082	0.034	0.106	0.021	0.084	0.035	0.108
V03186.00-V03187.00	3139	126.0	8.0	0.022	1.158	0.020	0.145	0.039	0.562	0.024	0.168	0.104	1.000
V03187.00-V03188.00	3140	299.0	8.0	0.007	0.653	0.054	0.204	0.177	1.000	0.078	0.245	0.221	1.000
V03188.00-V03189.00	3144	167.0	8.0	0.005	0.552	0.054	0.227	0.180	1.000	0.078	0.269	0.223	1.000
V03189.00-V03190.00	3145	146.0	8.0	0.005	0.552	0.056	0.212	0.209	1.000	0.079	0.252	0.227	1.000
V03190.00-V03191.00	3146	290.0	8.0	0.010	0.781	0.056	0.342	0.215	1.000	0.083	0.415	0.232	1.000
V04001.00-V04002.00	173	150.0	8.0	0.106	2.543	0.001	0.014	0.003	0.029	0.006	0.037	0.008	0.044
V04002.00-V04004.00	3751	231.3	8.0	0.106	2.543	0.001	0.021	0.005	0.041	0.006	0.059	0.011	0.068
V04003.00-V04004.00	3752	250.0	6.0	0.032	0.649	0.002	0.039	0.004	0.060	0.002	0.077	0.004	0.090
V04004.00-V04005.00	172	69.0	8.0	0.046	1.675	0.003	0.029	0.011	0.053	0.035	0.086	0.043	0.096
V04005.00-V04006.00	170	263.0	8.0	0.077	2.167	0.004	0.037	0.014	0.066	0.037	0.102	0.048	0.115
V04006.00-V04007.00	3754	272.0	8.0	0.038	1.522	0.005	0.044	0.017	0.079	0.041	0.125	0.053	0.141
V04007.00-V04011.00	3756	260.0	8.0	0.037	1.502	0.006	0.052	0.021	0.083	0.044	0.117	0.058	0.134
V04008.00-V04009.00	7518	252.0	8.0	0.031	1.375	0.001	0.031	0.003	0.043	0.002	0.032	0.004	0.043
V04009.00-V04010.00	7519	302.0	8.0	0.102	2.494	0.009	0.049	0.013	0.060	0.007	0.044	0.011	0.056
V04010.00-V04011.00	3750	130.0	8.0	0.058	1.881	0.011	0.056	0.017	0.076	0.009	0.073	0.015	0.089
V04011.00-V04018.00	169	11.0	8.0	0.008	0.699	0.018	0.077	0.040	0.117	0.053	0.122	0.076	0.150
V04012.00-V04014.A0	4042	81.0	8.0	0.010	0.781	0.000	0.020	0.002	0.048	0.000	0.020	0.002	0.049
V04013.00-V04014.00	4006	238.0	8.0	0.122	2.728	0.001	0.027	0.003	0.048	0.002	0.028	0.004	0.049
V04014.00-V04015.00	4043	360.0	8.0	0.021	1.132	0.003	0.046	0.011	0.081	0.003	0.049	0.011	0.083
V04014.A0-V04014.00	7429	36.0	8.0	0.004	0.494	0.001	0.030	0.005	0.063	0.001	0.031	0.005	0.063
V04015.00-V04016.00	3753	350.0	8.0	0.017	1.018	0.005	0.052	0.016	0.087	0.007	0.059	0.017	0.091
V04016.00-V04017.00	171	350.0	8.0	0.053	1.798	0.007	0.046	0.020	0.074	0.010	0.053	0.022	0.078
V04017.00-V04018.00	3755	290.0	8.0	0.116	2.660	0.009	0.070	0.024	0.108	0.012	0.099	0.027	0.128
V04018.00-V04019.00	3184	355.0	8.0	0.032	1.397	0.028	0.106	0.067	0.161	0.066	0.160	0.106	0.200
V04019.00-V04023.00	3180	350.0	8.0	0.020	1.104	0.031	0.141	0.072	0.216	0.071	0.214	0.112	0.271
V04020.00-V04021.00	3185	140.0	8.0	0.071	2.081	0.003	0.028	0.005	0.037	0.003	0.030	0.005	0.039
V04021.00-V04022.00	3183	296.0	8.0	0.138	2.901	0.004	0.030	0.008	0.045	0.005	0.036	0.009	0.049
V04022.00-V04023.00	3181	66.0	8.0	0.030	1.353	0.004	0.100	0.010	0.156	0.006	0.149	0.012	0.192
V04023.00-V04024.00	3182	293.0	8.0	0.005	0.552	0.035	0.171	0.084	0.265	0.083	0.269	0.132	0.340
V04024.00-V04025.00	4045	308.0	8.0	0.005	0.552	0.037	0.181	0.088	0.282	0.094	0.290	0.146	0.366
V04025.00-V04026.00	4046	122.0	8.0	0.004	0.494	0.037	0.197	0.090	0.300	0.094	0.305	0.148	0.383
V04026.00-V04031.00	4047	92.0	8.0	0.004	0.494	0.044	0.197	0.100	0.296	0.095	0.288	0.151	0.366
V04028.00-V04030.C0	174	20.0	6.0	0.026	0.585	0.011	0.074	0.023	0.111	0.019	0.098	0.031	0.128
V04028.A0-V04028.D0	453	16.0	8.0	0.011	0.819	0.000	0.027	0.002	0.039	0.006	0.040	0.008	0.048
V04028.B0-V04028.C0	454	81.0	8.0	0.056	1.848	0.009	0.044	0.015	0.056	0.009	0.044	0.015	0.056
V04028.BB-V04028.B0	7675	56.0	8.0	0.020	1.104	0.009	0.053	0.011	0.059	0.002	0.037	0.005	0.047
V04028.C0-V04028.D0	7078	106.0	8.0	0.078	2.181	0.009	0.048	0.017	0.066	0.009	0.048	0.017	0.066
V04028.D0-V04028.00	7674	293.0	6.0	0.078	1.013	0.010	0.071	0.021	0.100	0.010	0.082	0.021	0.108
V04029.00-V04030.00	4048	221.0	8.0	0.008	0.699	0.001	0.068	0.003	0.109	0.001	0.085	0.003	0.120
V04030.00-V04031.00	3179	77.0	8.0	0.006	0.605	0.013	0.144	0.036	0.227	0.024	0.201	0.046	0.268
V04030.A0-V04030.B0	3169	162.3	6.0	0.125	1.282	0.001	0.023	0.003	0.047	0.001	0.035	0.003	0.053
V04030.B0-V04030.C0	7676	145.3	6.0	0.043	0.752	0.001	0.053	0.005	0.090	0.004	0.077	0.008	0.105
V04030.C0-V04030.00	4044	311.6	6.0	0.075	0.993	0.012	0.108	0.031	0.172	0.022	0.144	0.041	0.196
V04033.00-V04034.00	4031	172.0	8.0	0.053	1.798	0.002	0.035	0.004	0.053	0.004	0.049	0.006	0.062
V04034.00-V04035.00	4020	257.0	8.0	0.008	0.699	0.003	0.047	0.007	0.072	0.005	0.063	0.010	0.082
V04035.00-V04038.00	4024	106.0	8.0	0.014	0.924	0.004	0.048	0.010	0.075	0.007	0.061	0.013	0.083
V04036.00-V04037.00	4030	170.0	8.0	0.022	1.158	0.001	0.034	0.003	0.050	0.001	0.034	0.004	0.051
V04037.00-V04038.00	4021	173.0	8.0	0.017	1.018	0.003	0.046	0.007	0.069	0.003	0.050	0.007	0.072
V04038.00-V04039.00	4025	205.0	8.0	0.046	1.675	0.008	0.059	0.021	0.090	0.011	0.067	0.024	0.095

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V04039.00-V04040.00	4007	269.0	8.0	0.021	1.132	0.010	0.078	0.025	0.119	0.014	0.089	0.028	0.126
V04040.00-V04041.00	4014	276.0	8.0	0.010	0.781	0.012	0.088	0.029	0.131	0.016	0.098	0.032	0.138
V04041.00-V04042.00	4015	350.0	8.0	0.027	1.283	0.016	0.078	0.034	0.112	0.019	0.086	0.038	0.118
V04042.00-V04043.00	4010	244.0	8.0	0.062	1.945	0.019	0.106	0.039	0.151	0.023	0.117	0.044	0.158
V04043.00-V04044.00	4012	205.0	8.0	0.010	0.781	0.021	0.112	0.044	0.159	0.026	0.124	0.049	0.168
V04044.00-V04060.00	3940	350.0	8.0	0.047	1.693	0.023	0.161	0.048	0.224	0.030	0.178	0.054	0.237
V04045.00-V04046.00	4022	339.0	8.0	0.023	1.184	0.002	0.039	0.005	0.053	0.003	0.040	0.005	0.054
V04046.00-V04047.00	4026	307.0	8.0	0.020	1.104	0.004	0.052	0.008	0.070	0.004	0.053	0.009	0.071
V04047.00-V04048.00	4027	300.0	8.0	0.020	1.104	0.008	0.068	0.014	0.089	0.008	0.068	0.014	0.090
V04048.00-V04049.00	4008	300.0	8.0	0.014	0.924	0.011	0.094	0.019	0.124	0.011	0.096	0.019	0.126
V04049.00-V04050.00	4016	206.0	8.0	0.004	0.494	0.013	0.117	0.023	0.155	0.014	0.122	0.024	0.158
V04050.00-V04055.00	4017	315.0	8.0	0.004	0.494	0.016	0.168	0.028	0.226	0.017	0.176	0.030	0.232
V04051.00-V04052.00	4023	266.0	8.0	0.004	0.494	0.002	0.075	0.005	0.097	0.003	0.080	0.005	0.101
V04052.00-V04054.00	4028	252.0	8.0	0.004	0.494	0.005	0.070	0.009	0.093	0.006	0.076	0.010	0.098
V04053.00-V04054.00	4029	56.0	8.0	0.004	0.494	0.001	0.035	0.003	0.057	0.001	0.037	0.003	0.058
V04054.00-V04055.00	4009	264.0	8.0	0.072	2.096	0.007	0.128	0.015	0.176	0.008	0.134	0.016	0.181
V04055.00-V04056.00	4018	350.0	8.0	0.004	0.494	0.026	0.153	0.048	0.208	0.028	0.161	0.051	0.214
V04056.00-V04057.00	4019	234.0	8.0	0.040	1.562	0.028	0.109	0.052	0.148	0.031	0.115	0.056	0.152
V04057.00-V04058.00	4011	311.0	8.0	0.023	1.184	0.031	0.111	0.058	0.150	0.035	0.118	0.062	0.155
V04058.00-V04059.00	4013	166.0	8.0	0.050	1.746	0.033	0.098	0.062	0.132	0.039	0.105	0.068	0.137
V04059.00-V04060.00	3987	317.0	8.0	0.047	1.693	0.035	0.170	0.066	0.234	0.041	0.185	0.072	0.246
V04060.00-V04061.00	4004	321.0	8.0	0.011	0.819	0.062	0.186	0.120	0.258	0.075	0.204	0.132	0.271
V04061.00-V04062.00	4000	221.0	8.0	0.052	1.781	0.064	0.129	0.123	0.178	0.077	0.142	0.137	0.187
V04062.00-V04063.00	3991	328.0	8.0	0.062	1.945	0.066	0.141	0.127	0.195	0.081	0.157	0.143	0.206
V04063.00-V04064.00	3995	151.0	8.0	0.085	2.277	0.068	0.118	0.132	0.163	0.085	0.132	0.149	0.173
V04064.00-V04078.00	3997	273.0	8.0	0.083	2.250	0.068	0.244	0.134	0.352	0.085	0.275	0.151	0.376
V04065.00-V04066.00	3988	240.0	8.0	0.073	2.110	0.002	0.038	0.004	0.054	0.002	0.043	0.004	0.058
V04066.00-V04068.00	4005	156.0	8.0	0.013	0.890	0.003	0.044	0.007	0.064	0.004	0.051	0.009	0.069
V04067.00-V04068.00	3989	190.0	8.0	0.048	1.711	0.002	0.029	0.004	0.043	0.003	0.034	0.005	0.047
V04068.00-V04069.00	4001	145.0	8.0	0.102	2.494	0.006	0.049	0.014	0.074	0.008	0.055	0.016	0.078
V04069.00-V04071.00	4002	225.0	8.0	0.015	0.957	0.008	0.099	0.018	0.151	0.010	0.114	0.020	0.161
V04070.00-V04071.00	3992	105.0	8.0	0.002	0.349	0.001	0.087	0.003	0.136	0.002	0.103	0.004	0.147
V04071.00-V04072.00	4003	375.0	8.0	0.005	0.552	0.010	0.095	0.025	0.145	0.014	0.111	0.029	0.156
V04072.00-V04076.00	3993	218.0	8.0	0.069	2.052	0.013	0.074	0.029	0.110	0.017	0.083	0.033	0.116
V04073.00-V04074.00	3990	159.0	8.0	0.070	2.066	0.002	0.025	0.004	0.036	0.002	0.026	0.004	0.037
V04074.00-V04075.00	3994	271.0	8.0	0.101	2.482	0.004	0.033	0.008	0.047	0.004	0.036	0.008	0.049
V04075.00-V04076.00	3999	173.0	8.0	0.076	2.153	0.005	0.064	0.012	0.094	0.007	0.071	0.013	0.099
V04076.00-V04077.00	3996	178.0	8.0	0.044	1.638	0.019	0.076	0.044	0.112	0.025	0.086	0.050	0.119
V04077.00-V04078.00	3998	177.0	8.0	0.134	2.859	0.021	0.234	0.047	0.341	0.028	0.266	0.055	0.366
V04078.00-V04079.00	3937	108.0	8.0	0.003	0.428	0.089	0.300	0.183	0.436	0.114	0.341	0.209	0.467
V04079.00-V04080.00	3938	196.0	8.0	0.013	0.890	0.089	0.234	0.186	0.340	0.115	0.266	0.212	0.365
V04080.00-V04081.00	3939	251.0	8.0	0.009	0.741	0.089	0.230	0.188	0.336	0.115	0.262	0.214	0.360
V05001.00-V05006.00	4072	284.0	12.0	0.005	1.628	0.224	0.256	0.387	0.344	0.294	0.298	0.456	0.379
V05002.00-V05004.00	3186	383.0	8.0	0.012	0.856	0.000	0.065	0.002	0.114	0.008	0.114	0.010	0.149
V05003.00-V05004.O0	4051	313.0	8.0	0.001	0.247	0.001	0.089	0.003	0.131	0.001	0.090	0.003	0.133
V05004.00-V05005.00	3187	240.0	8.0	0.014	0.924	0.025	0.115	0.064	0.179	0.044	0.149	0.084	0.204
V05004.A0-V05004.B0	1743	294.0	8.0	0.092	2.369	0.002	0.029	0.004	0.041	0.003	0.033	0.005	0.044
V05004.B0-V05004.C0	3194	30.0	8.0	0.009	0.741	0.004	0.037	0.008	0.052	0.004	0.037	0.008	0.053
V05004.C0-V05004.D0	3195	178.0	8.0	0.073	2.110	0.005	0.046	0.011	0.066	0.004	0.045	0.010	0.066
V05004.D0-V05004.M0	4052	202.0	8.0	0.023	1.184	0.007	0.097	0.015	0.141	0.008	0.112	0.016	0.152
V05004.E0-V05004.G0	1745	206.6	8.0	0.018	1.048	0.004	0.047	0.006	0.060	0.005	0.057	0.007	0.068
V05004.F0-V05004.G0	1197	101.0	8.0	0.010	0.781	0.002	0.044	0.004	0.059	0.007	0.069	0.010	0.079
V05004.G0-V05004.I0	1744	229.0	8.0	0.065	1.991	0.009	0.054	0.017	0.073	0.017	0.073	0.025	0.088
V05004.GA-V05004.G0	1198	133.5	8.0	0.064	1.976	0.001	0.035	0.003	0.049	0.003	0.048	0.005	0.059
V05004.H0-V05004.I0	3196	101.0	8.0	0.011	0.819	0.002	0.048	0.004	0.066	0.006	0.071	0.008	0.084

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V05004.I0-V05004.J0	4053	149.0	8.0	0.060	1.913	0.013	0.073	0.025	0.101	0.025	0.098	0.037	0.120
V05004.J0-V05004.K0	3188	33.0	8.0	0.007	0.653	0.015	0.091	0.029	0.126	0.026	0.119	0.040	0.147
V05004.K0-V05004.L0	3189	33.0	8.0	0.007	0.653	0.015	0.083	0.032	0.117	0.026	0.107	0.043	0.135
V05004.L0-V05004.M0	3190	38.0	8.0	0.013	0.890	0.016	0.106	0.035	0.154	0.027	0.130	0.045	0.172
V05004.M0-V05004.N0	3191	98.0	8.0	0.006	0.605	0.023	0.137	0.052	0.203	0.035	0.168	0.064	0.225
V05004.N0-V05004.O0	3192	30.3	8.0	0.002	0.349	0.023	0.141	0.054	0.208	0.036	0.164	0.066	0.224
V05004.O0-V05004.00	3193	33.4	8.0	0.003	0.428	0.025	0.130	0.060	0.201	0.036	0.159	0.071	0.221
V05005.00-V05006.00	3197	203.0	8.0	0.023	1.184	0.034	0.253	0.075	0.352	0.050	0.300	0.091	0.389
V05006.00-V05007.00	4058	379.0	12.0	0.006	1.784	0.258	0.254	0.464	0.344	0.343	0.294	0.549	0.376
V05007.00-V05012.00	4061	379.0	12.0	0.008	2.060	0.275	0.254	0.483	0.338	0.350	0.286	0.558	0.364
V05008.00-V05011.00	1738	224.0	8.0	0.057	1.865	0.000	0.052	0.002	0.073	0.000	0.055	0.002	0.075
V05009.00-V05010.00	3198	273.0	8.0	0.008	0.699	0.000	0.071	0.002	0.093	0.000	0.055	0.002	0.081
V05010.00-V05011.00	4059	273.0	8.0	0.008	0.699	0.023	0.123	0.027	0.134	0.018	0.110	0.022	0.124
V05011.00-V05012.00	4062	228.0	8.0	0.016	0.988	0.023	0.247	0.031	0.319	0.025	0.274	0.034	0.341
V05012.00-V05013.00	1731	338.0	12.0	0.008	2.060	0.298	0.259	0.516	0.344	0.376	0.292	0.594	0.371
V05013.00-V05024.00	3769	343.0	12.0	0.008	2.060	0.298	0.280	0.519	0.375	0.377	0.316	0.597	0.405
V05014.00-V05015.00	1737	258.0	8.0	0.041	1.581	0.000	0.031	0.002	0.050	0.000	0.010	0.002	0.036
V05015.00-V05016.00	1739	83.0	8.0	0.022	1.158	0.007	0.053	0.012	0.066	0.001	0.024	0.005	0.046
V05016.00-V05017.00	1740	72.0	8.0	0.039	1.542	0.008	0.070	0.014	0.089	0.003	0.050	0.009	0.075
V05017.00-V05018.00	1741	90.0	8.0	0.008	0.699	0.013	0.096	0.022	0.123	0.007	0.072	0.016	0.106
V05018.00-V05019.00	1742	208.0	8.0	0.008	0.699	0.014	0.096	0.024	0.129	0.007	0.083	0.018	0.120
V05019.00-V05020.00	1734	210.0	8.0	0.008	0.699	0.014	0.124	0.026	0.165	0.013	0.126	0.025	0.167
V05020.00-V05021.00	1735	214.0	8.0	0.010	0.781	0.020	0.111	0.035	0.144	0.022	0.115	0.036	0.146
V05021.00-V05022.00	1728	271.9	8.0	0.113	2.625	0.027	0.096	0.043	0.121	0.027	0.101	0.043	0.125
V05022.00-V05023.00	3767	52.8	8.0	0.014	0.924	0.027	0.100	0.046	0.128	0.033	0.109	0.051	0.135
V05023.00-V05024.00	3770	235.0	8.0	0.046	1.675	0.028	0.266	0.048	0.357	0.033	0.299	0.054	0.384
V05024.00-V05025.00	3765	319.0	12.0	0.005	1.628	0.326	0.334	0.569	0.446	0.410	0.373	0.653	0.479
V05025.00-V05036.00	3758	319.0	12.0	0.005	1.628	0.326	0.293	0.571	0.393	0.410	0.330	0.655	0.423
V05026.00-V05027.00	2064	163.0	8.0	0.010	0.781	0.003	0.045	0.007	0.071	0.006	0.063	0.010	0.083
V05026.A0-V05026.00	1726	152.0	8.0	0.022	1.158	0.001	0.035	0.003	0.053	0.004	0.051	0.006	0.064
V05027.00-V05028.00	1725	88.0	8.0	0.011	0.819	0.004	0.055	0.010	0.090	0.007	0.074	0.013	0.102
V05028.00-V05030.00	2063	96.0	8.0	0.012	0.856	0.004	0.048	0.012	0.083	0.007	0.064	0.015	0.092
V05029.00-V05030.00	2062	100.0	8.0	0.019	1.077	0.001	0.026	0.003	0.048	0.001	0.034	0.003	0.052
V05030.00-V05031.B0	2059	246.0	8.0	0.093	2.382	0.005	0.037	0.017	0.066	0.008	0.047	0.021	0.072
V05031.00-V05032.00	4049	185.3	8.0	0.082	2.236	0.008	0.052	0.026	0.090	0.017	0.075	0.035	0.104
V05031.A0-V05031.B0	2060	139.0	6.0	0.026	0.585	0.000	0.036	0.002	0.070	0.001	0.046	0.003	0.076
V05031.B0-V05031.00	3783	129.0	8.0	0.077	2.167	0.007	0.042	0.024	0.073	0.012	0.056	0.028	0.082
V05032.00-V05033.00	4050	94.0	8.0	0.033	1.419	0.010	0.057	0.030	0.098	0.021	0.083	0.042	0.114
V05033.00-V05034.00	3766	335.0	8.0	0.057	1.865	0.010	0.053	0.033	0.095	0.022	0.088	0.045	0.118
V05034.00-V05035.00	3759	320.0	8.0	0.048	1.711	0.010	0.074	0.035	0.134	0.035	0.135	0.060	0.175
V05035.00-V05036.00	3760	158.0	8.0	0.005	0.552	0.011	0.212	0.037	0.309	0.038	0.277	0.065	0.356
V05036.00-V05037.00	3761	340.0	12.0	0.019	3.174	0.336	0.308	0.611	0.419	0.448	0.357	0.722	0.459
V05037.00-V05041.A0	1429	121.0	12.0	0.003	1.261	0.337	0.345	0.614	0.471	0.452	0.401	0.728	0.517
V05038.00-V05039.00	1437	100.0	8.0	0.025	1.235	0.000	0.017	0.002	0.036	0.006	0.051	0.008	0.059
V05039.00-V05040.00	1432	312.0	8.0	0.038	1.522	0.003	0.033	0.007	0.052	0.012	0.063	0.016	0.074
V05040.00-V05041.00	1433	27.5	8.0	0.009	0.741	0.003	0.213	0.009	0.298	0.012	0.262	0.018	0.336
V05041.00-V05046.00	1425	235.0	12.0	0.010	2.303	0.340	0.297	0.629	0.410	0.464	0.347	0.752	0.459
V05041.A0-V05041.B0	1430	189.0	14.0	0.005	2.456	0.337	0.320	0.616	0.429	0.452	0.367	0.730	0.467
V05041.B0-V05041.00	1434	132.0	14.0	0.001	1.098	0.337	0.305	0.618	0.410	0.452	0.352	0.732	0.447
V05042.00-V05043.00	1436	10.0	8.0	0.002	0.349	0.007	0.099	0.009	0.115	0.011	0.118	0.013	0.132
V05043.00-V05044.00	1438	303.0	8.0	0.005	0.552	0.007	0.079	0.011	0.098	0.011	0.095	0.015	0.112
V05044.00-V05103.00	1426	300.0	8.0	0.039	1.542	0.007	0.302	0.013	0.533	0.011	0.531	0.018	0.538
V05046.00-V05047.00	175	224.0	12.0	0.004	1.456	0.346	0.331	0.631	0.461	0.464	0.389	0.768	0.649
V05047.00-V05048.00	447	104.0	12.0	0.005	1.628	0.361	0.341	0.633	0.435	0.464	0.374	0.763	0.904
V05048.00-V05091.A0	7378	153.0	12.0	0.006	1.784	0.456	0.448	0.635	0.704	0.535	0.578	0.765	1.000

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V05050.00-V05051.00	4071	228.0	8.0	0.014	0.924	0.180	0.327	0.415	0.520	0.363	0.480	0.591	1.000
V05051.00-V05052.00	4076	300.0	8.0	0.008	0.699	0.180	0.402	0.417	0.658	0.364	0.602	0.590	1.000
V05052.00-V05057.00	4055	300.0	8.0	0.005	0.552	0.180	0.391	0.419	0.639	0.364	0.584	0.587	1.000
V05057.00-V05058.00	4060	300.0	8.0	0.010	0.781	0.180	0.439	0.421	0.699	0.364	0.635	0.586	1.000
V05058.00-V05059.A0	4056	267.0	8.0	0.006	0.605	0.198	0.378	0.441	0.590	0.374	0.535	0.606	1.000
V05059.00-V05060.00	1727	301.0	8.0	0.017	1.018	0.198	0.365	0.445	0.566	0.374	0.497	0.602	1.000
V05059.A0-V05059.00	4057	267.0	8.0	0.013	0.890	0.198	0.254	0.443	0.389	0.374	0.354	0.600	1.000
V05060.00-V05068.00	1732	203.0	8.0	0.007	0.653	0.248	0.419	0.500	0.766	0.378	0.531	0.607	1.000
V05061.00-V05062.00	4068	198.0	8.0	0.026	1.259	0.004	0.069	0.010	0.088	0.004	0.041	0.010	0.068
V05061.A0-V05061.B0	7076	24.3	8.0	0.004	0.494	0.001	0.040	0.003	0.057	0.000	0.022	0.003	0.047
V05061.B0-V05061.00	7077	243.7	8.0	0.012	0.856	0.004	0.047	0.008	0.067	0.001	0.033	0.005	0.059
V05062.00-V05063.00	4065	350.0	8.0	0.021	1.132	0.022	0.136	0.030	0.150	0.004	0.106	0.012	0.128
V05063.00-V05064.00	4066	172.0	8.0	0.015	0.957	0.065	0.268	0.076	0.287	0.061	0.257	0.072	0.277
V05064.00-V05066.00	4067	240.0	8.0	0.004	0.494	0.070	0.250	0.083	0.271	0.066	0.241	0.078	0.263
V05065.00-V05066.00	4064	275.0	8.0	0.125	2.761	0.000	0.070	0.004	0.093	0.003	0.082	0.007	0.096
V05065.A0-V05065.00	4069	139.4	8.0	0.002	0.349	0.000	0.000	0.002	0.054	0.003	0.060	0.005	0.079
V05066.00-V05067.00	1729	354.0	8.0	0.045	1.657	0.070	0.143	0.089	0.160	0.068	0.138	0.087	0.155
V05067.00-V05068.00	1730	362.0	8.0	0.048	1.711	0.079	0.277	0.099	0.528	0.068	0.312	0.089	0.577
V05068.00-V05069.00	1733	78.0	8.0	0.013	0.890	0.326	0.449	0.589	0.948	0.446	0.540	0.693	1.000
V05069.00-V05075.00	3771	333.6	8.0	0.008	0.699	0.327	0.526	0.591	1.000	0.447	0.643	0.695	1.000
V05070.00-V05071.00	3782	113.0	8.0	0.045	1.657	0.000	0.019	0.002	0.037	0.000	0.000	0.002	0.029
V05071.00-V05072.00	3777	169.0	8.0	0.075	2.139	0.006	0.062	0.010	0.075	0.000	0.037	0.004	0.062
V05072.00-V05073.00	3779	88.0	8.0	0.030	1.353	0.024	0.097	0.034	0.115	0.017	0.097	0.027	0.116
V05072.A0-V05072.B0	7670	112.5	8.0	0.031	1.375	0.000	0.049	0.002	0.066	0.000	0.053	0.002	0.068
V05072.B0-V05072.00	7671	218.0	8.0	0.017	1.018	0.018	0.092	0.022	0.102	0.017	0.089	0.021	0.099
V05073.00-V05074.B0	3774	184.6	6.0	0.064	0.917	0.041	0.150	0.059	0.179	0.052	0.173	0.071	0.199
V05073.A0-V05073.B0	3781	65.0	8.0	0.031	1.375	0.009	0.047	0.011	0.054	0.017	0.071	0.019	0.076
V05073.B0-V05073.C0	3778	96.0	8.0	0.048	1.711	0.009	0.058	0.013	0.069	0.023	0.087	0.028	0.094
V05073.C0-V05073.00	3780	112.0	8.0	0.045	1.657	0.017	0.089	0.023	0.105	0.035	0.110	0.041	0.124
V05074.00-V05075.00	3768	300.0	8.0	0.034	1.440	0.056	0.348	0.085	0.582	0.079	0.426	0.108	0.593
V05074.A0-V05074.00	3775	100.0	6.0	0.010	0.363	0.000	0.090	0.002	0.128	0.000	0.106	0.002	0.142
V05074.B0-V05074.00	3776	120.4	8.0	0.056	1.848	0.056	0.125	0.080	0.152	0.079	0.149	0.104	0.171
V05074.BA-V05074.BB	7672	97.0	8.0	0.055	1.832	0.015	0.069	0.017	0.076	0.018	0.085	0.020	0.090
V05074.BB-V05074.B0	7673	259.3	8.0	0.021	1.132	0.015	0.099	0.019	0.115	0.027	0.122	0.031	0.136
V05075.00-V05076.00	3772	200.0	8.0	0.007	0.653	0.382	0.543	0.671	1.000	0.526	0.669	0.800	1.000
V05076.00-V05077.00	3764	194.0	8.0	0.008	0.699	0.383	0.572	0.673	1.000	0.528	0.723	0.804	1.000
V05077.00-V05078.00	3757	330.0	8.0	0.005	0.552	0.382	0.632	0.675	1.000	0.531	0.831	0.809	1.000
V05078.00-V05079.00	3762	28.0	8.0	0.002	0.349	0.382	0.670	0.677	1.000	0.532	0.873	0.812	1.000
V05079.00-V05080.00	1439	392.0	8.0	0.006	0.605	0.382	0.569	0.679	0.826	0.532	0.710	0.814	1.000
V05080.00-V05102.00	1435	363.0	8.0	0.015	0.957	0.383	0.557	0.680	0.826	0.532	0.767	0.816	1.000
V05081.00-V05083.00	1172	130.0	8.0	0.031	1.375	0.007	0.061	0.009	0.073	0.005	0.049	0.007	0.063
V05082.00-V05083.00	1174	103.0	8.0	0.011	0.819	0.003	0.054	0.005	0.068	0.001	0.035	0.003	0.055
V05083.00-V05084.00	1175	97.0	8.0	0.019	1.077	0.011	0.072	0.017	0.091	0.006	0.055	0.012	0.078
V05084.00-V05087.00	1176	36.0	8.0	0.007	0.653	0.011	0.078	0.019	0.105	0.006	0.054	0.014	0.088
V05085.00-V05086.00	1177	132.0	8.0	0.006	0.605	0.001	0.036	0.003	0.061	0.001	0.024	0.003	0.056
V05086.00-V05087.00	1178	109.0	8.0	0.006	0.605	0.002	0.061	0.006	0.092	0.001	0.038	0.005	0.078
V05087.00-V05088.00	1179	40.0	8.0	0.011	0.819	0.013	0.070	0.028	0.099	0.006	0.053	0.021	0.087
V05088.00-V05092.00	1162	155.0	8.0	0.076	2.153	0.014	0.060	0.030	0.087	0.012	0.054	0.029	0.084
V05089.00-V05091.00	1170	85.0	8.0	0.010	0.781	0.001	0.038	0.003	0.062	0.001	0.023	0.003	0.055
V05090.00-V05091.00	1171	58.0	8.0	0.007	0.653	0.001	0.040	0.003	0.063	0.000	0.020	0.002	0.053
V05091.00-V05092.00	1163	145.0	8.0	0.010	0.781	0.004	0.055	0.010	0.085	0.001	0.039	0.007	0.076
V05092.00-V05093.00	1164	58.0	8.0	0.037	1.502	0.019	0.069	0.044	0.104	0.013	0.061	0.038	0.100
V05093.00-V05097.00	1165	109.0	8.0	0.053	1.798	0.019	0.068	0.046	0.104	0.013	0.058	0.040	0.097
V05094.00-V05096.00	1173	89.0	8.0	0.007	0.653	0.001	0.064	0.003	0.083	0.001	0.029	0.003	0.061
V05095.00-V05096.00	1441	58.0	8.0	0.007	0.653	0.007	0.081	0.009	0.095	0.000	0.024	0.002	0.058

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V05096.00-V05097.00	1169	105.0	8.0	0.007	0.653	0.008	0.078	0.014	0.102	0.001	0.038	0.007	0.078
V05097.00-V05098.00	1442	33.0	8.0	0.039	1.542	0.028	0.070	0.063	0.104	0.015	0.052	0.050	0.093
V05098.00-V05099.00	1443	258.0	8.0	0.079	2.195	0.028	0.120	0.065	0.183	0.015	0.091	0.052	0.166
V05099.00-V05100.00	1161	374.0	8.0	0.004	0.494	0.028	0.171	0.067	0.264	0.016	0.188	0.056	0.279
V05100.00-V05101.00	1440	386.0	8.0	0.004	0.494	0.028	0.160	0.069	0.252	0.055	0.225	0.096	0.298
V05101.00-V05102.00	1431	85.0	8.0	-0.001	Adverse	0.034	0.265	0.078	0.529	0.058	0.332	0.111	1.000
V05102.00-V05103.00	1427	113.0	8.0	0.005	0.552	0.416	0.615	0.752	1.000	0.589	1.000	0.922	1.000
V05103.00-V05104.00	1428	123.0	8.0	0.008	0.699	0.423	0.735	0.766	1.000	0.600	1.000	0.942	1.000
V05104.00-V05105.00	1424	343.0	8.0	0.003	0.428	0.423	0.850	0.768	1.000	0.600	0.972	0.945	1.000
V05105.00-V05106.00	7380	230.0	10.0	0.006	1.097	0.423	0.409	0.770	0.562	0.600	0.491	0.958	0.864
V06102.00-V05050.00	4073	266.0	8.0	0.006	0.605	0.180	0.368	0.413	0.587	0.363	0.543	0.608	1.000
V07064.00-V05001.00	4074	285.0	12.0	0.039	4.547	0.222	0.201	0.383	0.264	0.290	0.230	0.450	0.288
V06001.00-V06002.00	593	210.0	8.0	0.121	2.717	0.001	0.017	0.003	0.031	0.003	0.031	0.005	0.040
V06002.00-V06003.00	594	185.0	8.0	0.081	2.223	0.002	0.046	0.006	0.061	0.006	0.062	0.010	0.073
V06003.00-V06004.A0	7073	336.0	8.0	0.043	1.620	0.015	0.068	0.024	0.084	0.025	0.086	0.033	0.098
V06003.A0-V06003.00	1002	19.6	8.0	0.001	0.247	0.000	0.047	0.002	0.072	0.001	0.063	0.003	0.082
V06004.00-V06005.00	4081	116.0	8.0	0.006	0.605	0.016	0.113	0.029	0.148	0.026	0.142	0.039	0.171
V06004.A0-V06003.00	7074	336.0	8.0	0.010	0.781	0.016	0.093	0.026	0.119	0.026	0.117	0.036	0.139
V06005.00-V06008.00	4082	374.0	8.0	0.008	0.699	0.017	0.162	0.031	0.223	0.027	0.196	0.042	0.248
V06006.00-V06007.00	4078	27.0	8.0	0.003	0.428	0.001	0.026	0.003	0.043	0.001	0.029	0.003	0.045
V06007.00-V06008.00	4079	251.0	8.0	0.089	2.330	0.002	0.121	0.006	0.170	0.003	0.142	0.007	0.186
V06008.00-V06009.00	4080	374.0	8.0	0.001	0.247	0.021	0.174	0.042	0.242	0.033	0.217	0.053	0.275
V06009.00-V06017.00	4086	374.0	8.0	0.006	0.605	0.022	0.189	0.045	0.274	0.042	0.251	0.065	0.324
V06010.00-V06011.00	4084	165.0	6.0	0.003	0.199	0.001	0.072	0.003	0.107	0.002	0.075	0.004	0.109
V06011.00-V06014.00	4090	353.0	6.0	0.005	0.256	0.004	0.119	0.008	0.168	0.004	0.132	0.008	0.178
V06012.00-V06013.00	4091	243.0	8.0	0.016	0.988	0.003	0.039	0.005	0.050	0.006	0.054	0.008	0.062
V06013.00-V06014.00	4092	197.0	8.0	0.072	2.096	0.004	0.075	0.008	0.104	0.007	0.087	0.011	0.113
V06014.00-V06015.00	4085	306.0	6.0	0.003	0.199	0.011	0.188	0.021	0.262	0.014	0.213	0.024	0.280
V06015.00-V06016.00	4087	97.0	6.0	0.004	0.229	0.012	0.153	0.024	0.215	0.015	0.173	0.028	0.229
V06016.00-V06017.00	4088	290.0	6.0	0.060	0.888	0.013	0.209	0.028	0.305	0.017	0.266	0.032	0.353
V06017.00-V06024.00	4089	280.0	6.0	0.003	0.199	0.037	0.291	0.076	0.424	0.062	0.377	0.101	0.494
V06018.00-V06019.00	7534	235.0	8.0	0.042	1.601	0.001	0.025	0.003	0.040	0.004	0.038	0.006	0.048
V06019.00-V06096.A0	7726	363.3	8.0	0.043	1.620	0.002	0.027	0.006	0.047	0.004	0.037	0.008	0.052
V06024.00-V06040.00	4164	167.0	8.0	0.004	0.494	0.039	0.209	0.080	0.301	0.064	0.271	0.105	0.349
V06025.00-V06027.00	2384	210.0	8.0	0.008	0.699	0.001	0.033	0.003	0.052	0.002	0.037	0.004	0.054
V06026.00-V06027.00	2386	235.0	8.0	0.004	0.494	0.001	0.039	0.003	0.060	0.002	0.051	0.005	0.068
V06027.00-V06028.00	2382	293.0	8.0	0.048	1.711	0.003	0.039	0.009	0.063	0.005	0.049	0.011	0.069
V06028.00-V06029.00	2383	216.0	8.0	0.027	1.283	0.005	0.051	0.014	0.078	0.009	0.064	0.017	0.087
V06029.00-V06030.00	2376	202.0	8.0	0.025	1.235	0.007	0.061	0.018	0.090	0.012	0.075	0.022	0.099
V06030.00-V06031.00	2369	337.0	8.0	0.024	1.210	0.010	0.069	0.023	0.100	0.016	0.084	0.028	0.110
V06031.00-V06038.00	4168	382.0	8.0	0.024	1.210	0.013	0.090	0.027	0.130	0.019	0.110	0.033	0.144
V06032.00-V06033.00	2367	195.0	8.0	0.021	1.132	0.001	0.025	0.003	0.047	0.001	0.031	0.003	0.050
V06033.00-V06034.00	2365	315.8	8.0	0.018	1.048	0.002	0.031	0.006	0.053	0.003	0.037	0.007	0.057
V06034.00-V06037.00	4171	227.0	8.0	0.067	2.022	0.004	0.039	0.010	0.060	0.005	0.048	0.011	0.066
V06035.00-V06036.00	1907	265.0	8.0	0.075	2.139	0.002	0.037	0.005	0.050	0.007	0.058	0.009	0.066
V06036.00-V06037.00	1908	195.0	8.0	0.015	0.957	0.004	0.048	0.008	0.068	0.009	0.069	0.013	0.082
V06037.00-V06038.00	4169	273.0	8.0	0.080	2.209	0.009	0.077	0.022	0.113	0.016	0.097	0.028	0.127
V06038.00-V06039.00	4170	246.0	8.0	0.020	1.104	0.026	0.105	0.055	0.151	0.039	0.128	0.068	0.168
V06039.A0-V06039.AA	7728	309.0	8.0	0.028	1.307	0.029	0.104	0.060	0.148	0.043	0.125	0.073	0.163
V06039.AA-V06096.G0	7729	38.5	8.0	0.011	0.819	0.030	0.107	0.063	0.150	0.044	0.126	0.077	0.166
V06040.00-V06041.00	4159	321.0	8.0	0.004	0.494	0.039	0.190	0.082	0.276	0.064	0.243	0.107	0.316
V06042.00-V06045.00	1909	217.0	8.0	0.004	0.494	0.001	0.037	0.003	0.060	0.004	0.065	0.006	0.079
V06043.00-V06045.00	1910	350.0	8.0	0.004	0.494	0.001	0.040	0.003	0.063	0.002	0.054	0.004	0.072
V06044.00-V06045.00	2284	231.0	8.0	0.005	0.552	0.002	0.047	0.006	0.076	0.005	0.069	0.009	0.091
V06044.A0-V06044.00	7661	114.3	8.0	0.002	0.349	0.001	0.049	0.003	0.078	0.002	0.068	0.004	0.090

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V06045.00-V06046.00	2282	284.0	8.0	0.059	1.897	0.006	0.060	0.016	0.095	0.014	0.089	0.025	0.115
V06046.00-V06047.A0	2283	194.0	8.0	0.006	0.605	0.008	0.090	0.020	0.140	0.018	0.132	0.030	0.169
V06047.00-V06049.00	2279	168.0	8.0	0.016	0.988	0.010	0.077	0.027	0.120	0.023	0.111	0.039	0.143
V06047.A0-V06047.00	2280	185.0	8.0	0.006	0.605	0.009	0.086	0.024	0.134	0.021	0.125	0.035	0.162
V06048.00-V06049.00	2278	210.0	8.0	0.004	0.494	0.001	0.058	0.003	0.092	0.004	0.091	0.006	0.115
V06049.00-V06056.00	2276	213.0	8.0	0.016	0.988	0.013	0.086	0.034	0.138	0.028	0.115	0.048	0.156
V06050.00-V06051.00	1916	133.9	8.0	0.007	0.653	0.001	0.046	0.003	0.082	0.000	0.040	0.002	0.079
V06051.00-V06054.00	2271	131.9	8.0	0.005	0.552	0.005	0.082	0.015	0.139	0.004	0.075	0.014	0.135
V06051.A0-V06051.B0	1911	155.0	8.0	0.004	0.494	0.001	0.042	0.003	0.067	0.001	0.042	0.003	0.068
V06051.B0-V06051.C0	1912	168.0	8.0	0.004	0.494	0.002	0.055	0.007	0.088	0.003	0.056	0.007	0.088
V06051.C0-V06051.00	1917	135.0	8.0	0.004	0.494	0.004	0.063	0.010	0.106	0.003	0.060	0.009	0.104
V06052.00-V06053.00	1918	94.9	8.0	0.005	0.552	0.001	0.039	0.003	0.066	0.000	0.027	0.002	0.060
V06053.00-V06054.00	2272	126.5	8.0	0.004	0.494	0.002	0.075	0.007	0.122	0.001	0.062	0.005	0.114
V06054.00-V06055.00	2277	358.1	8.0	0.005	0.552	0.009	0.089	0.025	0.148	0.007	0.079	0.023	0.143
V06055.00-V06056.00	2337	48.8	8.0	0.005	0.552	0.009	0.085	0.027	0.141	0.007	0.091	0.025	0.146
V06056.00-V06058.00	2273	265.0	8.0	0.030	1.353	0.023	0.096	0.064	0.156	0.036	0.118	0.077	0.170
V06057.00-V06058.00	2274	285.0	8.0	0.075	2.139	0.002	0.062	0.004	0.098	0.002	0.073	0.004	0.105
V06058.00-V06059.00	2269	83.0	8.0	0.023	1.184	0.026	0.096	0.071	0.156	0.039	0.117	0.084	0.169
V06059.00-V06067.00	2264	269.0	8.0	0.040	1.562	0.026	0.096	0.074	0.155	0.039	0.115	0.087	0.168
V06060.00-V06061.00	2387	336.0	8.0	0.011	0.819	0.003	0.051	0.005	0.063	0.004	0.055	0.006	0.066
V06061.00-V06063.00	2388	244.0	8.0	0.050	1.746	0.007	0.045	0.011	0.056	0.007	0.047	0.011	0.058
V06062.00-V06063.00	2262	68.5	8.0	0.002	0.349	0.001	0.033	0.003	0.062	0.001	0.034	0.003	0.062
V06063.00-V06064.00	2385	393.0	8.0	0.316	4.390	0.009	0.516	0.017	0.522	0.009	0.517	0.017	0.523
V06064.00-V06066.00	2270	200.0	8.0	-0.341	Adverse	0.010	0.530	0.020	0.542	0.012	0.533	0.022	0.545
V06065.00-V06066.00	2263	240.0	8.0	0.050	1.746	0.001	0.039	0.003	0.058	0.002	0.044	0.003	0.061
V06066.00-V06067.00	2265	229.0	8.0	0.056	1.848	0.013	0.081	0.027	0.124	0.016	0.093	0.030	0.132
V06067.00-V06068.00	2266	266.0	8.0	0.054	1.815	0.040	0.146	0.103	0.234	0.056	0.173	0.120	0.253
V06068.00-V06069.00	2267	183.0	8.0	0.005	0.552	0.041	0.223	0.107	0.360	0.058	0.264	0.124	0.389
V06069.00-V06070.00	2268	248.0	8.0	0.002	0.349	0.044	0.225	0.112	0.361	0.062	0.268	0.130	0.391
V06070.00-V06071.00	4177	251.0	8.0	0.005	0.552	0.047	0.214	0.117	0.338	0.067	0.257	0.137	0.367
V06071.00-V06072.00	4172	270.0	8.0	0.009	0.741	0.049	0.175	0.122	0.272	0.072	0.209	0.144	0.296
V06072.00-V06074.00	4175	50.4	8.0	0.022	1.158	0.051	0.115	0.125	0.179	0.073	0.137	0.147	0.194
V06073.00-V06074.00	4176	180.0	6.0	0.006	0.281	0.001	0.103	0.003	0.159	0.002	0.123	0.004	0.173
V06074.00-V06075.00	4173	188.0	8.0	0.056	1.848	0.053	0.117	0.131	0.182	0.076	0.139	0.154	0.197
V06075.00-V06089.00	4174	174.9	8.0	0.056	1.848	0.054	0.132	0.135	0.205	0.078	0.156	0.158	0.222
V06076.00-V06077.00	2377	125.0	6.0	0.044	0.761	0.000	0.019	0.002	0.046	0.001	0.016	0.002	0.045
V06077.00-V06080.00	2380	26.3	6.0	0.014	0.429	0.001	0.038	0.005	0.072	0.000	0.042	0.004	0.075
V06078.00-V06079.00	2379	183.0	8.0	0.035	1.461	0.002	0.048	0.005	0.062	0.006	0.069	0.008	0.078
V06079.00-V06080.00	2381	98.0	8.0	0.008	0.699	0.004	0.054	0.008	0.075	0.007	0.072	0.011	0.089
V06080.00-V06081.00	2378	322.3	6.0	0.063	0.910	0.005	0.064	0.016	0.102	0.008	0.076	0.019	0.110
V06081.00-V06083.00	2375	231.0	6.0	0.043	0.752	0.008	0.104	0.021	0.163	0.011	0.120	0.024	0.173
V06082.00-V06083.00	2374	121.0	6.0	0.005	0.256	0.001	0.091	0.003	0.144	0.001	0.101	0.003	0.151
V06083.00-V06084.00	2372	195.0	8.0	0.004	0.494	0.011	0.116	0.027	0.180	0.014	0.132	0.031	0.191
V06084.00-V06086.00	2373	198.0	8.0	0.006	0.605	0.012	0.099	0.031	0.154	0.016	0.112	0.034	0.162
V06085.00-V06086.00	2368	72.0	6.0	0.047	0.786	0.001	0.055	0.003	0.091	0.001	0.061	0.003	0.094
V06086.00-V06088.00	2371	225.0	8.0	0.039	1.542	0.013	0.089	0.036	0.141	0.017	0.100	0.040	0.148
V06087.00-V06088.00	2370	185.0	6.0	0.060	0.888	0.002	0.092	0.004	0.142	0.002	0.103	0.004	0.149
V06088.00-V06089.00	4179	190.0	8.0	0.007	0.653	0.017	0.128	0.044	0.202	0.022	0.149	0.049	0.216
V06089.00-V06090.00	4181	69.0	8.0	0.030	1.353	0.071	0.139	0.181	0.218	0.102	0.165	0.212	0.236
V06090.00-V06091.00	4180	253.0	8.0	0.060	1.913	0.071	0.175	0.183	0.280	0.102	0.209	0.214	0.304
V06091.00-V06094.00	4182	198.0	8.0	0.004	0.494	0.073	0.246	0.186	0.394	0.104	0.289	0.217	0.426
V06092.00-V06093.00	4183	120.0	6.0	0.033	0.659	0.012	0.129	0.014	0.144	0.009	0.111	0.011	0.129
V06093.00-V06094.00	4184	120.0	6.0	0.004	0.229	0.013	0.266	0.017	0.385	0.010	0.284	0.014	0.398
V06094.00-V06095.00	591	198.0	8.0	0.004	0.494	0.086	0.344	0.206	0.550	0.114	0.393	0.234	0.588
V06095.00-V06096.00	592	251.0	8.0	0.002	0.349	0.088	0.321	0.210	0.503	0.117	0.371	0.238	0.542

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V06096.00-V06097.00	4185	208.0	10.0	0.027	2.327	0.171	0.236	0.390	0.363	0.248	0.285	0.466	0.401
V06096.A0-V06096.B0	7725	346.1	8.0	0.057	1.865	0.002	0.034	0.009	0.061	0.004	0.043	0.010	0.066
V06096.B0-V06096.C0	7724	331.5	8.0	0.022	1.158	0.004	0.042	0.012	0.071	0.006	0.052	0.014	0.078
V06096.C0-V06096.E0	7723	342.8	8.0	0.047	1.693	0.006	0.045	0.016	0.073	0.009	0.055	0.020	0.079
V06096.E0-V06096.F0	7719	141.6	8.0	0.042	1.601	0.007	0.050	0.019	0.082	0.010	0.060	0.023	0.088
V06096.F0-V06096.G0	7718	38.5	8.0	0.013	0.890	0.007	0.081	0.022	0.125	0.011	0.096	0.025	0.135
V06096.G0-V06096.H0	7727	280.1	8.0	0.039	1.542	0.039	0.129	0.088	0.190	0.056	0.157	0.105	0.210
V06096.H0-V06096.00	7720	221.9	8.0	0.046	1.675	0.080	0.189	0.175	0.281	0.122	0.229	0.217	0.311
V06097.00-V06098.00	4186	313.0	10.0	0.004	0.896	0.172	0.337	0.392	0.523	0.248	0.391	0.469	0.567
V06098.00-V06099.00	597	311.0	10.0	0.005	1.001	0.173	0.283	0.395	0.433	0.250	0.343	0.472	0.480
V06099.00-V06100.00	598	300.0	10.0	0.032	2.533	0.179	0.214	0.404	0.324	0.356	0.304	0.581	0.395
V06100.00-V06101.00	596	299.0	10.0	0.009	1.343	0.179	0.265	0.406	0.406	0.361	0.381	0.588	0.499
V06101.00-V06102.A0	7797	246.0	10.0	0.007	1.185	0.179	0.261	0.408	0.399	0.361	0.374	0.623	0.692
V06102.A0-V06102.00	7798	246.0	10.0	0.010	1.416	0.180	0.293	0.411	0.463	0.363	0.429	0.593	0.947
V07001.00-V07002.00	3015	90.0	8.0	0.029	1.330	0.009	0.056	0.011	0.065	0.004	0.043	0.006	0.054
V07002.00-V07003.00	3009	200.0	8.0	0.030	1.353	0.009	0.061	0.013	0.074	0.006	0.052	0.010	0.066
V07003.00-V07005.00	3010	266.0	8.0	0.040	1.562	0.013	0.070	0.019	0.086	0.010	0.068	0.016	0.084
V07004.00-V07005.00	3012	315.0	8.0	0.043	1.620	0.002	0.050	0.004	0.065	0.007	0.063	0.009	0.075
V07005.00-V07006.00	3011	248.3	8.0	0.037	1.502	0.017	0.082	0.027	0.101	0.020	0.086	0.030	0.105
V07006.00-V07007.E0	7047	129.0	8.0	0.029	1.330	0.021	0.087	0.033	0.113	0.023	0.096	0.035	0.121
V07007.00-V07009.00	3949	364.0	8.0	0.033	1.419	0.023	0.090	0.047	0.128	0.034	0.113	0.059	0.146
V07007.A0-V07007.B0	7051	121.9	8.0	0.070	2.066	0.000	0.015	0.002	0.033	0.003	0.032	0.005	0.042
V07007.B0-V07007.C0	7052	209.7	8.0	0.049	1.729	0.001	0.021	0.005	0.045	0.005	0.043	0.009	0.057
V07007.C0-V07007.D0	7050	165.0	8.0	0.044	1.638	0.001	0.025	0.007	0.063	0.007	0.061	0.013	0.083
V07007.D0-V07007.E0	7662	78.7	8.0	0.009	0.741	0.001	0.057	0.009	0.098	0.009	0.088	0.017	0.117
V07007.E0-V07007.00	7413	72.5	8.0	0.024	1.210	0.022	0.086	0.045	0.122	0.033	0.104	0.055	0.135
V07008.00-V07009.00	3950	225.0	8.0	0.032	1.397	0.001	0.058	0.003	0.084	0.008	0.086	0.010	0.106
V07009.00-V07011.00	3952	270.0	8.0	0.034	1.440	0.025	0.093	0.054	0.134	0.043	0.120	0.072	0.153
V07010.00-V07011.00	4219	220.0	8.0	0.016	0.988	0.002	0.066	0.005	0.092	0.003	0.080	0.005	0.103
V07011.00-V07015.00	4194	285.0	8.0	0.040	1.562	0.029	0.102	0.062	0.147	0.048	0.130	0.081	0.167
V07012.00-V07013.00	3944	168.0	8.0	0.094	2.394	0.002	0.028	0.004	0.040	0.005	0.039	0.007	0.048
V07013.00-V07014.00	4191	175.0	8.0	0.045	1.657	0.004	0.043	0.008	0.061	0.007	0.055	0.011	0.069
V07014.00-V07015.00	4195	328.0	8.0	0.024	1.210	0.006	0.081	0.013	0.115	0.010	0.102	0.016	0.131
V07015.00-V07028.00	4215	156.0	8.0	0.034	1.440	0.037	0.199	0.078	0.290	0.060	0.255	0.101	0.332
V07016.00-V07018.00	4220	75.0	6.0	0.010	0.363	0.004	0.077	0.006	0.093	0.004	0.073	0.006	0.090
V07017.00-V07018.00	3951	348.0	6.0	0.032	0.649	0.002	0.056	0.005	0.074	0.003	0.059	0.005	0.076
V07018.00-V07019.00	3008	168.0	8.0	0.043	1.620	0.008	0.059	0.014	0.077	0.009	0.060	0.015	0.078
V07019.00-V07021.00	3945	300.0	8.0	0.024	1.210	0.011	0.093	0.019	0.128	0.012	0.113	0.020	0.143
V07022.00-V07026.J0	4192	186.0	8.0	0.006	0.605	0.001	0.101	0.003	0.145	0.003	0.135	0.005	0.171
V07024.00-V07025.00	3946	265.0	6.0	0.034	0.669	0.003	0.050	0.005	0.066	0.003	0.053	0.005	0.069
V07025.00-V07026.00	3948	161.0	6.0	0.053	0.835	0.005	0.130	0.009	0.184	0.005	0.161	0.009	0.207
V07026.00-V07027.00	4216	236.0	8.0	0.007	0.653	0.034	0.159	0.071	0.228	0.057	0.204	0.094	0.262
V07026.A0-V07026.C0	8211	228.7	8.0	0.007	0.653	0.001	0.062	0.003	0.083	0.003	0.101	0.005	0.113
V07026.B0-V07026.C0	8210	153.2	8.0	0.008	0.699	0.002	0.072	0.005	0.089	0.013	0.123	0.015	0.132
V07026.C0-V07026.E0	8212	206.1	8.0	0.007	0.653	0.013	0.099	0.020	0.123	0.032	0.149	0.038	0.166
V07026.D0-V07026.E0	8209	148.9	8.0	0.007	0.653	0.000	0.049	0.002	0.085	0.000	0.074	0.002	0.105
V07026.E0-V07026.F0	8213	116.6	8.0	0.007	0.653	0.013	0.098	0.024	0.131	0.032	0.147	0.042	0.171
V07026.F0-V07026.G0	8214	106.3	8.0	0.008	0.699	0.013	0.098	0.026	0.136	0.032	0.148	0.044	0.175
V07026.G0-V07026.H0	8215	152.9	8.0	0.008	0.699	0.014	0.101	0.028	0.144	0.032	0.151	0.047	0.182
V07026.H0-V07026.I0	8216	46.4	8.0	0.005	0.552	0.015	0.112	0.032	0.158	0.034	0.155	0.050	0.191
V07026.I0-V07026.J0	8217	156.6	8.0	0.013	0.890	0.027	0.143	0.054	0.202	0.047	0.190	0.074	0.238
V07026.J0-V07026.00	3947	236.0	8.0	0.004	0.494	0.029	0.160	0.060	0.229	0.051	0.211	0.082	0.267
V07027.00-V07028.00	4217	221.0	8.0	0.006	0.605	0.036	0.226	0.075	0.328	0.059	0.290	0.098	0.377
V07028.00-V07032.00	4218	119.0	8.0	0.006	0.605	0.073	0.231	0.155	0.338	0.120	0.296	0.202	0.387
V07029.00-V07030.00	3942	135.0	8.0	0.011	0.819	0.002	0.041	0.005	0.054	0.003	0.041	0.005	0.054

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V07030.00-V07031.00	4196	240.0	8.0	0.054	1.815	0.005	0.046	0.009	0.062	0.005	0.048	0.009	0.063
V07031.00-V07032.00	3941	240.0	8.0	0.025	1.235	0.007	0.114	0.013	0.164	0.008	0.139	0.014	0.182
V07032.00-V07036.00	4200	288.0	8.0	0.024	1.210	0.080	0.182	0.171	0.264	0.128	0.227	0.219	0.298
V07033.00-V07034.00	4197	350.0	6.0	0.067	0.939	0.002	0.059	0.005	0.076	0.002	0.056	0.004	0.074
V07034.00-V07036.00	4201	300.0	6.0	0.017	0.473	0.006	0.166	0.010	0.233	0.006	0.195	0.010	0.255
V07035.00-V07036.00	4204	230.0	6.0	0.009	0.344	0.002	0.157	0.005	0.223	0.003	0.188	0.005	0.246
V07036.00-V07046.00	4205	250.0	8.0	0.022	1.158	0.091	0.423	0.189	0.589	0.139	0.503	0.238	0.648
V07037.00-V07038.00	4202	320.0	6.0	0.021	0.526	0.002	0.071	0.005	0.094	0.003	0.079	0.005	0.100
V07038.00-V07039.00	4206	233.0	6.0	0.007	0.303	0.005	0.098	0.009	0.131	0.007	0.113	0.011	0.142
V07039.00-V07040.00	4207	200.0	6.0	0.007	0.303	0.007	0.108	0.013	0.149	0.009	0.127	0.015	0.164
V07040.00-V07041.00	4208	96.0	6.0	0.007	0.303	0.008	0.119	0.016	0.166	0.012	0.139	0.020	0.180
V07041.00-V07046.00	4209	321.0	6.0	0.008	0.324	0.011	0.500	0.021	0.587	0.014	0.572	0.024	0.594
V07042.00-V07043.00	3943	117.0	8.0	0.008	0.699	0.001	0.036	0.003	0.052	0.002	0.040	0.004	0.055
V07043.00-V07044.00	4198	300.0	6.0	0.062	0.903	0.005	0.063	0.009	0.083	0.005	0.062	0.009	0.082
V07044.00-V07045.00	4203	210.0	6.0	0.046	0.778	0.009	0.086	0.015	0.112	0.008	0.084	0.014	0.110
V07045.00-V07046.00	4210	295.0	8.0	0.016	0.988	0.011	0.364	0.019	0.500	0.010	0.422	0.019	0.542
V07046.00-V07047.00	4211	115.0	8.0	0.000	0.000	0.113	0.409	0.233	0.568	0.164	0.484	0.284	0.623
V07047.00-V07049.00	4319	50.3	8.0	0.024	1.210	0.114	0.227	0.235	0.328	0.165	0.274	0.287	0.365
V07048.00-V07049.00	4212	300.0	6.0	0.026	0.585	0.002	0.219	0.005	0.314	0.010	0.281	0.012	0.365
V07049.00-V07052.00	4213	137.0	8.0	0.011	0.819	0.117	0.256	0.243	0.372	0.176	0.315	0.302	0.419
V07050.00-V07051.00	4193	107.0	8.0	0.005	0.552	0.002	0.045	0.004	0.068	0.003	0.079	0.005	0.094
V07051.00-V07052.00	4214	135.0	8.0	0.005	0.552	0.002	0.134	0.007	0.198	0.014	0.193	0.018	0.244
V07052.00-V07053.00	4199	124.0	8.0	0.021	1.132	0.120	0.230	0.252	0.329	0.190	0.278	0.322	0.366
V07053.00-V07054.00	603	301.0	8.0	0.021	1.132	0.143	0.281	0.277	0.408	0.192	0.340	0.326	0.456
V07054.00-V07064.00	604	289.0	8.0	0.012	0.856	0.143	0.274	0.279	0.387	0.205	0.329	0.341	0.431
V07055.00-V07056.00	600	121.0	8.0	0.007	0.653	0.045	0.176	0.050	0.183	0.026	0.133	0.030	0.143
V07055.A0-V07055.00	1004	80.0	8.0	0.002	0.349	0.041	0.230	0.043	0.236	0.024	0.175	0.026	0.183
V07056.00-V07059.00	607	300.0	8.0	0.036	1.482	0.048	0.164	0.054	0.178	0.030	0.151	0.037	0.166
V07057.00-V07058.00	599	291.0	8.0	0.032	1.397	0.001	0.041	0.003	0.052	0.004	0.060	0.006	0.068
V07058.00-V07059.00	606	361.0	8.0	0.043	1.620	0.010	0.131	0.014	0.146	0.023	0.142	0.027	0.156
V07059.00-V07060.00	608	328.0	8.0	0.007	0.653	0.060	0.219	0.072	0.240	0.059	0.225	0.071	0.246
V07060.00-V07063.00	609	325.0	8.0	0.007	0.653	0.062	0.207	0.076	0.230	0.068	0.217	0.083	0.239
V07061.00-V07062.00	601	288.0	6.0	0.005	0.256	0.016	0.173	0.020	0.199	0.010	0.148	0.014	0.177
V07061.A0-V07061.00	1003	54.0	6.0	0.007	0.303	0.014	0.153	0.016	0.168	0.006	0.115	0.009	0.134
V07062.00-V07063.00	4188	102.0	6.0	0.004	0.229	0.017	0.211	0.023	0.242	0.013	0.205	0.019	0.238
V07063.00-V07064.00	602	325.0	8.0	0.020	1.104	0.078	0.203	0.101	0.249	0.084	0.222	0.106	0.264
V08001.00-V08002.00	5656	180.0	6.0	0.089	1.082	0.003	0.103	0.005	0.126	0.001	0.061	0.004	0.096
V08002.00-V08004.00	5408	235.0	6.0	0.003	0.199	0.007	0.123	0.011	0.156	0.003	0.083	0.007	0.127
V08003.00-V08004.A0	7247	270.0	6.0	0.211	1.666	0.004	0.030	0.006	0.038	0.003	0.025	0.005	0.035
V08004.00-V08007.00	5407	215.0	6.0	0.055	0.850	0.012	0.099	0.022	0.135	0.009	0.092	0.019	0.131
V08004.A0-V08004.00	7248	270.0	6.0	0.320	2.051	0.005	0.059	0.009	0.079	0.004	0.052	0.008	0.074
V08005.00-V08006.00	5406	143.0	6.0	0.007	0.303	0.002	0.146	0.004	0.195	0.002	0.144	0.004	0.194
V08006.00-V08007.00	5405	140.0	6.0	0.000	0.000	0.003	0.175	0.008	0.235	0.004	0.175	0.008	0.234
V08007.00-V08015.00	5361	360.0	6.0	0.028	0.607	0.017	0.125	0.034	0.175	0.016	0.127	0.033	0.176
V08010.00-V08011.00	5369	153.0	6.0	0.001	0.115	0.001	0.048	0.003	0.097	0.002	0.075	0.004	0.112
V08011.00-V08017.C0	7283	18.9	8.0	0.005	0.552	0.001	0.033	0.005	0.065	0.002	0.040	0.007	0.068
V08016.00-V08017.00	5360	267.0	6.0	0.025	0.573	0.000	0.150	0.002	0.240	0.002	0.165	0.004	0.244
V08017.00-V08023.00	1026	186.0	8.0	0.007	0.653	0.036	0.158	0.082	0.234	0.034	0.152	0.079	0.230
V08017.A0-V08017.D0	7082	166.5	8.0	0.011	0.819	0.002	0.046	0.004	0.072	0.002	0.050	0.004	0.074
V08017.B0-V08017.D0	7690	315.9	8.0	0.077	2.167	0.003	0.041	0.005	0.064	0.002	0.042	0.004	0.064
V08017.C0-V08017.D0	7284	124.5	8.0	0.006	0.605	0.002	0.048	0.008	0.087	0.003	0.053	0.009	0.089
V08017.D0-V08017.E0	7081	282.6	8.0	0.018	1.048	0.006	0.058	0.019	0.099	0.007	0.063	0.020	0.101
V08017.E0-V08017.I0	7281	89.4	8.0	0.014	0.924	0.006	0.073	0.021	0.114	0.008	0.066	0.022	0.110
V08017.F0-V08017.G0	7233	406.4	8.0	0.011	0.819	0.001	0.046	0.003	0.062	0.001	0.036	0.004	0.053
V08017.G0-V08017.I0	7285	127.1	8.0	0.017	1.018	0.009	0.076	0.013	0.102	0.003	0.053	0.007	0.086

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V08017.H0-V08017.I0	7083	106.0	8.0	0.054	1.815	0.003	0.058	0.005	0.081	0.001	0.040	0.003	0.070
V08017.I0-V08017.00	7282	186.2	8.0	0.026	1.259	0.019	0.155	0.042	0.226	0.011	0.141	0.034	0.217
V08017.J0-V08017.00	5362	46.4	8.0	0.006	0.605	0.017	0.162	0.036	0.235	0.019	0.160	0.038	0.234
V08023.00-V08072.A0	5370	91.2	8.0	0.046	1.675	0.037	0.107	0.088	0.163	0.034	0.108	0.085	0.164
V08023.A0-V08023.B0	5359	21.0	15.0	0.001	1.320	0.002	0.553	0.006	0.579	0.003	0.551	0.005	0.578
V08023.B0-V08023.00	1023	23.7	15.0	-0.004	Adverse	0.007	0.321	0.015	0.347	0.009	0.319	0.014	0.346
V08032.00-V08033.00	1022	325.0	10.0	0.002	0.633	0.003	0.064	0.005	0.080	0.002	0.053	0.004	0.072
V08033.00-V08037.00	1021	89.0	10.0	0.002	0.633	0.006	0.069	0.011	0.088	0.005	0.066	0.009	0.086
V08034.00-V08035.00	5357	37.1	6.0	0.001	0.115	0.003	0.135	0.005	0.176	0.006	0.182	0.008	0.217
V08035.00-V08036.00	5358	161.0	6.0	0.002	0.162	0.005	0.126	0.009	0.166	0.009	0.165	0.013	0.197
V08036.00-V08037.00	1020	43.0	6.0	0.013	0.413	0.007	0.088	0.013	0.119	0.011	0.103	0.017	0.130
V08037.00-V08134.00	1019	354.0	6.0	0.033	0.659	0.015	0.108	0.027	0.146	0.018	0.122	0.030	0.158
V08038.00-V08039.00	1120	110.0	6.0	0.057	0.866	0.000	0.052	0.002	0.073	0.000	0.045	0.002	0.067
V08039.00-V08040.00	4771	209.0	6.0	0.110	1.203	0.027	0.105	0.031	0.114	0.020	0.091	0.024	0.102
V08040.00-V08042.00	4815	221.0	6.0	0.095	1.118	0.027	0.140	0.033	0.156	0.020	0.128	0.026	0.146
V08041.00-V08042.00	4814	225.0	6.0	0.070	0.959	0.006	0.116	0.008	0.131	0.010	0.117	0.012	0.132
V08042.00-V08043.00	5655	90.8	6.0	0.053	0.835	0.034	0.131	0.045	0.149	0.031	0.125	0.042	0.144
V08043.00-V08044.00	1264	370.0	6.0	0.385	2.250	0.037	0.545	0.049	0.551	0.035	0.543	0.047	0.550
V08044.00-V08045.00	1018	370.0	6.0	-0.228	Adverse	0.039	0.560	0.054	0.570	0.037	0.557	0.052	0.568
V08045.00-V08049.00	1017	260.0	6.0	0.006	0.281	0.007	0.105	0.010	0.129	0.008	0.113	0.011	0.135
V08045.00-V08137.00	7358	158.3	8.0	0.065	1.991	0.033	0.151	0.046	0.192	0.030	0.158	0.043	0.197
V08046.00-V08047.00	5404	175.0	6.0	0.039	0.716	0.001	0.038	0.003	0.057	0.002	0.056	0.005	0.070
V08047.00-V08048.00	5403	200.0	6.0	0.060	0.888	0.004	0.054	0.008	0.076	0.008	0.078	0.013	0.094
V08048.00-V08049.00	1263	250.0	6.0	0.054	0.843	0.006	0.075	0.012	0.101	0.013	0.099	0.019	0.120
V08049.00-V08136.00	7796	150.2	8.0	0.046	1.675	0.015	0.109	0.027	0.149	0.024	0.132	0.036	0.167
V08060.00-V08061.00	5350	47.4	6.0	0.044	0.761	0.005	1.000	0.008	1.000	0.006	1.000	0.010	1.000
V08061.00-V08138.00	7805	144.1	6.0	-0.319	Adverse	0.018	0.543	0.019	0.552	0.012	0.535	0.017	0.546
V08072.A0-V08072.B0	5371	70.0	8.0	0.019	1.077	0.037	0.118	0.090	0.183	0.040	0.123	0.093	0.186
V08072.B0-V08072.C0	5372	90.8	8.0	0.023	1.184	0.036	0.114	0.092	0.179	0.040	0.120	0.095	0.182
V08072.C0-V08072.A0	7721	219.7	18.0	0.011	7.120	1.667	0.337	3.129	0.472	1.879	0.359	3.309	0.488
V08072.CA-V08072.CB	7744	94.7	8.0	0.023	1.184	0.000	0.487	0.002	0.516	0.000	0.500	0.002	0.516
V08072.CB-V08072.CD	7747	267.6	18.0	0.004	4.294	1.630	0.476	3.034	0.673	1.818	0.505	3.191	0.696
V08072.CD-V08072.CE	7749	180.0	18.0	0.003	3.718	1.631	0.431	3.036	0.621	1.836	0.460	3.210	0.644
V08072.CE-V08072.CF	7750	14.0	18.0	0.002	3.036	1.631	0.409	3.037	0.594	1.836	0.438	3.212	0.616
V08072.CF-V08072.C0	7751	145.0	18.0	0.004	4.294	1.631	0.403	3.039	0.562	1.838	0.428	3.216	0.581
V08074.A0-V08129.00	7730	48.5	24.0	0.002	6.539	1.667	0.289	3.131	0.404	1.879	0.307	3.311	0.418
V08077.B0-V08118.A0	7786	63.5	8.0	0.002	0.349	0.005	0.077	0.009	0.104	0.007	0.090	0.011	0.114
V08077.C0-V08077.B0	7788	111.4	8.0	0.002	0.349	0.005	0.091	0.007	0.113	0.007	0.108	0.009	0.127
V08081.00-V08084.00	4813	415.0	6.0	0.058	0.873	0.002	0.052	0.004	0.069	0.005	0.073	0.007	0.086
V08082.00-V08083.00	6261	177.0	6.0	0.057	0.866	0.004	0.057	0.007	0.069	0.006	0.069	0.008	0.079
V08083.00-V08084.00	4812	224.0	6.0	0.060	0.888	0.007	0.067	0.011	0.084	0.012	0.087	0.016	0.101
V08084.00-V08085.00	4827	49.0	8.0	0.026	1.259	0.012	0.063	0.020	0.081	0.021	0.083	0.030	0.097
V08085.00-V08089.00	5654	377.0	6.0	0.043	0.752	0.015	0.119	0.026	0.150	0.027	0.161	0.037	0.185
V08086.00-V08087.00	4810	300.0	6.0	0.073	0.980	0.005	0.059	0.007	0.070	0.009	0.076	0.011	0.084
V08087.00-V08088.00	5653	209.0	6.0	0.088	1.076	0.010	0.085	0.014	0.103	0.016	0.107	0.020	0.121
V08088.00-V08089.00	5402	341.0	6.0	0.020	0.513	0.011	0.121	0.017	0.150	0.018	0.161	0.024	0.184
V08089.00-V08090.00	1261	333.0	6.0	0.045	0.769	0.032	0.139	0.050	0.174	0.063	0.198	0.081	0.223
V08090.00-V08112.00	7695	70.2	8.0	0.026	1.259	0.036	0.106	0.057	0.133	0.078	0.154	0.098	0.173
V08091.00-V08092.00	4770	135.0	8.0	0.080	2.209	0.001	0.027	0.003	0.040	0.001	0.028	0.003	0.041
V08092.00-V08093.00	5607	252.0	8.0	0.034	1.440	0.003	0.046	0.007	0.066	0.004	0.051	0.008	0.069
V08093.00-V08094.00	5608	150.0	8.0	0.014	0.924	0.006	0.068	0.012	0.099	0.007	0.074	0.014	0.103
V08094.00-V08095.00	4809	33.0	8.0	0.005	0.552	0.006	0.059	0.014	0.089	0.008	0.068	0.016	0.095
V08095.00-V08103.00	5652	236.0	8.0	0.094	2.394	0.006	0.063	0.016	0.090	0.013	0.082	0.023	0.104
V08096.00-V08103.00	5401	330.0	6.0	0.004	0.229	0.002	0.091	0.004	0.126	0.006	0.128	0.008	0.155
V08097.00-V08098.00	5400	126.0	8.0	0.004	0.494	0.001	0.051	0.003	0.074	0.001	0.045	0.003	0.071

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V08098.00-V08099.00	5399	126.0	8.0	0.004	0.494	0.004	0.074	0.008	0.101	0.004	0.086	0.008	0.110
V08099.00-V08100.00	5398	192.0	8.0	0.004	0.494	0.007	0.089	0.013	0.119	0.012	0.123	0.018	0.146
V08100.00-V08102.00	5397	79.0	8.0	0.005	0.552	0.010	0.124	0.019	0.155	0.023	0.149	0.032	0.176
V08101.00-V08102.00	5651	103.0	8.0	0.053	1.798	0.009	0.101	0.011	0.118	0.001	0.087	0.003	0.109
V08102.00-V08103.00	5396	87.0	8.0	0.006	0.605	0.020	0.121	0.032	0.153	0.024	0.134	0.037	0.163
V08103.00-V08104.00	1260	210.0	8.0	0.050	1.746	0.029	0.094	0.055	0.126	0.045	0.111	0.072	0.139
V08104.00-V08105.00	1009	240.0	8.0	0.052	1.781	0.037	0.141	0.065	0.190	0.046	0.157	0.075	0.203
V08105.00-V08109.00	1276	323.0	6.0	0.006	0.281	0.037	0.257	0.067	0.353	0.046	0.284	0.077	0.375
V08106.00-V08107.00	5348	191.0	6.0	0.033	0.659	0.001	0.082	0.003	0.109	0.005	0.098	0.007	0.121
V08107.00-V08108.00	5346	95.0	6.0	0.006	0.281	0.006	0.097	0.010	0.126	0.007	0.105	0.011	0.133
V08108.00-V08109.00	1275	245.0	6.0	0.050	0.811	0.006	0.165	0.012	0.229	0.009	0.186	0.015	0.245
V08109.00-V08110.00	5347	138.0	6.0	0.006	0.281	0.046	0.347	0.086	0.476	0.055	0.377	0.094	0.500
V08110.00-V08111.00	5349	129.0	6.0	0.006	0.281	0.046	0.261	0.088	0.358	0.055	0.284	0.096	0.375
V08111.00-V08113.00	7554	41.1	8.0	0.055	1.832	0.047	0.111	0.091	0.149	0.057	0.133	0.100	0.167
V08112.00-V08113.00	7696	384.6	8.0	0.036	1.482	0.036	0.127	0.059	0.165	0.078	0.170	0.100	0.201
V08113.00-V08147.00	7697	82.1	8.0	0.037	1.502	0.083	0.484	0.151	0.598	0.135	0.531	0.203	0.613
V08114.00-V08115.A0	7886	154.8	8.0	0.010	0.781	0.000	0.032	0.002	0.057	0.014	0.094	0.016	0.100
V08115.00-V08116.00	7885	235.6	8.0	0.011	0.819	0.007	0.065	0.013	0.091	0.014	0.124	0.020	0.140
V08115.A0-V08115.00	7887	33.6	8.0	0.006	0.605	0.007	0.063	0.011	0.082	0.014	0.089	0.018	0.103
V08116.00-V08117.00	7884	131.9	8.0	0.011	0.819	0.007	0.066	0.015	0.098	0.044	0.162	0.052	0.177
V08117.00-V08119.A0	7883	69.0	8.0	0.009	0.741	0.007	0.065	0.017	0.102	0.044	0.160	0.054	0.178
V08118.00-V08119.00	7784	103.1	8.0	0.002	0.349	0.005	0.084	0.013	0.140	0.007	0.138	0.015	0.179
V08118.A0-V08118.00	7785	94.3	8.0	0.014	0.924	0.005	0.065	0.011	0.104	0.007	0.078	0.013	0.112
V08119.00-V08123.00	7783	99.0	8.0	0.008	0.699	0.011	0.098	0.034	0.170	0.050	0.201	0.073	0.244
V08119.A0-V08119.00	7781	85.6	8.0	0.012	0.856	0.007	0.075	0.019	0.126	0.044	0.167	0.056	0.195
V08123.00-V08124.00	7782	94.8	8.0	0.008	0.699	0.011	0.089	0.038	0.159	0.050	0.181	0.077	0.223
V08123.A0-V08123.00	7780	39.0	8.0	0.004	0.494	0.000	0.054	0.002	0.115	0.000	0.111	0.002	0.155
V08127.00-V08128.00	7731	96.3	8.0	0.011	0.819	0.000	0.001	0.002	0.037	0.000	0.004	0.002	0.037
V08128.00-V08129.00	7732	20.4	8.0	0.033	1.419	0.000	0.326	0.004	0.512	0.000	0.361	0.005	0.512
V08129.00-V08130.00	7753	316.0	24.0	0.003	8.008	1.667	0.351	3.137	0.482	1.879	0.371	3.317	0.496
V08130.00-V08132.B0	7754	150.3	24.0	0.002	6.539	1.687	0.322	3.158	0.438	1.881	0.339	3.320	0.449
V08132.00-V08133.00	7803	209.6	24.0	0.003	8.008	1.687	0.281	3.162	0.379	1.881	0.296	3.324	0.388
V08132.B0-V08132.00	7802	91.0	24.0	0.004	9.247	1.687	0.316	3.160	0.428	1.881	0.333	3.322	0.438
V08133.00-V08142.00	7801	265.1	24.0	0.021	21.188	1.689	0.595	3.168	0.630	1.882	0.600	3.329	0.633
V08133.A0-V08133.00	7757	13.0	6.0	0.004	0.229	0.002	0.048	0.004	0.065	0.002	0.043	0.004	0.061
V08134.00-V08135.00	8319	354.0	6.0	0.021	0.526	0.015	0.126	0.030	0.177	0.021	0.147	0.035	0.192
V08135.00-V08136.00	7357	341.7	8.0	0.007	0.653	0.015	0.127	0.032	0.179	0.021	0.151	0.037	0.197
V08136.00-V08137.00	1273	257.4	8.0	0.007	0.653	0.031	0.181	0.061	0.244	0.045	0.205	0.076	0.263
V08137.00-V08140.00	1272	208.8	8.0	0.007	0.653	0.064	0.268	0.109	0.350	0.075	0.285	0.121	0.363
V08138.00-V08140.00	7804	77.5	8.0	0.027	1.283	0.013	0.194	0.019	0.250	0.008	0.196	0.014	0.251
V08139.00-V08140.00	7808	390.9	8.0	0.010	0.781	0.001	0.176	0.003	0.234	0.002	0.186	0.004	0.242
V08140.00-V08141.00	7809	191.6	8.0	0.011	0.819	0.078	0.205	0.133	0.267	0.086	0.215	0.141	0.275
V08141.00-V08142.00	7807	22.3	8.0	0.042	1.601	0.078	0.543	0.135	0.556	0.088	0.546	0.146	0.558
V08142.00-V08143.A0	7795	74.3	24.0	-0.019	Adverse	1.765	0.682	3.300	0.752	1.969	0.693	3.472	0.759
V08143.00-V08144.A0	7792	97.8	24.0	0.062	36.406	1.765	0.552	3.305	0.571	1.971	0.555	3.479	0.572
V08143.A0-V08143.B0	7794	70.9	24.0	0.001	4.624	1.765	0.373	3.302	0.503	1.970	0.393	3.475	0.516
V08143.B0-V08143.00	7793	115.4	24.0	0.004	9.247	1.765	0.243	3.303	0.322	1.970	0.255	3.477	0.329
V08144.00-V08146.00	7255	228.2	24.0	-0.083	Adverse	1.766	0.667	3.309	0.732	1.974	0.676	3.487	0.738
V08144.A0-V08144.00	7756	20.8	24.0	0.038	28.501	0.000	0.500	0.002	0.501	0.002	0.501	0.004	0.501
V08145.00-V08146.00	7755	93.7	8.0	0.010	0.781	0.007	0.065	0.009	0.074	0.000	0.000	0.002	0.040
V08146.00-V08147.00	7254	380.8	24.0	0.003	8.008	1.771	0.304	3.318	0.422	1.978	0.322	3.493	0.435
V09062.00-V08072.CB	7746	82.1	18.0	0.011	7.120	1.630	0.360	3.029	0.514	1.817	0.382	3.186	0.530
V09001.00-V09002.00	630	160.0	6.0	0.012	0.397	0.008	0.101	0.010	0.118	0.007	0.101	0.009	0.117
V09002.00-V09003.A0	632	239.0	8.0	0.008	0.699	0.009	0.139	0.013	0.170	0.009	0.160	0.013	0.187
V09003.00-V09004.00	626	337.0	8.0	0.005	0.552	0.013	0.103	0.021	0.131	0.020	0.129	0.028	0.152

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V09003.A0-V09003.00	629	130.0	8.0	0.000	0.000	0.009	0.170	0.015	0.211	0.015	0.208	0.021	0.242
V09004.00-V09007.00	627	28.0	8.0	0.010	0.781	0.013	0.162	0.023	0.218	0.021	0.222	0.031	0.264
V09005.00-V09006.00	255	73.0	6.0	0.006	0.281	0.001	0.062	0.003	0.089	0.001	0.096	0.003	0.116
V09006.00-V09007.00	625	300.0	6.0	0.008	0.324	0.005	0.089	0.009	0.118	0.015	0.149	0.019	0.168
V09007.00-V09008.00	628	322.0	8.0	0.001	0.247	0.019	0.178	0.035	0.238	0.037	0.245	0.054	0.291
V09008.00-V09010.00	634	254.0	8.0	0.028	1.307	0.025	0.152	0.043	0.176	0.045	0.151	0.064	0.174
V09009.00-V09010.00	633	350.0	8.0	0.005	0.552	0.082	0.258	0.084	0.262	0.021	0.154	0.023	0.168
V09010.00-V09011.00	619	266.0	8.0	0.026	1.259	0.112	0.202	0.135	0.221	0.074	0.164	0.097	0.187
V09011.00-V09012.00	620	265.0	10.0	0.027	2.327	0.114	0.150	0.138	0.165	0.075	0.123	0.100	0.141
V09012.00-V09013.00	618	248.0	10.0	0.036	2.687	0.120	0.146	0.147	0.161	0.087	0.126	0.114	0.143
V09013.00-V09027.00	613	300.0	10.0	0.034	2.611	0.123	0.168	0.152	0.192	0.092	0.154	0.120	0.180
V09014.00-V09015.00	624	124.0	6.0	0.066	0.932	0.004	0.055	0.006	0.066	0.007	0.070	0.009	0.079
V09015.00-V09016.00	258	239.0	6.0	0.074	0.986	0.007	0.061	0.011	0.079	0.012	0.078	0.016	0.092
V09016.00-V09017.00	259	121.0	8.0	0.065	1.991	0.008	0.522	0.017	0.531	0.014	0.529	0.022	0.536
V09016.A0-V09016.00	818	40.6	8.0	0.001	0.247	0.001	0.039	0.003	0.063	0.001	0.052	0.003	0.071
V09017.00-V09018.00	256	109.0	8.0	-0.020	Adverse	0.009	0.569	0.019	0.601	0.016	0.594	0.026	0.619
V09018.00-V09020.00	252	217.0	8.0	0.008	0.699	0.013	0.093	0.027	0.134	0.023	0.125	0.038	0.157
V09018.A0-V09018.00	253	416.0	6.0	0.068	0.946	0.002	0.111	0.005	0.160	0.005	0.152	0.007	0.190
V09019.00-V09020.00	249	225.0	8.0	0.051	1.764	0.006	0.045	0.008	0.057	0.008	0.055	0.010	0.065
V09020.00-V09021.00	250	43.0	8.0	0.057	1.865	0.019	0.524	0.038	0.533	0.032	0.530	0.051	0.538
V09021.00-V09023.00	251	153.0	8.0	-0.051	Adverse	0.019	0.558	0.040	0.582	0.033	0.576	0.054	0.596
V09022.00-V09023.00	248	363.0	6.0	0.036	0.688	0.004	0.105	0.006	0.143	0.007	0.137	0.009	0.168
V09023.00-V09025.00	622	216.0	6.0	0.017	0.473	0.025	0.173	0.050	0.237	0.043	0.217	0.067	0.272
V09024.00-V09025.00	247	275.0	8.0	0.017	1.018	0.009	0.105	0.013	0.136	0.010	0.121	0.014	0.148
V09024.A0-V09024.00	621	118.0	8.0	0.051	1.764	0.005	0.052	0.007	0.062	0.004	0.052	0.006	0.062
V09025.00-V09026.00	614	345.0	8.0	0.017	1.018	0.035	0.127	0.066	0.173	0.053	0.155	0.084	0.194
V09026.00-V09027.00	615	40.0	8.0	0.012	0.856	0.035	0.173	0.068	0.214	0.053	0.181	0.086	0.219
V09027.00-V09029.00	616	120.0	12.0	0.019	3.174	0.159	0.152	0.223	0.179	0.145	0.145	0.209	0.173
V09028.00-V09029.00	611	475.0	6.0	0.051	0.819	0.003	0.169	0.007	0.208	0.001	0.155	0.005	0.198
V09028.A0-V09028.00	5353	20.0	8.0	0.001	0.247	0.001	0.039	0.003	0.069	0.001	0.036	0.003	0.067
V09029.00-V09032.A0	1154	108.0	12.0	0.018	3.089	0.164	0.154	0.234	0.183	0.149	0.146	0.219	0.177
V09030.00-V09031.00	3045	195.0	6.0	0.086	1.063	0.002	0.050	0.007	0.073	0.003	0.050	0.007	0.073
V09030.A0-V09030.00	5354	30.0	8.0	0.001	0.247	0.001	0.040	0.003	0.073	0.003	0.068	0.005	0.089
V09031.00-V09032.00	3044	280.0	6.0	0.040	0.725	0.006	0.217	0.012	0.266	0.005	0.206	0.011	0.257
V09032.00-V09035.00	1155	120.0	12.0	0.013	2.625	0.171	0.173	0.252	0.209	0.154	0.165	0.235	0.202
V09032.A0-V09032.00	1156	92.0	12.0	0.017	3.002	0.164	0.172	0.236	0.206	0.149	0.164	0.221	0.199
V09033.00-V09034.00	3046	256.0	8.0	0.011	0.819	0.003	0.045	0.007	0.067	0.004	0.050	0.008	0.070
V09033.A0-V09033.00	7533	24.8	8.0	0.001	0.247	0.002	0.054	0.004	0.075	0.004	0.069	0.006	0.086
V09034.00-V09035.00	1157	250.0	8.0	0.033	1.419	0.005	0.143	0.011	0.180	0.005	0.136	0.011	0.174
V09035.00-V09046.00	3040	290.0	12.0	0.018	3.089	0.177	0.221	0.266	0.277	0.159	0.220	0.248	0.277
V09036.00-V09037.00	638	70.0	6.0	0.011	0.380	0.000	0.000	0.002	0.055	0.000	0.074	0.002	0.105
V09037.00-V09038.00	637	104.0	6.0	0.032	0.649	0.000	0.044	0.004	0.089	0.031	0.166	0.035	0.179
V09038.00-V09039.00	635	376.0	6.0	0.014	0.429	0.007	0.090	0.013	0.126	0.031	0.185	0.037	0.205
V09039.00-V09040.00	1159	206.0	6.0	0.012	0.397	0.007	0.101	0.015	0.151	0.031	0.211	0.039	0.235
V09040.00-V09042.00	617	120.0	8.0	0.004	0.494	0.007	0.090	0.018	0.137	0.031	0.168	0.041	0.193
V09041.00-V09042.00	5946	225.0	6.0	0.005	0.256	0.003	0.102	0.007	0.155	0.001	0.130	0.005	0.179
V09041.A0-V09041.00	5945	15.0	8.0	0.001	0.247	0.001	0.045	0.003	0.071	0.001	0.032	0.003	0.064
V09042.00-V09045.A0	3041	112.0	8.0	0.006	0.605	0.012	0.098	0.028	0.151	0.034	0.160	0.050	0.196
V09043.00-V09045.00	3038	235.0	6.0	0.019	0.500	0.002	0.113	0.007	0.177	0.001	0.131	0.005	0.192
V09043.A0-V09043.00	7427	41.3	8.0	0.001	0.247	0.000	0.019	0.002	0.058	0.000	0.009	0.002	0.055
V09044.00-V09045.00	7624	225.0	6.0	0.006	0.281	0.002	0.119	0.006	0.189	0.002	0.149	0.006	0.210
V09044.A0-V09044.00	5957	15.0	8.0	0.001	0.247	0.000	0.024	0.002	0.063	0.001	0.036	0.003	0.065
V09045.00-V09046.00	3042	118.0	8.0	0.005	0.552	0.020	0.276	0.049	0.370	0.037	0.304	0.065	0.391
V09045.A0-V09045.00	3043	111.0	8.0	0.006	0.605	0.013	0.116	0.031	0.180	0.034	0.169	0.052	0.218
V09046.00-V09049.00	3035	287.0	12.0	0.003	1.261	0.198	0.261	0.317	0.332	0.207	0.267	0.327	0.338

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V09049.00-V09050.A0	3034	223.0	15.0	0.003	2.287	0.198	0.207	0.319	0.262	0.207	0.212	0.329	0.266
V09050.00-V09054.00	3022	280.0	15.0	0.007	3.493	0.208	0.164	0.339	0.208	0.223	0.169	0.355	0.213
V09050.A0-V09050.00	3030	230.0	15.0	0.003	2.287	0.198	0.192	0.322	0.243	0.209	0.197	0.333	0.247
V09051.00-V09052.00	3036	460.0	8.0	0.006	0.605	0.003	0.055	0.005	0.071	0.009	0.087	0.011	0.096
V09052.00-V09053.00	3031	455.0	8.0	0.011	0.819	0.006	0.530	0.010	0.539	0.012	0.541	0.016	0.548
V09053.00-V09050.00	3029	190.0	8.0	-0.006	Adverse	0.034	0.653	0.045	0.695	0.027	0.659	0.035	0.699
V09054.00-V09061.00	7742	230.6	18.0	0.006	5.259	0.208	0.181	0.342	0.241	0.224	0.189	0.358	0.247
V09056.00-V09057.00	3033	450.0	18.0	0.002	3.036	1.417	0.503	2.662	0.798	1.581	0.537	2.800	0.853
V09057.00-V09058.00	3027	450.0	18.0	0.001	2.147	1.417	0.572	2.663	0.864	1.583	0.609	2.803	0.904
V09058.00-V09059.B0	3023	451.0	18.0	0.000	0.000	1.421	0.563	2.678	0.790	1.588	0.596	2.819	0.814
V09058.A0-V09058.C0	3032	389.0	8.0	0.006	0.605	0.002	0.056	0.004	0.091	0.002	0.058	0.004	0.092
V09058.B0-V09058.C0	4322	30.0	8.0	0.011	0.819	0.001	0.047	0.003	0.079	0.001	0.045	0.003	0.079
V09058.C0-V09058.E0	3026	339.0	8.0	0.006	0.605	0.003	0.047	0.009	0.084	0.003	0.048	0.009	0.084
V09058.D0-V09058.E0	3025	21.2	8.0	0.005	0.552	0.000	0.012	0.002	0.036	0.000	0.017	0.002	0.037
V09058.E0-V09058.00	3024	9.9	8.0	0.013	0.890	0.003	0.510	0.013	0.520	0.003	0.510	0.013	0.521
V09059.00-V09061.00	7743	126.6	18.0	0.026	10.947	1.422	0.224	2.687	0.309	1.593	0.237	2.831	0.318
V09059.A0-V09059.B0	3028	103.0	8.0	0.029	1.330	0.001	0.512	0.003	0.518	0.002	0.514	0.004	0.520
V09059.B0-V09059.00	3020	451.0	18.0	0.004	4.294	1.422	0.371	2.683	0.516	1.590	0.393	2.825	0.531
V09059.C0-V09059.00	3021	105.0	8.0	0.054	1.815	0.000	0.252	0.002	0.361	0.003	0.281	0.005	0.378
V09061.00-V09062.00	7745	59.9	18.0	0.015	8.315	1.630	0.256	3.028	0.352	1.817	0.270	3.184	0.362
V10143.00-V09056.00	4267	450.0	18.0	0.001	2.147	1.329	0.499	2.513	0.757	1.537	0.535	2.697	0.810
V13139.00-V09056.00	4663	34.0	8.0	0.023	1.184	0.088	0.563	0.151	0.582	0.044	0.545	0.107	0.569
V10001.00-V10002.00	915	140.0	8.0	0.005	0.552	0.008	0.089	0.015	0.119	0.014	0.124	0.020	0.147
V10001.A0-V10001.00	4323	48.0	8.0	0.002	0.349	0.000	0.055	0.002	0.086	0.006	0.099	0.008	0.117
V10001.B0-V10001.00	4324	42.5	8.0	0.001	0.247	0.008	0.101	0.010	0.116	0.008	0.107	0.010	0.124
V10002.00-V10003.00	914	349.0	8.0	0.004	0.494	0.008	0.124	0.017	0.163	0.020	0.180	0.029	0.209
V10003.00-V10006.00	4395	348.0	8.0	0.004	0.494	0.013	0.111	0.023	0.147	0.027	0.158	0.038	0.185
V10004.00-V10006.00	4093	110.0	8.0	0.102	2.494	0.001	0.037	0.003	0.057	0.001	0.052	0.003	0.068
V10005.00-V10006.00	4394	165.0	8.0	0.003	0.428	0.000	0.032	0.002	0.071	0.001	0.065	0.003	0.087
V10006.00-V10007.00	4393	249.0	8.0	0.048	1.711	0.014	0.063	0.030	0.092	0.029	0.091	0.046	0.112
V10007.00-V10008.00	4392	268.0	8.0	0.061	1.929	0.015	0.062	0.033	0.092	0.031	0.089	0.049	0.111
V10008.00-V10017.00	4391	224.0	8.0	0.063	1.960	0.015	0.075	0.035	0.112	0.033	0.106	0.053	0.134
V10009.00-V10010.00	4099	222.0	8.0	0.027	1.283	0.002	0.030	0.004	0.042	0.002	0.035	0.005	0.046
V10010.00-V10011.00	4098	270.0	8.0	0.071	2.081	0.004	0.040	0.008	0.055	0.006	0.047	0.010	0.061
V10011.00-V10012.00	4096	245.0	8.0	0.033	1.419	0.006	0.049	0.012	0.069	0.009	0.059	0.015	0.076
V10012.00-V10014.00	4095	350.0	8.0	0.036	1.482	0.007	0.062	0.016	0.086	0.011	0.079	0.019	0.099
V10014.00-V10015.00	4390	349.0	8.0	0.016	0.988	0.011	0.080	0.021	0.110	0.020	0.105	0.030	0.130
V10015.00-V10016.00	4389	386.0	8.0	0.016	0.988	0.012	0.078	0.025	0.108	0.021	0.101	0.034	0.126
V10016.00-V10017.00	4094	137.0	8.0	0.037	1.502	0.015	0.079	0.029	0.114	0.024	0.105	0.038	0.133
V10017.00-V10018.00	376	187.0	8.0	0.055	1.832	0.030	0.092	0.067	0.134	0.058	0.125	0.095	0.158
V10018.00-V10019.00	375	185.0	8.0	0.051	1.764	0.032	0.098	0.071	0.144	0.061	0.133	0.100	0.169
V10019.00-V10079.00	912	275.0	8.0	0.039	1.542	0.035	0.179	0.076	0.267	0.063	0.221	0.105	0.297
V10020.00-V10021.00	4425	175.0	8.0	0.040	1.562	0.002	0.029	0.006	0.049	0.005	0.043	0.009	0.058
V10020.A0-V10020.00	4233	253.0	8.0	0.051	1.764	0.001	0.023	0.003	0.038	0.004	0.037	0.006	0.048
V10021.00-V10023.00	639	318.0	8.0	0.046	1.675	0.003	0.045	0.009	0.070	0.007	0.061	0.013	0.082
V10022.00-V10023.00	4424	182.0	8.0	0.058	1.881	0.002	0.043	0.005	0.062	0.004	0.055	0.006	0.071
V10023.00-V10025.00	4421	255.0	8.0	0.020	1.104	0.007	0.079	0.018	0.121	0.013	0.102	0.023	0.137
V10024.00-V10025.00	4387	260.0	8.0	0.061	1.929	0.002	0.063	0.004	0.094	0.003	0.077	0.005	0.104
V10025.00-V10026.00	4388	139.0	8.0	0.014	0.924	0.010	0.072	0.024	0.110	0.016	0.090	0.030	0.123
V10026.00-V10027.00	4131	93.0	8.0	0.033	1.419	0.011	0.050	0.027	0.078	0.017	0.062	0.034	0.086
V10027.00-V10029.00	4396	134.0	8.0	0.055	1.832	0.012	0.084	0.030	0.134	0.018	0.103	0.037	0.147
V10028.00-V10029.00	4397	121.0	8.0	0.060	1.913	0.001	0.063	0.003	0.103	0.001	0.076	0.003	0.111
V10029.00-V10031.00	4129	34.0	8.0	0.007	0.653	0.013	0.100	0.036	0.160	0.020	0.121	0.043	0.174
V10030.00-V10031.00	4130	190.0	8.0	0.004	0.494	0.002	0.068	0.004	0.103	0.003	0.081	0.005	0.112
V10031.00-V10038.00	4128	325.0	8.0	0.017	1.018	0.017	0.098	0.043	0.154	0.024	0.113	0.051	0.164

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V10032.00-V10033.00	1080	245.0	8.0	0.044	1.638	0.002	0.040	0.004	0.053	0.002	0.037	0.004	0.052
V10033.00-V10035.00	1079	204.0	8.0	0.014	0.924	0.005	0.068	0.009	0.093	0.004	0.063	0.008	0.089
V10034.00-V10035.00	1076	141.0	8.0	0.020	1.104	0.002	0.057	0.004	0.080	0.001	0.052	0.003	0.076
V10035.00-V10036.00	1078	163.0	8.0	0.010	0.781	0.008	0.072	0.016	0.100	0.007	0.066	0.015	0.096
V10036.00-V10037.00	4399	30.0	8.0	0.009	0.741	0.009	0.059	0.019	0.086	0.008	0.056	0.018	0.084
V10037.00-V10038.00	4400	121.0	8.0	0.030	1.353	0.010	0.084	0.022	0.128	0.009	0.088	0.021	0.131
V10038.00-V10049.00	1074	325.0	8.0	0.021	1.132	0.027	0.157	0.068	0.237	0.034	0.160	0.075	0.239
V10039.00-V10041.00	4423	250.0	8.0	0.009	0.741	0.008	0.084	0.010	0.097	0.002	0.042	0.004	0.064
V10040.00-V10041.00	4422	350.0	8.0	0.047	1.693	0.001	0.055	0.003	0.071	0.000	0.029	0.002	0.052
V10041.00-V10044.00	4386	234.0	8.0	0.011	0.819	0.011	0.083	0.018	0.102	0.003	0.050	0.010	0.078
V10042.00-V10043.00	1082	300.0	8.0	0.090	2.343	0.003	0.032	0.005	0.042	0.003	0.033	0.005	0.042
V10043.00-V10044.00	1081	100.0	8.0	0.048	1.711	0.005	0.055	0.009	0.071	0.005	0.046	0.010	0.065
V10044.00-V10047.00	1083	293.0	8.0	0.049	1.729	0.018	0.086	0.031	0.112	0.010	0.066	0.022	0.097
V10045.00-V10046.00	1085	131.0	8.0	0.048	1.711	0.001	0.022	0.003	0.034	0.001	0.020	0.003	0.032
V10046.00-V10047.00	1084	373.0	8.0	0.080	2.209	0.003	0.064	0.007	0.086	0.003	0.052	0.007	0.078
V10047.00-V10048.00	1075	170.0	8.0	0.022	1.158	0.024	0.102	0.042	0.135	0.014	0.080	0.033	0.120
V10048.00-V10049.00	817	190.1	8.0	0.019	1.077	0.025	0.156	0.046	0.223	0.015	0.142	0.036	0.213
V10049.00-V10051.00	4127	248.0	8.0	0.013	0.890	0.053	0.166	0.117	0.245	0.050	0.162	0.114	0.242
V10050.00-V10051.00	4126	120.0	8.0	0.033	1.419	0.001	0.073	0.003	0.109	0.001	0.072	0.003	0.108
V10051.00-V10053.00	4125	180.0	8.0	0.047	1.693	0.056	0.130	0.124	0.190	0.054	0.128	0.122	0.189
V10052.00-V10053.00	4124	315.0	8.0	0.032	1.397	0.002	0.083	0.005	0.120	0.003	0.083	0.005	0.120
V10053.00-V10054.00	4123	177.0	8.0	0.040	1.562	0.061	0.179	0.133	0.264	0.059	0.177	0.131	0.262
V10054.00-V10056.00	4122	77.0	8.0	0.009	0.741	0.062	0.192	0.136	0.283	0.061	0.190	0.135	0.282
V10055.00-V10056.00	4115	252.0	8.0	0.044	1.638	0.003	0.096	0.005	0.138	0.003	0.096	0.005	0.139
V10056.00-V10058.00	4121	270.0	8.0	0.024	1.210	0.066	0.159	0.145	0.234	0.066	0.159	0.144	0.233
V10057.00-V10058.00	4116	255.0	8.0	-0.198	Adverse	0.014	0.579	0.040	0.616	0.014	0.579	0.040	0.616
V10058.00-V10060.00	4120	67.0	8.0	0.016	0.988	0.070	0.174	0.152	0.257	0.070	0.175	0.153	0.258
V10059.00-V10060.00	4119	115.0	8.0	0.042	1.601	0.001	0.107	0.003	0.159	0.002	0.110	0.004	0.161
V10060.00-V10061.00	4118	276.0	8.0	0.014	0.924	0.073	0.199	0.159	0.294	0.074	0.201	0.161	0.296
V10061.00-V10078.00	4114	207.0	8.0	0.011	0.819	0.075	0.211	0.164	0.316	0.077	0.226	0.166	0.327
V10062.00-V10063.00	4101	164.0	8.0	0.037	1.502	0.002	0.028	0.004	0.041	0.002	0.028	0.004	0.042
V10063.00-V10065.00	4100	350.0	8.0	0.045	1.657	0.002	0.048	0.007	0.072	0.003	0.064	0.007	0.083
V10064.00-V10065.00	4105	235.0	8.0	0.019	1.077	0.006	0.061	0.013	0.087	0.018	0.094	0.024	0.112
V10064.A0-V10064.B0	4107	217.0	8.0	0.076	2.153	0.002	0.096	0.004	0.125	0.013	0.168	0.015	0.183
V10064.B0-V10064.00	4106	115.0	8.0	0.000	0.000	0.004	0.112	0.008	0.147	0.015	0.186	0.020	0.206
V10065.00-V10066.00	4104	140.0	8.0	0.022	1.158	0.011	0.088	0.023	0.127	0.023	0.125	0.036	0.155
V10066.00-V10068.00	4108	282.0	8.0	0.004	0.494	0.012	0.112	0.027	0.164	0.025	0.157	0.040	0.197
V10067.00-V10068.00	4111	117.0	8.0	0.063	1.960	0.001	0.068	0.003	0.102	0.002	0.093	0.004	0.119
V10068.00-V10069.00	4110	113.0	8.0	0.006	0.605	0.015	0.110	0.033	0.162	0.029	0.151	0.048	0.192
V10069.00-V10070.00	4109	245.0	8.0	0.015	0.957	0.017	0.092	0.038	0.134	0.031	0.123	0.052	0.157
V10070.00-V10075.00	4112	149.0	8.0	0.034	1.440	0.019	0.082	0.041	0.122	0.034	0.110	0.056	0.142
V10071.00-V10072.00	919	195.0	8.0	0.052	1.781	0.002	0.027	0.004	0.039	0.004	0.047	0.006	0.055
V10072.00-V10073.00	918	233.0	8.0	0.054	1.815	0.002	0.028	0.007	0.044	0.009	0.050	0.013	0.060
V10073.00-V10074.00	917	120.0	8.0	0.058	1.881	0.004	0.095	0.012	0.150	0.011	0.140	0.019	0.178
V10073.A0-V10073.00	1006	56.0	8.0	0.002	0.349	0.001	0.033	0.003	0.061	0.001	0.038	0.003	0.063
V10074.00-V10075.00	1008	135.1	8.0	0.000	0.000	0.005	0.124	0.015	0.192	0.012	0.176	0.023	0.226
V10075.00-V10077.00	1007	60.8	8.0	0.027	1.283	0.024	0.080	0.059	0.122	0.047	0.109	0.082	0.143
V10076.00-V10077.00	4113	210.0	6.0	0.019	0.500	0.001	0.070	0.003	0.108	0.003	0.097	0.005	0.127
V10077.00-V10078.00	916	197.0	8.0	0.077	2.167	0.026	0.146	0.065	0.222	0.051	0.173	0.090	0.242
V10078.00-V10079.00	4381	317.0	8.0	0.017	1.018	0.103	0.236	0.233	0.355	0.130	0.273	0.260	0.383
V10079.00-V10082.00	911	254.0	10.0	0.012	1.551	0.140	0.206	0.313	0.309	0.197	0.244	0.370	0.337
V10081.00-V10082.00	373	190.0	6.0	0.048	0.795	0.002	0.192	0.004	0.285	0.003	0.226	0.005	0.311
V10082.00-V10097.A0	374	134.0	10.0	0.012	1.551	0.144	0.231	0.321	0.350	0.202	0.275	0.379	0.383
V10083.00-V10084.00	4403	216.0	8.0	0.004	0.494	0.002	0.050	0.004	0.070	0.008	0.095	0.011	0.106
V10084.00-V10086.00	4402	300.0	8.0	0.008	0.699	0.005	0.059	0.009	0.079	0.012	0.091	0.016	0.104

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V10085.00-V10086.00	4401	160.0	8.0	-0.050	Adverse	0.002	0.530	0.004	0.540	0.003	0.542	0.005	0.549
V10086.00-V10087.00	1096	323.0	8.0	0.031	1.375	0.010	0.089	0.018	0.119	0.020	0.124	0.028	0.147
V10087.00-V10089.00	1089	248.0	8.0	0.003	0.428	0.013	0.118	0.024	0.155	0.026	0.161	0.036	0.190
V10088.00-V10089.00	4383	238.0	8.0	0.002	0.349	0.008	0.110	0.010	0.133	0.012	0.142	0.014	0.160
V10089.00-V10090.00	1090	80.0	8.0	0.008	0.699	0.022	0.127	0.036	0.163	0.040	0.169	0.054	0.198
V10090.00-V10091.00	1091	191.0	8.0	0.011	0.819	0.023	0.115	0.040	0.149	0.041	0.151	0.057	0.179
V10091.00-V10092.00	1092	169.0	8.0	0.030	1.353	0.025	0.097	0.044	0.127	0.043	0.126	0.062	0.150
V10092.00-V10097.B0	1095	196.0	8.0	0.025	1.235	0.026	0.251	0.046	0.357	0.045	0.305	0.065	0.398
V10093.00-V10094.00	4408	267.0	8.0	0.031	1.375	0.001	0.026	0.003	0.041	0.001	0.028	0.003	0.042
V10094.00-V10095.00	4407	155.0	8.0	0.047	1.693	0.004	0.037	0.008	0.052	0.004	0.043	0.008	0.056
V10095.00-V10096.00	4406	247.0	8.0	0.080	2.209	0.007	0.044	0.013	0.060	0.010	0.052	0.016	0.066
V10096.00-V10097.00	4413	135.0	8.0	0.063	1.960	0.009	0.146	0.017	0.212	0.012	0.175	0.020	0.233
V10097.00-V10100.00	1087	196.0	12.0	0.018	3.089	0.180	0.180	0.393	0.266	0.263	0.216	0.475	0.293
V10097.A0-V10097.B0	1093	161.0	10.0	0.005	1.001	0.145	0.288	0.324	0.428	0.203	0.344	0.383	0.469
V10097.B0-V10097.00	1088	70.0	10.0	0.005	1.001	0.171	0.258	0.373	0.377	0.250	0.310	0.451	0.414
V10098.00-V10099.00	4405	97.0	8.0	0.017	1.018	0.002	0.034	0.004	0.047	0.003	0.043	0.006	0.053
V10099.00-V10100.00	4404	84.0	8.0	0.039	1.542	0.002	0.162	0.007	0.242	0.004	0.196	0.009	0.266
V10100.00-V10101.00	1086	300.0	12.0	0.009	2.184	0.184	0.195	0.402	0.288	0.269	0.235	0.487	0.318
V10101.00-V10104.A0	4385	173.0	12.0	0.010	2.303	0.189	0.195	0.410	0.286	0.280	0.242	0.500	0.322
V10102.00-V10103.00	332	184.0	8.0	0.024	1.210	0.004	0.043	0.008	0.065	0.005	0.055	0.009	0.073
V10102.B0-V10102.00	333	116.0	8.0	0.020	1.104	0.002	0.037	0.005	0.052	0.003	0.042	0.005	0.055
V10103.00-V10104.00	330	53.0	8.0	0.009	0.741	0.004	0.185	0.010	0.265	0.007	0.219	0.013	0.291
V10104.00-V10105.00	329	250.0	12.0	0.010	2.303	0.234	0.220	0.467	0.312	0.320	0.258	0.553	0.341
V10104.A0-V10104.B0	4384	71.0	12.0	0.007	1.927	0.196	0.214	0.418	0.307	0.313	0.259	0.536	0.341
V10104.B0-V10104.00	326	106.0	12.0	0.008	2.060	0.230	0.223	0.455	0.314	0.313	0.259	0.538	0.343
V10105.00-V10106.00	328	174.0	12.0	0.009	2.184	0.239	0.222	0.474	0.314	0.329	0.260	0.564	0.344
V10106.00-V10108.00	327	133.0	12.0	0.010	2.303	0.243	0.240	0.480	0.337	0.335	0.282	0.572	0.371
V10107.00-V10108.00	4453	230.0	8.0	0.006	0.605	0.012	0.245	0.014	0.328	0.017	0.289	0.019	0.363
V10108.00-V10109.00	4452	239.0	12.0	0.009	2.184	0.257	0.230	0.498	0.322	0.355	0.271	0.596	0.353
V10109.00-V10110.00	4445	230.0	12.0	0.020	3.256	0.258	0.190	0.501	0.265	0.357	0.224	0.601	0.291
V10110.00-V10132.00	4446	83.0	12.0	0.016	2.913	0.259	0.191	0.505	0.266	0.360	0.225	0.605	0.293
V10111.00-V10113.A0	4232	200.0	8.0	0.114	2.637	0.001	0.017	0.003	0.030	0.001	0.025	0.003	0.035
V10112.00-V10113.00	4230	330.0	8.0	0.002	0.349	0.002	0.060	0.005	0.080	0.005	0.083	0.007	0.097
V10113.00-V10115.00	4228	62.0	8.0	0.033	1.419	0.005	0.042	0.013	0.065	0.010	0.061	0.018	0.078
V10113.A0-V10113.00	4231	86.0	8.0	0.060	1.913	0.002	0.028	0.006	0.046	0.005	0.041	0.009	0.055
V10114.00-V10115.00	4227	225.0	6.0	0.012	0.397	0.004	0.067	0.006	0.090	0.010	0.110	0.012	0.121
V10115.00-V10116.00	4226	203.0	8.0	0.069	2.052	0.010	0.061	0.022	0.088	0.022	0.087	0.034	0.108
V10116.00-V10118.00	4417	260.0	8.0	0.032	1.397	0.015	0.079	0.031	0.112	0.030	0.112	0.047	0.137
V10116.A0-V10116.00	4418	263.0	8.0	0.020	1.104	0.003	0.055	0.005	0.075	0.005	0.075	0.007	0.091
V10117.00-V10118.00	4420	325.0	8.0	0.041	1.581	0.002	0.057	0.005	0.080	0.006	0.083	0.008	0.100
V10118.00-V10119.00	4416	141.0	8.0	0.026	1.259	0.019	0.086	0.039	0.124	0.039	0.122	0.060	0.151
V10119.00-V10121.00	4437	61.0	8.0	0.016	0.988	0.020	0.544	0.043	0.563	0.041	0.562	0.063	0.576
V10120.00-V10121.00	4438	248.0	8.0	0.010	0.781	0.003	0.523	0.005	0.529	0.007	0.534	0.009	0.538
V10121.00-V10123.00	4439	103.0	8.0	0.015	0.957	0.040	1.000	0.050	1.000	0.079	1.000	0.076	1.000
V10122.00-V10123.00	4436	245.0	8.0	0.055	1.832	0.003	0.516	0.005	0.520	0.007	0.523	0.009	0.526
V10123.00-V10124.00	4432	237.0	8.0	-0.010	Adverse	0.029	0.550	0.059	0.568	0.059	0.564	0.088	0.579
V10124.00-V10125.00	4433	117.0	8.0	0.048	1.711	0.037	0.140	0.070	0.190	0.063	0.179	0.096	0.221
V10125.00-V10126.00	4434	76.0	8.0	0.006	0.605	0.038	0.166	0.073	0.229	0.063	0.213	0.098	0.265
V10126.00-V10127.00	4427	240.0	8.0	0.009	0.741	0.038	0.193	0.076	0.226	0.064	0.209	0.101	0.264
V10127.00-V10130.00	4426	178.0	8.0	0.007	0.653	0.046	0.179	0.078	0.234	0.066	0.215	0.105	0.272
V10128.00-V10129.00	4430	122.0	6.0	0.008	0.324	0.025	1.000	0.033	1.000	0.019	1.000	0.044	1.000
V10129.00-V10130.00	4431	314.0	6.0	-0.751	Adverse	0.029	0.619	0.032	0.653	0.027	0.639	0.036	0.675
V10130.00-V10131.00	4429	362.0	8.0	0.011	0.819	0.050	0.168	0.094	0.232	0.077	0.209	0.123	0.264
V10131.00-V10132.00	4448	70.8	8.0	0.009	0.741	0.051	0.234	0.098	0.325	0.079	0.282	0.127	0.363
V10132.00-V10141.D0	4447	45.0	12.0	0.008	2.060	0.310	0.302	0.605	0.426	0.439	0.347	0.734	0.461

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V10133.00-V10139.00	4454	59.6	8.0	0.019	1.077	0.001	0.070	0.005	0.091	0.000	0.047	0.004	0.078
V10133.A0-V10133.00	4451	345.0	8.0	0.006	0.605	0.001	0.029	0.003	0.050	0.000	0.000	0.002	0.042
V10135.00-V10136.00	4455	58.0	8.0	0.008	0.699	0.009	0.084	0.011	0.094	0.013	0.114	0.015	0.123
V10136.00-V10137.00	4456	172.0	8.0	0.009	0.741	0.015	0.102	0.019	0.112	0.020	0.112	0.024	0.122
V10137.00-V10138.00	4325	94.4	6.0	0.051	0.819	0.038	0.183	0.044	0.194	0.021	0.143	0.027	0.158
V10138.00-V10139.00	4457	240.8	8.0	0.012	0.856	0.039	0.144	0.047	0.158	0.024	0.114	0.032	0.131
V10139.00-V10140.00	4458	100.0	8.0	0.027	1.283	0.040	0.120	0.054	0.140	0.024	0.094	0.038	0.131
V10140.00-V10141.00	4261	43.0	8.0	0.012	0.856	0.040	0.560	0.056	0.571	0.024	0.547	0.040	0.574
V10141.00-V10142.A0	4260	434.0	18.0	0.001	2.147	1.277	0.488	2.426	0.703	1.497	0.530	2.626	0.752
V10141.A0-V10141.B0	4440	403.0	15.0	0.004	2.640	0.670	0.342	1.285	0.488	0.814	0.379	1.424	0.518
V10141.B0-V10141.CA	4441	403.0	15.0	0.005	2.952	0.670	0.600	1.286	0.725	0.815	0.641	1.426	0.739
V10141.C0-V10141.D0	4444	214.0	15.0	0.008	3.734	0.730	0.314	1.371	0.443	0.878	0.351	1.511	0.472
V10141.CA-V10141.C0	4442	70.0	15.0	-0.005	Adverse	0.671	0.594	1.289	0.713	0.817	0.633	1.429	0.725
V10141.D0-V10141.E0	4449	131.0	15.0	0.012	4.573	1.040	0.366	1.978	0.528	1.318	0.408	2.241	0.563
V10141.E0-V10141.00	4460	408.0	15.0	0.007	3.493	1.238	0.553	2.368	0.796	1.472	0.605	2.586	0.817
V10142.00-V10143.A0	4265	451.0	18.0	0.002	3.036	1.301	0.470	2.467	0.795	1.519	0.523	2.662	0.867
V10142.A0-V10142.00	4262	434.0	18.0	0.004	4.294	1.301	0.388	2.465	0.648	1.518	0.431	2.661	0.713
V10143.A0-V10143.00	4266	451.0	18.0	0.001	2.147	1.329	0.543	2.511	0.829	1.536	0.590	2.695	0.889
V11123.00-V10141.A0	3790	333.0	15.0	0.021	6.050	0.364	0.267	0.640	0.373	0.389	0.290	0.665	0.391
V13097.00-V10141.C0	3792	10.0	8.0	0.015	0.957	0.059	0.325	0.079	0.445	0.062	0.355	0.082	0.468
V13099.00-V10141.E0	5003	58.0	10.0	0.036	2.687	0.197	0.385	0.389	0.559	0.155	0.407	0.346	0.579
V13110.00-V10143.A0	5948	10.0	8.0	0.010	0.781	0.028	0.536	0.044	0.545	0.018	0.529	0.034	0.539
V13140.00-V10142.A0	4264	10.0	8.0	0.008	0.699	0.024	0.478	0.039	0.543	0.021	0.511	0.036	0.542
V14120.00-V10141.A0	4508	185.6	10.0	0.010	1.416	0.306	0.432	0.642	0.629	0.424	0.492	0.757	0.678
V11001.00-V11002.00	3787	220.0	6.0	0.052	0.827	0.002	0.048	0.004	0.070	0.002	0.048	0.004	0.070
V11002.00-V11004.00	3786	300.0	6.0	0.014	0.429	0.003	0.074	0.007	0.114	0.003	0.082	0.007	0.119
V11003.00-V11004.00	3785	328.0	8.0	0.000	0.000	0.001	0.067	0.003	0.108	0.002	0.084	0.004	0.118
V11004.00-V11005.00	3788	328.0	8.0	0.006	0.605	0.005	0.080	0.013	0.121	0.007	0.093	0.015	0.130
V11005.00-V11010.00	4615	331.0	8.0	0.005	0.552	0.007	0.083	0.018	0.125	0.011	0.098	0.021	0.135
V11006.00-V11007.00	4614	316.0	6.0	0.032	0.649	0.003	0.050	0.005	0.066	0.003	0.052	0.005	0.067
V11007.00-V11011.00	4618	255.0	6.0	0.062	0.903	0.005	0.089	0.009	0.129	0.006	0.101	0.010	0.137
V11008.00-V11009.00	4619	244.0	8.0	0.006	0.605	0.001	0.042	0.003	0.068	0.003	0.055	0.005	0.076
V11009.00-V11010.00	1398	106.0	8.0	0.003	0.428	0.002	0.071	0.006	0.117	0.004	0.089	0.008	0.128
V11010.00-V11011.00	4616	37.0	8.0	0.003	0.428	0.010	0.093	0.027	0.145	0.015	0.111	0.032	0.158
V11011.00-V11013.00	4613	406.0	8.0	0.015	0.957	0.017	0.094	0.040	0.143	0.024	0.110	0.046	0.153
V11012.00-V11013.00	7531	175.0	6.0	0.063	0.910	0.001	0.074	0.003	0.117	0.001	0.086	0.003	0.125
V11013.00-V11014.00	4601	401.0	8.0	0.022	1.158	0.020	0.090	0.046	0.136	0.027	0.105	0.054	0.146
V11014.00-V11015.00	4588	291.0	8.0	0.037	1.502	0.022	0.100	0.051	0.149	0.030	0.116	0.059	0.160
V11015.00-V11048.00	4587	181.0	8.0	0.012	0.856	0.024	0.240	0.055	0.318	0.032	0.243	0.063	0.320
V11016.00-V11017.00	4704	293.0	8.0	0.032	1.397	0.002	0.041	0.005	0.057	0.004	0.050	0.006	0.063
V11017.00-V11018.00	3784	236.0	8.0	0.010	0.781	0.004	0.051	0.008	0.071	0.006	0.061	0.010	0.079
V11018.00-V11019.00	4701	278.0	8.0	0.022	1.158	0.006	0.055	0.012	0.076	0.008	0.062	0.014	0.082
V11019.00-V11023.00	4692	350.0	8.0	0.026	1.259	0.009	0.081	0.017	0.118	0.011	0.093	0.019	0.126
V11020.00-V11022.00	4702	125.0	8.0	0.031	1.375	0.001	0.036	0.003	0.062	0.001	0.042	0.004	0.066
V11021.00-V11022.00	4703	146.0	8.0	0.010	0.781	0.001	0.042	0.003	0.068	0.002	0.047	0.004	0.072
V11022.00-V11023.00	4693	143.0	8.0	0.005	0.552	0.003	0.077	0.009	0.122	0.004	0.090	0.010	0.130
V11023.00-V11024.00	4695	260.0	8.0	0.005	0.552	0.012	0.120	0.029	0.179	0.017	0.137	0.033	0.191
V11024.00-V11029.00	4696	253.0	8.0	0.005	0.552	0.015	0.113	0.033	0.166	0.019	0.127	0.038	0.176
V11025.00-V11026.00	4699	180.0	8.0	0.021	1.132	0.001	0.032	0.003	0.046	0.002	0.036	0.004	0.049
V11026.00-V11028.00	4691	351.0	8.0	0.042	1.601	0.004	0.042	0.008	0.059	0.005	0.048	0.009	0.063
V11027.00-V11028.00	4697	122.0	8.0	0.019	1.077	0.002	0.040	0.004	0.056	0.004	0.048	0.006	0.062
V11028.00-V11029.00	4698	244.0	8.0	0.047	1.693	0.007	0.068	0.016	0.098	0.010	0.078	0.018	0.105
V11029.00-V11031.00	4611	163.0	8.0	0.036	1.482	0.024	0.089	0.053	0.131	0.031	0.100	0.060	0.139
V11030.00-V11031.00	4612	138.0	8.0	0.012	0.856	0.001	0.060	0.003	0.089	0.001	0.064	0.003	0.092
V11031.00-V11033.00	4689	149.0	8.0	0.040	1.562	0.026	0.092	0.059	0.136	0.033	0.103	0.066	0.144

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V11032.00-V11033.00	4690	164.0	8.0	0.014	0.924	0.002	0.063	0.004	0.093	0.003	0.073	0.005	0.100
V11033.00-V11034.00	4681	309.2	8.0	0.040	1.562	0.029	0.114	0.066	0.171	0.037	0.131	0.074	0.182
V11034.00-V11036.00	4683	259.0	8.0	0.014	0.924	0.031	0.125	0.070	0.186	0.041	0.143	0.080	0.198
V11035.00-V11036.00	4684	190.0	8.0	0.012	0.856	0.002	0.077	0.005	0.111	0.003	0.087	0.005	0.117
V11036.00-V11037.00	4620	368.0	8.0	0.026	1.259	0.035	0.128	0.079	0.190	0.046	0.145	0.089	0.207
V11037.00-V11038.00	4621	269.0	8.0	0.012	0.856	0.037	0.149	0.082	0.209	0.047	0.159	0.092	0.221
V11038.00-V11045.00	4626	350.0	8.0	0.022	1.158	0.062	0.191	0.110	0.242	0.063	0.186	0.111	0.237
V11039.00-V11040.00	4623	160.0	8.0	0.008	0.699	0.001	0.038	0.003	0.057	0.001	0.039	0.004	0.058
V11040.00-V11043.00	4685	325.0	8.0	0.014	0.924	0.003	0.086	0.007	0.103	0.003	0.078	0.008	0.096
V11041.00-V11043.00	4686	203.0	8.0	0.040	1.562	0.002	0.077	0.004	0.090	0.003	0.072	0.005	0.085
V11042.00-V11043.00	4687	219.0	8.0	0.020	1.104	0.038	0.128	0.040	0.137	0.026	0.110	0.029	0.120
V11043.00-V11044.00	4688	302.0	8.0	0.025	1.235	0.044	0.138	0.054	0.153	0.033	0.122	0.044	0.138
V11044.00-V11045.00	4625	321.0	8.0	0.025	1.235	0.058	0.186	0.071	0.219	0.045	0.172	0.057	0.206
V11045.00-V11046.00	8172	242.0	8.0	0.020	1.104	0.122	0.477	0.183	0.575	0.110	0.438	0.171	0.543
V11046.00-V11047.00	8173	242.0	8.0	0.000	0.000	0.134	0.468	0.198	0.562	0.110	0.429	0.174	0.530
V11047.00-V11048.A0	4589	188.0	8.0	0.026	1.259	0.134	0.167	0.200	0.203	0.120	0.158	0.186	0.196
V11048.00-V11051.00	4590	258.0	8.0	0.008	0.699	0.160	0.325	0.261	0.423	0.153	0.318	0.254	0.417
V11048.A0-V11048.00	4591	68.0	8.0	0.025	1.235	0.135	0.245	0.203	0.309	0.120	0.237	0.188	0.302
V11049.00-V11050.00	4595	146.0	6.0	0.025	0.573	0.001	0.035	0.003	0.070	0.003	0.063	0.005	0.087
V11050.00-V11051.00	4594	225.0	6.0	0.007	0.303	0.001	0.213	0.005	0.300	0.004	0.227	0.008	0.307
V11051.00-V11052.00	4593	43.0	6.0	0.011	0.380	0.161	0.399	0.268	0.537	0.158	0.393	0.265	0.532
V11052.00-V11054.00	4592	167.0	6.0	0.021	0.526	0.162	0.381	0.271	0.509	0.160	0.379	0.269	0.507
V11053.A0-V11054.00	4596	235.0	6.0	0.001	0.115	0.004	0.234	0.006	0.302	0.006	0.249	0.008	0.314
V11054.00-V11055.00	4604	167.0	8.0	0.021	1.132	0.167	0.314	0.280	0.416	0.169	0.316	0.282	0.418
V11055.00-V11089.00	2328	229.0	8.0	0.006	0.605	0.170	0.384	0.285	0.525	0.171	0.385	0.286	0.526
V11056.00-V11057.00	4609	315.0	8.0	0.027	1.283	0.002	0.039	0.004	0.051	0.002	0.041	0.005	0.053
V11057.00-V11059.00	4605	350.0	8.0	0.032	1.397	0.006	0.048	0.010	0.064	0.006	0.052	0.011	0.067
V11058.00-V11059.00	4606	50.0	8.0	0.005	0.552	0.001	0.042	0.003	0.060	0.003	0.052	0.005	0.067
V11059.00-V11060.00	4602	187.0	8.0	0.057	1.865	0.009	0.074	0.017	0.099	0.011	0.082	0.019	0.105
V11060.00-V11062.00	4579	238.0	8.0	0.010	0.781	0.011	0.082	0.021	0.114	0.013	0.092	0.024	0.120
V11061.00-V11062.00	2232	75.0	8.0	0.029	1.330	0.001	0.043	0.003	0.063	0.001	0.048	0.003	0.067
V11062.00-V11063.00	2231	147.0	8.0	0.032	1.397	0.012	0.080	0.027	0.115	0.016	0.090	0.030	0.122
V11063.00-V11064.00	2230	201.0	8.0	0.011	0.819	0.015	0.110	0.031	0.158	0.019	0.123	0.035	0.167
V11064.00-V11065.00	4599	315.0	8.0	0.004	0.494	0.017	0.126	0.035	0.184	0.021	0.143	0.040	0.195
V11065.00-V11075.A0	4600	158.0	8.0	0.004	0.494	0.017	0.129	0.038	0.190	0.022	0.146	0.043	0.203
V11066.00-V11067.00	4608	72.0	8.0	0.007	0.653	0.001	0.039	0.003	0.064	0.001	0.040	0.003	0.064
V11067.00-V11068.00	4607	350.0	8.0	0.010	0.781	0.003	0.044	0.007	0.067	0.003	0.045	0.007	0.068
V11068.00-V11069.00	4586	350.0	8.0	0.056	1.848	0.005	0.042	0.012	0.061	0.006	0.044	0.012	0.062
V11069.00-V11070.00	4583	129.0	8.0	0.050	1.746	0.007	0.058	0.015	0.084	0.007	0.060	0.016	0.086
V11070.00-V11072.00	4582	145.0	8.0	0.010	0.781	0.007	0.067	0.017	0.104	0.008	0.070	0.018	0.106
V11071.00-V11072.00	4584	80.0	8.0	0.013	0.890	0.001	0.043	0.003	0.073	0.001	0.045	0.003	0.074
V11072.00-V11073.00	4581	150.0	8.0	0.018	1.048	0.009	0.064	0.023	0.102	0.009	0.067	0.024	0.104
V11073.00-V11074.00	4580	350.0	8.0	0.029	1.330	0.011	0.074	0.028	0.112	0.012	0.077	0.029	0.114
V11074.00-V11075.00	4492	180.0	8.0	0.016	0.988	0.014	0.135	0.032	0.200	0.015	0.141	0.034	0.204
V11075.00-V11089.00	2329	200.0	8.0	0.004	0.494	0.038	0.294	0.081	0.416	0.041	0.298	0.085	0.419
V11075.A0-V11075.00	2330	158.0	8.0	0.004	0.494	0.018	0.159	0.041	0.235	0.024	0.173	0.047	0.244
V11076.00-V11078.00	4499	287.0	8.0	0.010	0.781	0.002	0.051	0.005	0.073	0.003	0.057	0.005	0.077
V11077.00-V11078.00	4500	139.0	8.0	0.005	0.552	0.001	0.049	0.003	0.074	0.002	0.054	0.004	0.077
V11078.00-V11079.00	4501	157.0	8.0	0.007	0.653	0.005	0.065	0.011	0.097	0.006	0.072	0.012	0.101
V11079.00-V11081.00	4497	162.0	8.0	0.007	0.653	0.006	0.077	0.015	0.115	0.008	0.083	0.016	0.119
V11080.00-V11081.00	4496	242.0	8.0	0.018	1.048	0.002	0.057	0.004	0.085	0.002	0.061	0.004	0.087
V11081.00-V11082.00	4495	173.0	8.0	0.007	0.653	0.009	0.175	0.022	0.220	0.011	0.163	0.023	0.209
V11082.00-V11083.00	2326	169.0	8.0	0.005	0.552	0.034	0.170	0.049	0.201	0.027	0.152	0.042	0.186
V11083.00-V11084.00	2321	178.0	8.0	0.070	2.066	0.035	0.087	0.051	0.105	0.029	0.079	0.045	0.099
V11084.00-V11085.00	2320	297.0	8.0	0.060	1.913	0.036	0.096	0.057	0.118	0.030	0.088	0.051	0.112

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V11084.A0-V11084.00	2322	218.0	8.0	0.021	1.132	0.001	0.062	0.003	0.081	0.001	0.059	0.003	0.078
V11085.00-V11087.00	2319	49.0	8.0	0.077	2.167	0.037	0.255	0.059	0.310	0.031	0.239	0.053	0.297
V11086.00-V11087.00	4494	135.0	6.0	0.005	0.256	0.000	0.293	0.002	0.371	0.000	0.264	0.002	0.356
V11087.00-V11088.A0	4493	301.0	8.0	-0.002	Adverse	0.037	0.260	0.064	0.319	0.031	0.244	0.057	0.307
V11088.00-V11089.00	4274	349.0	8.0	0.029	1.330	0.037	0.257	0.068	0.355	0.034	0.255	0.065	0.354
V11088.A0-V11088.00	2327	350.0	8.0	0.050	1.746	0.037	0.108	0.066	0.143	0.032	0.102	0.061	0.139
V11089.00-V11090.00	4275	348.0	8.0	0.009	0.741	0.247	0.410	0.439	0.573	0.248	0.410	0.439	0.572
V11090.00-V11091.00	4276	229.0	8.0	0.008	0.699	0.254	0.500	0.448	0.711	0.252	0.502	0.445	0.714
V11091.00-V11092.00	939	310.0	8.0	0.005	0.552	0.256	0.463	0.452	0.651	0.264	0.471	0.460	0.659
V11092.00-V11121.00	940	370.0	10.0	0.011	1.485	0.257	0.279	0.455	0.375	0.272	0.287	0.470	0.382
V11093.00-V11095.00	2323	101.0	8.0	0.010	0.781	0.001	0.040	0.003	0.059	0.001	0.036	0.003	0.057
V11094.00-V11095.00	2318	329.0	8.0	0.082	2.236	0.004	0.041	0.006	0.055	0.003	0.038	0.005	0.053
V11095.00-V11098.00	2315	323.0	8.0	0.022	1.158	0.006	0.055	0.013	0.075	0.005	0.050	0.011	0.072
V11096.00-V11097.00	2313	182.0	8.0	0.045	1.657	0.002	0.036	0.004	0.049	0.002	0.033	0.004	0.046
V11097.00-V11098.00	2316	345.0	8.0	0.027	1.283	0.005	0.051	0.009	0.069	0.004	0.046	0.008	0.065
V11098.00-V11099.00	2314	152.0	8.0	0.079	2.195	0.014	0.067	0.027	0.088	0.011	0.058	0.024	0.082
V11099.00-V11100.00	2312	87.0	8.0	0.035	1.461	0.019	0.075	0.034	0.098	0.014	0.065	0.028	0.091
V11100.00-V11101.00	2311	94.0	8.0	0.041	1.581	0.021	0.079	0.037	0.106	0.016	0.070	0.032	0.099
V11101.00-V11105.00	961	237.4	8.0	0.035	1.461	0.021	0.094	0.040	0.125	0.017	0.088	0.035	0.121
V11102.00-V11103.00	2310	303.0	8.0	0.025	1.235	0.002	0.036	0.004	0.048	0.003	0.042	0.005	0.053
V11103.00-V11104.00	2309	325.0	8.0	0.043	1.620	0.005	0.053	0.009	0.068	0.007	0.061	0.011	0.075
V11104.00-V11105.00	960	350.0	8.0	0.021	1.132	0.009	0.084	0.015	0.109	0.013	0.088	0.019	0.113
V11105.00-V11109.00	955	350.0	8.0	0.038	1.522	0.034	0.114	0.061	0.151	0.033	0.114	0.060	0.150
V11106.00-V11107.00	4272	320.0	8.0	0.003	0.428	0.002	0.049	0.004	0.068	0.003	0.056	0.005	0.073
V11107.00-V11108.00	4271	320.0	8.0	0.041	1.581	0.006	0.051	0.011	0.064	0.008	0.054	0.012	0.067
V11108.00-V11109.00	957	350.0	8.0	0.044	1.638	0.010	0.091	0.016	0.118	0.011	0.092	0.017	0.119
V11109.00-V11111.00	952	157.0	8.0	0.030	1.353	0.046	0.130	0.081	0.171	0.046	0.130	0.081	0.172
V11110.00-V11111.00	951	465.0	8.0	0.036	1.482	0.004	0.085	0.008	0.114	0.004	0.086	0.008	0.116
V11110.A0-V11110.00	7561	35.5	8.0	0.001	0.247	0.001	0.045	0.003	0.067	0.002	0.047	0.004	0.069
V11111.00-V11116.00	948	106.2	8.0	0.030	1.353	0.052	0.145	0.093	0.193	0.053	0.148	0.094	0.196
V11112.00-V11113.00	954	350.0	8.0	0.015	0.957	0.002	0.048	0.005	0.062	0.003	0.053	0.005	0.066
V11113.00-V11114.00	947	370.0	8.0	0.014	0.924	0.006	0.068	0.010	0.088	0.008	0.077	0.012	0.095
V11114.00-V11115.00	946	131.0	8.0	0.007	0.653	0.008	0.088	0.014	0.115	0.010	0.101	0.017	0.125
V11115.00-V11116.00	945	358.0	8.0	0.005	0.552	0.011	0.128	0.020	0.169	0.015	0.137	0.023	0.176
V11116.00-V11119.00	950	120.8	8.0	0.024	1.210	0.064	0.166	0.115	0.221	0.068	0.173	0.120	0.227
V11117.00-V11118.00	958	210.0	8.0	0.018	1.048	0.003	0.045	0.005	0.056	0.005	0.054	0.007	0.064
V11118.00-V11119.00	949	350.0	8.0	0.034	1.440	0.007	0.114	0.012	0.149	0.011	0.123	0.015	0.156
V11119.00-V11120.00	941	229.8	8.0	0.024	1.210	0.073	0.166	0.130	0.222	0.082	0.176	0.140	0.229
V11120.00-V11121.A0	942	350.0	8.0	0.032	1.397	0.074	0.181	0.134	0.245	0.086	0.196	0.146	0.256
V11121.00-V11122.00	4270	387.0	10.0	0.007	1.185	0.353	0.380	0.617	0.521	0.362	0.385	0.626	0.525
V11121.A0-V11121.00	943	80.0	8.0	0.010	0.781	0.074	0.341	0.136	0.466	0.088	0.353	0.150	0.476
V11121.B0-V11121.00	5172	75.0	8.0	-0.022	Adverse	0.022	0.738	0.025	0.826	0.024	0.741	0.037	0.829
V11122.00-V11123.00	4268	345.0	12.0	0.006	1.784	0.362	0.306	0.636	0.409	0.387	0.316	0.661	0.417
V14122.00-V11122.00	5169	20.1	8.0	0.005	0.552	0.009	0.332	0.017	0.448	0.016	0.351	0.024	0.463
V12001.00-V12003.00	6605	195.0	8.0	0.006	0.605	0.001	0.032	0.003	0.052	0.004	0.060	0.006	0.072
V12002.00-V12003.00	6606	72.0	8.0	0.068	2.037	0.002	0.025	0.004	0.040	0.001	0.030	0.003	0.043
V12003.00-V12004.00	218	160.0	8.0	0.046	1.675	0.003	0.055	0.009	0.092	0.006	0.073	0.012	0.104
V12004.00-V12005.00	6607	296.0	8.0	0.007	0.653	0.004	0.057	0.013	0.095	0.007	0.074	0.016	0.105
V12005.00-V12007.00	7153	135.2	8.0	0.078	2.181	0.006	0.040	0.016	0.064	0.009	0.049	0.019	0.070
V12006.00-V12007.00	6608	146.0	6.0	0.168	1.486	0.002	0.041	0.004	0.064	0.003	0.051	0.005	0.070
V12007.00-V12008.00	7154	127.4	8.0	0.083	2.250	0.009	0.045	0.023	0.071	0.013	0.055	0.028	0.077
V12008.00-V12013.00	6280	265.0	8.0	0.098	2.445	0.010	0.056	0.027	0.087	0.016	0.070	0.032	0.096
V12009.00-V12011.00	7155	140.0	6.0	0.128	1.297	0.003	0.060	0.005	0.084	0.004	0.073	0.006	0.093
V12010.00-V12011.00	6756	35.0	6.0	0.003	0.199	0.001	0.073	0.003	0.108	0.003	0.095	0.005	0.123
V12011.00-V12012.00	2019	310.0	6.0	0.022	0.538	0.005	0.070	0.012	0.101	0.008	0.086	0.014	0.112

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V12012.00-V12013.00	6279	178.0	6.0	0.136	1.337	0.007	0.070	0.015	0.104	0.011	0.087	0.020	0.116
V12013.00-V12015.00	6684	235.0	8.0	0.076	2.153	0.018	0.067	0.045	0.104	0.029	0.084	0.056	0.115
V12014.00-V12015.00	7157	148.0	6.0	0.172	1.504	0.002	0.060	0.004	0.090	0.004	0.076	0.006	0.101
V12015.00-V12018.00	3973	181.0	8.0	0.074	2.125	0.021	0.073	0.052	0.112	0.033	0.090	0.064	0.124
V12016.00-V12017.00	7158	180.0	8.0	0.116	2.660	0.002	0.028	0.004	0.039	0.002	0.029	0.004	0.039
V12017.00-V12018.00	3971	160.0	8.0	0.053	1.798	0.004	0.055	0.008	0.083	0.004	0.064	0.008	0.089
V12018.00-V12020.00	1565	96.0	8.0	0.051	1.764	0.025	0.077	0.062	0.119	0.038	0.095	0.075	0.131
V12019.00-V12020.00	3970	173.0	8.0	0.169	3.211	0.002	0.046	0.003	0.073	0.003	0.061	0.005	0.083
V12020.00-V12021.00	5263	182.0	8.0	0.075	2.139	0.027	0.085	0.068	0.133	0.042	0.106	0.083	0.147
V12021.00-V12022.00	1119	420.0	8.0	0.043	1.620	0.029	0.117	0.072	0.181	0.045	0.147	0.088	0.201
V12022.00-V12023.00	4768	254.0	8.0	0.011	0.819	0.035	0.148	0.085	0.226	0.057	0.184	0.106	0.252
V12022.A0-V12022.B0	6483	159.0	8.0	0.002	0.349	0.002	0.058	0.004	0.077	0.007	0.098	0.009	0.111
V12022.B0-V12022.00	5894	399.0	8.0	0.011	0.819	0.006	0.101	0.010	0.148	0.010	0.128	0.014	0.167
V12023.00-V12038.00	6258	295.0	8.0	0.012	0.856	0.036	0.140	0.087	0.217	0.058	0.177	0.109	0.243
V12024.00-V12025.00	7160	207.0	6.0	0.058	0.873	0.001	0.027	0.003	0.046	0.002	0.043	0.004	0.056
V12025.00-V12026.00	7161	278.0	8.0	0.096	2.420	0.002	0.025	0.007	0.041	0.006	0.037	0.010	0.048
V12026.00-V12027.00	6683	36.0	8.0	0.022	1.158	0.003	0.026	0.009	0.045	0.006	0.038	0.013	0.052
V12027.00-V12028.00	6681	172.0	8.0	0.121	2.717	0.004	0.037	0.012	0.064	0.007	0.052	0.016	0.074
V12028.00-V12029.00	3969	76.0	8.0	0.024	1.210	0.005	0.042	0.015	0.072	0.009	0.058	0.020	0.082
V12029.00-V12034.00	6189	140.0	8.0	0.077	2.167	0.005	0.047	0.018	0.077	0.010	0.060	0.022	0.086
V12030.00-V12031.00	7159	145.0	6.0	0.184	1.556	0.002	0.028	0.004	0.042	0.002	0.031	0.004	0.043
V12031.00-V12032.00	6278	124.0	6.0	0.141	1.362	0.002	0.037	0.007	0.057	0.003	0.041	0.007	0.060
V12032.00-V12034.00	4970	256.0	6.0	0.088	1.076	0.004	0.060	0.010	0.094	0.005	0.072	0.011	0.102
V12033.00-V12034.00	7162	228.0	8.0	0.091	2.356	0.002	0.039	0.004	0.060	0.004	0.052	0.006	0.069
V12034.00-V12037.00	1118	263.0	8.0	0.076	2.153	0.014	0.065	0.037	0.102	0.023	0.083	0.045	0.114
V12035.00-V12037.00	1117	366.0	8.0	0.032	1.397	0.002	0.051	0.004	0.077	0.004	0.068	0.006	0.088
V12036.00-V12037.00	7163	161.0	8.0	0.049	1.729	0.001	0.046	0.003	0.072	0.003	0.064	0.005	0.085
V12037.00-V12038.00	4767	374.0	8.0	0.051	1.764	0.018	0.100	0.047	0.157	0.033	0.129	0.062	0.177
V12039.00-V12040.00	7167	400.0	8.0	0.007	0.653	0.004	0.059	0.006	0.076	0.013	0.097	0.015	0.105
V12040.00-V12041.00	6257	349.0	8.0	0.014	0.924	0.007	0.074	0.013	0.097	0.016	0.096	0.022	0.115
V12040.A0-V12040.00	7165	349.0	8.0	0.003	0.428	0.001	0.044	0.003	0.069	0.002	0.067	0.004	0.086
V12041.00-V12057.00	7168	296.0	8.0	0.009	0.741	0.012	0.152	0.020	0.208	0.016	0.172	0.024	0.223
V12042.00-V12043.00	7309	247.0	8.0	0.164	3.163	0.002	0.027	0.005	0.038	0.002	0.029	0.004	0.039
V12043.00-V12044.00	4969	172.0	8.0	0.053	1.798	0.004	0.033	0.008	0.048	0.005	0.038	0.009	0.051
V12044.00-V12045.B0	5262	348.0	8.0	0.048	1.711	0.005	0.046	0.011	0.061	0.007	0.053	0.013	0.067
V12045.00-V12048.00	4489	246.0	8.0	0.050	1.746	0.018	0.086	0.030	0.109	0.024	0.102	0.036	0.121
V12045.A0-V12045.B0	6137	225.0	8.0	0.063	1.960	0.012	0.057	0.014	0.067	0.013	0.063	0.015	0.072
V12045.B0-V12045.00	1116	348.0	8.0	0.095	2.407	0.017	0.066	0.027	0.083	0.022	0.074	0.032	0.090
V12046.00-V12047.00	7310	355.0	8.0	0.018	1.048	0.002	0.034	0.004	0.048	0.002	0.037	0.004	0.050
V12047.00-V12048.00	7311	309.0	8.0	0.043	1.620	0.004	0.069	0.008	0.089	0.005	0.081	0.009	0.098
V12048.00-V12055.00	4766	431.0	8.0	0.031	1.375	0.025	0.093	0.043	0.122	0.032	0.106	0.051	0.132
V12049.00-V12050.00	7312	182.0	8.0	0.102	2.494	0.001	0.022	0.003	0.034	0.001	0.013	0.003	0.029
V12050.00-V12051.00	6136	54.0	8.0	0.039	1.542	0.003	0.033	0.007	0.049	0.001	0.022	0.005	0.043
V12051.00-V12053.00	6172	251.0	8.0	0.041	1.581	0.005	0.042	0.011	0.062	0.002	0.028	0.008	0.053
V12052.00-V12053.00	7313	133.0	6.0	0.114	1.224	0.003	0.046	0.005	0.064	0.001	0.029	0.003	0.053
V12053.00-V12054.00	1115	47.0	6.0	0.043	0.752	0.009	0.062	0.019	0.090	0.003	0.043	0.014	0.079
V12054.00-V12055.00	4765	140.0	6.0	0.108	1.192	0.010	0.090	0.022	0.126	0.005	0.084	0.018	0.123
V12055.00-V12057.00	7169	431.0	8.0	0.080	2.209	0.035	0.152	0.068	0.211	0.038	0.166	0.071	0.222
V12056.00-V12057.00	7315	229.0	8.0	0.131	2.827	0.001	0.115	0.003	0.164	0.004	0.136	0.006	0.178
V12057.00-V12059.00	7170	140.0	10.0	0.004	0.896	0.047	0.155	0.092	0.216	0.059	0.172	0.104	0.228
V12058.00-V12059.00	7316	148.0	8.0	0.096	2.420	0.004	0.099	0.006	0.135	0.004	0.109	0.006	0.142
V12059.00-V12060.00	7171	259.0	10.0	0.009	1.343	0.052	0.138	0.101	0.191	0.064	0.152	0.114	0.202
V12060.00-V12066.00	7172	396.0	10.0	0.008	1.267	0.053	0.160	0.105	0.218	0.066	0.178	0.118	0.231
V12061.00-V12062.00	7174	204.0	6.0	0.031	0.638	0.004	0.061	0.006	0.074	0.007	0.074	0.009	0.084
V12062.00-V12063.00	4968	180.0	6.0	0.083	1.045	0.008	0.101	0.013	0.126	0.012	0.122	0.016	0.143

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V12063.00-V12064.00	6187	160.0	6.0	0.013	0.413	0.010	0.107	0.016	0.133	0.015	0.130	0.022	0.152
V12064.00-V12065.00	6135	150.0	6.0	0.112	1.214	0.013	0.086	0.022	0.105	0.020	0.098	0.028	0.115
V12065.00-V12066.00	1114	350.0	6.0	0.116	1.235	0.025	0.201	0.035	0.260	0.030	0.221	0.041	0.277
V12066.00-V12067.00	4808	396.0	10.0	0.014	1.675	0.079	0.147	0.143	0.196	0.099	0.164	0.162	0.209
V12067.00-V12068.00	5650	399.0	10.0	0.044	2.970	0.079	0.556	0.145	0.575	0.103	0.564	0.168	0.581
V12068.00-V12112.D0	7688	141.6	10.0	-0.047	Adverse	0.080	0.540	0.148	0.553	0.103	0.544	0.171	0.556
V12069.00-V12070.00	84	172.0	6.0	0.025	0.573	0.006	0.070	0.012	0.100	0.002	0.047	0.009	0.087
V12069.A0-V12069.B0	4967	80.0	6.0	0.009	0.344	0.004	0.075	0.006	0.091	0.001	0.043	0.003	0.069
V12069.B0-V12069.00	83	82.0	6.0	0.038	0.707	0.005	0.067	0.009	0.090	0.002	0.043	0.006	0.076
V12070.00-V12071.00	1113	359.0	6.0	0.099	1.141	0.007	0.055	0.015	0.080	0.003	0.038	0.011	0.070
V12071.00-V12072.A0	7317	262.0	8.0	0.027	1.283	0.010	0.050	0.020	0.069	0.004	0.035	0.014	0.060
V12072.00-V12073.00	6256	29.0	8.0	0.003	0.428	0.015	0.106	0.029	0.146	0.006	0.073	0.021	0.125
V12072.A0-V12072.00	7318	262.0	8.0	0.031	1.375	0.012	0.103	0.025	0.143	0.006	0.067	0.018	0.122
V12073.00-V12074.00	4807	179.0	6.0	0.075	0.993	0.020	0.107	0.036	0.144	0.013	0.088	0.029	0.131
V12074.00-V12081.00	4826	43.0	6.0	0.017	0.473	0.021	0.122	0.040	0.167	0.014	0.104	0.033	0.154
V12075.00-V12076.00	6878	56.0	8.0	0.017	1.018	0.001	0.022	0.003	0.037	0.001	0.019	0.003	0.035
V12076.00-V12078.00	4488	350.0	8.0	0.084	2.264	0.002	0.034	0.006	0.050	0.002	0.031	0.006	0.048
V12077.00-V12078.00	7319	270.0	6.0	0.105	1.175	0.007	0.057	0.009	0.072	0.004	0.048	0.006	0.064
V12078.00-V12080.00	4764	350.0	8.0	0.085	2.277	0.009	0.054	0.017	0.074	0.007	0.050	0.015	0.071
V12079.00-V12080.00	6850	254.0	8.0	0.045	1.657	0.002	0.045	0.004	0.062	0.004	0.047	0.006	0.064
V12080.00-V12081.00	4806	254.0	8.0	0.040	1.562	0.012	0.079	0.024	0.109	0.011	0.071	0.023	0.104
V12081.00-V12112.A0	7286	21.0	8.0	0.011	0.819	0.034	0.115	0.067	0.159	0.026	0.101	0.059	0.149
V12087.00-V12088.00	7323	5.0	6.0	0.001	0.115	0.001	0.051	0.003	0.095	0.000	0.037	0.002	0.089
V12088.00-V12089.00	7324	300.0	6.0	0.057	0.866	0.003	0.048	0.007	0.074	0.001	0.035	0.005	0.066
V12089.00-V12090.00	7325	175.0	6.0	0.039	0.716	0.004	0.075	0.010	0.112	0.002	0.061	0.008	0.103
V12089.00-V12112.K0	7236	174.3	8.0	0.075	2.139	0.022	0.084	0.046	0.120	0.013	0.067	0.038	0.109
V12090.00-V12091.00	7326	182.0	6.0	0.014	0.429	0.008	0.092	0.016	0.132	0.005	0.075	0.013	0.120
V12091.00-V12097.00	4487	213.0	6.0	0.030	0.628	0.010	0.101	0.021	0.144	0.006	0.078	0.016	0.129
V12092.00-V12093.00	6888	331.0	6.0	0.058	0.873	0.002	0.042	0.004	0.062	0.001	0.026	0.003	0.054
V12093.00-V12095.00	7320	42.0	6.0	0.006	0.281	0.003	0.050	0.007	0.078	0.001	0.034	0.005	0.070
V12094.00-V12095.00	7322	83.0	6.0	0.060	0.888	0.002	0.040	0.004	0.062	0.002	0.034	0.004	0.058
V12095.00-V12096.00	7321	114.0	6.0	0.076	1.000	0.005	0.053	0.013	0.082	0.003	0.041	0.011	0.076
V12096.00-V12097.00	1112	204.0	6.0	0.110	1.203	0.007	0.084	0.018	0.125	0.004	0.066	0.015	0.113
V12097.00-V12098.00	5770	240.0	6.0	0.057	0.866	0.019	0.104	0.042	0.150	0.012	0.081	0.034	0.136
V12099.00-V12100.00	6883	124.0	8.0	0.005	0.552	0.010	0.092	0.012	0.101	0.006	0.084	0.008	0.096
V12100.00-V12101.00	6884	87.6	8.0	0.008	0.699	0.010	0.128	0.014	0.157	0.013	0.129	0.017	0.159
V12101.00-V12102.00	6885	206.0	8.0	0.008	0.699	0.020	0.116	0.032	0.146	0.019	0.113	0.031	0.143
V12101.A0-V12101.B0	5958	118.0	6.0	0.097	1.129	0.005	0.047	0.007	0.058	0.004	0.040	0.006	0.052
V12101.B0-V12101.C0	6881	83.0	8.0	0.056	1.848	0.005	0.042	0.009	0.054	0.004	0.032	0.008	0.047
V12101.C0-V12101.00	6882	152.0	8.0	0.058	1.881	0.009	0.110	0.015	0.139	0.004	0.100	0.010	0.132
V12105.00-V12106.00	6887	165.0	6.0	0.030	0.628	0.001	0.045	0.003	0.068	0.001	0.040	0.003	0.065
V12106.00-V12108.00	4824	306.0	6.0	0.020	0.513	0.004	0.065	0.008	0.089	0.003	0.055	0.007	0.082
V12108.00-V12112.V0	7708	24.1	8.0	0.021	1.132	0.008	0.050	0.014	0.066	0.006	0.041	0.012	0.061
V12112.00-V12113.00	968	531.0	8.0	0.013	0.890	0.184	0.392	0.374	0.588	0.191	0.398	0.380	0.594
V12112.A0-V12112.B0	7287	19.0	8.0	0.006	0.605	0.035	0.114	0.070	0.159	0.026	0.099	0.061	0.149
V12112.B0-V12112.C0	7292	296.0	8.0	0.064	1.976	0.035	0.107	0.072	0.152	0.026	0.094	0.063	0.143
V12112.C0-V12112.F0	7235	131.0	8.0	0.021	1.132	0.036	0.217	0.075	0.311	0.028	0.220	0.067	0.314
V12112.D0-V12112.E0	7280	27.6	8.0	0.037	1.502	0.085	0.150	0.155	0.203	0.106	0.168	0.176	0.217
V12112.E0-V12112.F0	7288	191.5	8.0	0.015	0.957	0.085	0.258	0.157	0.361	0.106	0.279	0.178	0.379
V12112.F0-V12112.G0	7289	346.0	8.0	0.005	0.552	0.120	0.315	0.234	0.451	0.135	0.334	0.248	0.466
V12112.G0-V12112.H0	7290	294.1	8.0	0.005	0.552	0.121	0.314	0.237	0.450	0.136	0.333	0.251	0.466
V12112.H0-V12112.Q0	7291	330.4	8.0	0.006	0.605	0.121	0.340	0.239	0.497	0.137	0.356	0.255	0.511
V12112.K0-V12112.L0	7237	69.2	8.0	0.026	1.259	0.025	0.087	0.051	0.123	0.016	0.070	0.042	0.112
V12112.L0-V12112.M0	7238	63.2	8.0	0.036	1.482	0.025	0.090	0.054	0.131	0.016	0.073	0.045	0.121
V12112.M0-V12112.N0	7239	120.9	8.0	0.040	1.562	0.025	0.087	0.056	0.129	0.016	0.072	0.047	0.119

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V12112.N0-V12112.P0	7240	82.0	8.0	0.057	1.865	0.025	0.083	0.058	0.119	0.017	0.074	0.050	0.114
V12112.O0-V12112.P0	7241	154.4	8.0	0.135	2.870	0.023	0.078	0.037	0.106	0.022	0.075	0.037	0.103
V12112.P0-V12112.Q0	7706	87.6	8.0	0.058	1.881	0.047	0.232	0.097	0.341	0.041	0.235	0.091	0.344
V12112.Q0-V12112.S0	7242	157.1	8.0	0.006	0.605	0.168	0.375	0.337	0.557	0.179	0.390	0.348	0.570
V12112.S0-V12112.X0	7243	178.4	8.0	0.006	0.605	0.168	0.359	0.339	0.530	0.179	0.370	0.350	0.539
V12112.T0-V12112.U0	7249	336.0	8.0	0.021	1.132	0.000	0.030	0.002	0.056	0.000	0.024	0.002	0.053
V12112.U0-V12112.V0	7244	288.7	8.0	0.044	1.638	0.011	0.078	0.022	0.105	0.007	0.065	0.018	0.095
V12112.V0-V12112.W0	7245	340.7	8.0	0.031	1.375	0.014	0.071	0.026	0.096	0.010	0.060	0.022	0.088
V12112.W0-V12112.X0	7692	9.6	8.0	0.014	0.924	0.014	0.191	0.028	0.278	0.010	0.189	0.024	0.278
V12112.X0-V12112.00	7246	165.2	8.0	0.011	0.819	0.184	0.322	0.371	0.471	0.189	0.327	0.376	0.475
V12113.00-V12115.00	967	210.0	8.0	0.004	0.494	0.186	0.412	0.378	0.621	0.194	0.421	0.385	0.629
V12114.00-V12115.00	966	174.3	8.0	0.002	0.349	0.003	0.204	0.005	0.298	0.007	0.230	0.010	0.319
V12115.00-V12119.00	965	427.0	8.0	0.009	0.741	0.191	0.390	0.387	0.564	0.203	0.402	0.399	0.574
V12116.00-V12117.00	7146	295.8	18.0	-0.015	Adverse	0.000	0.111	0.003	0.513	0.001	0.442	0.003	0.515
V12117.00-V12118.00	964	296.6	18.0	0.003	3.718	0.000	0.003	0.004	0.028	0.001	0.009	0.006	0.032
V12118.00-V12119.00	963	184.9	18.0	0.003	3.718	0.000	0.097	0.006	0.151	0.001	0.103	0.008	0.155
V12119.00-V12120.00	5620	335.0	18.0	0.003	3.718	0.191	0.149	0.395	0.212	0.204	0.154	0.409	0.216
V13001.00-V13002.00	4709	50.0	8.0	0.005	0.552	0.000	0.010	0.002	0.026	0.001	0.018	0.003	0.029
V13002.00-V13005.00	4710	195.0	8.0	0.185	3.359	0.001	0.019	0.007	0.042	0.003	0.031	0.009	0.048
V13002.A0-V13002.00	7530	85.0	8.0	0.018	1.048	0.001	0.013	0.003	0.030	0.002	0.022	0.004	0.034
V13003.00-V13004.00	3806	118.0	8.0	0.097	2.432	0.001	0.142	0.003	0.168	0.002	0.160	0.004	0.181
V13004.00-V13005.00	4711	108.0	8.0	-0.002	Adverse	0.002	0.147	0.006	0.181	0.005	0.169	0.009	0.197
V13005.00-V13006.00	3809	179.0	8.0	0.154	3.065	0.004	0.028	0.016	0.057	0.009	0.043	0.021	0.065
V13006.00-V13007.00	3807	186.0	8.0	0.088	2.317	0.004	0.050	0.019	0.100	0.010	0.077	0.024	0.116
V13007.00-V13009.00	3813	116.8	8.0	0.005	0.552	0.005	0.080	0.021	0.162	0.013	0.131	0.029	0.192
V13008.00-V13009.00	3810	250.0	8.0	0.117	2.671	0.001	0.052	0.003	0.105	0.002	0.089	0.004	0.127
V13009.00-V13010.00	3812	162.5	8.0	0.003	0.428	0.006	0.085	0.027	0.169	0.018	0.140	0.039	0.202
V13010.00-V13014.00	3811	145.0	8.0	0.006	0.605	0.007	0.113	0.030	0.211	0.020	0.172	0.043	0.247
V13011.00-V13013.00	3815	205.0	6.0	0.006	0.281	0.001	0.052	0.003	0.079	0.002	0.056	0.004	0.082
V13012.00-V13013.00	3814	39.0	8.0	0.051	1.764	0.001	0.025	0.003	0.037	0.002	0.029	0.004	0.040
V13013.00-V13014.00	3803	281.0	8.0	0.172	3.239	0.004	0.088	0.010	0.156	0.006	0.125	0.012	0.179
V13014.00-V13015.00	4708	181.0	8.0	0.005	0.552	0.012	0.102	0.043	0.185	0.028	0.151	0.059	0.215
V13015.00-V13030.00	3819	357.0	8.0	0.087	2.304	0.014	0.088	0.047	0.149	0.032	0.117	0.065	0.167
V13016.00-V13017.00	4136	255.0	8.0	0.008	0.699	0.001	0.028	0.003	0.053	0.001	0.033	0.003	0.056
V13017.00-V13018.00	4250	177.0	8.0	0.009	0.741	0.001	0.036	0.006	0.066	0.002	0.041	0.006	0.069
V13018.00-V13021.00	4255	131.0	8.0	0.011	0.819	0.002	0.045	0.009	0.080	0.003	0.054	0.009	0.085
V13019.00-V13020.00	4135	196.0	8.0	0.107	2.555	0.001	0.020	0.003	0.031	0.004	0.031	0.006	0.039
V13020.00-V13021.00	4256	159.0	8.0	0.139	2.912	0.002	0.036	0.007	0.061	0.006	0.048	0.010	0.069
V13021.00-V13022.00	4257	142.0	8.0	0.020	1.104	0.005	0.083	0.018	0.131	0.009	0.093	0.021	0.137
V13022.00-V13023.00	3820	271.0	8.0	0.003	0.428	0.012	0.126	0.026	0.184	0.013	0.131	0.027	0.187
V13023.00-V13028.00	3822	105.0	8.0	0.001	0.247	0.012	0.112	0.029	0.168	0.014	0.119	0.030	0.173
V13024.00-V13025.00	3817	136.0	8.0	0.114	2.637	0.002	0.024	0.004	0.036	0.003	0.030	0.005	0.039
V13025.00-V13026.00	3805	109.0	8.0	0.050	1.746	0.002	0.027	0.007	0.043	0.004	0.033	0.008	0.047
V13026.00-V13027.00	4707	113.0	8.0	0.089	2.330	0.003	0.029	0.009	0.049	0.005	0.035	0.011	0.053
V13027.00-V13028.00	3821	394.0	8.0	0.054	1.815	0.004	0.061	0.012	0.100	0.005	0.069	0.014	0.105
V13028.00-V13029.00	3823	105.0	8.0	0.013	0.890	0.016	0.087	0.043	0.141	0.019	0.095	0.046	0.146
V13029.00-V13030.00	4705	224.0	8.0	0.020	1.104	0.017	0.103	0.045	0.169	0.020	0.122	0.049	0.181
V13030.00-V13033.00	4706	260.0	8.0	0.021	1.132	0.035	0.159	0.099	0.261	0.056	0.198	0.120	0.288
V13031.00-V13032.00	7528	67.0	8.0	0.062	1.945	0.002	0.028	0.004	0.037	0.003	0.032	0.005	0.041
V13032.00-V13033.00	7529	251.0	8.0	0.089	2.330	0.005	0.115	0.009	0.184	0.007	0.142	0.011	0.203
V13033.00-V13034.00	4251	198.0	8.0	0.004	0.494	0.042	0.218	0.113	0.356	0.065	0.269	0.135	0.392
V13034.00-V13035.00	4868	163.0	8.0	0.005	0.552	0.043	0.186	0.115	0.301	0.065	0.226	0.137	0.329
V13035.00-V13036.00	5142	100.1	8.0	0.025	1.235	0.044	0.129	0.118	0.208	0.065	0.156	0.140	0.226
V13036.00-V13037.00	4994	158.0	8.0	0.031	1.375	0.045	0.124	0.121	0.201	0.066	0.149	0.142	0.217
V13037.00-V13038.00	5006	300.0	8.0	0.035	1.461	0.047	0.153	0.126	0.257	0.067	0.193	0.145	0.286

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V13038.00-V13056.00	5022	155.0	8.0	0.008	0.699	0.050	0.187	0.130	0.295	0.067	0.211	0.148	0.314
V13039.00-V13040.00	4996	320.0	8.0	0.127	2.783	0.004	0.043	0.010	0.065	0.003	0.034	0.009	0.061
V13039.A0-V13039.B0	4999	69.0	6.0	0.002	0.162	0.002	0.093	0.004	0.145	0.002	0.105	0.004	0.152
V13039.B0-V13039.00	5001	36.3	6.0	0.001	0.115	0.002	0.072	0.006	0.120	0.002	0.079	0.007	0.123
V13040.00-V13041.00	4998	333.0	8.0	0.014	0.924	0.006	0.064	0.014	0.090	0.003	0.043	0.012	0.079
V13041.00-V13045.00	4627	330.0	8.0	0.024	1.210	0.012	0.136	0.022	0.164	0.004	0.103	0.015	0.138
V13042.00-V13043.00	4995	285.0	6.0	0.040	0.725	0.019	0.140	0.022	0.148	0.001	0.091	0.003	0.108
V13043.00-V13044.00	4997	302.0	6.0	0.023	0.550	0.024	0.141	0.028	0.152	0.020	0.131	0.024	0.143
V13044.00-V13045.00	4633	236.0	6.0	0.076	1.000	0.028	0.193	0.034	0.219	0.021	0.159	0.027	0.190
V13045.00-V13052.00	4634	192.0	8.0	0.009	0.741	0.044	0.163	0.062	0.194	0.026	0.128	0.045	0.165
V13046.00-V13047.00	4628	162.0	6.0	0.126	1.287	0.001	0.051	0.003	0.083	0.001	0.032	0.003	0.074
V13047.00-V13049.00	4637	79.1	6.0	0.008	0.324	0.002	0.058	0.006	0.097	0.001	0.039	0.005	0.087
V13048.00-V13049.00	4636	252.0	8.0	0.058	1.881	0.002	0.026	0.004	0.040	0.001	0.018	0.003	0.036
V13049.00-V13051.00	4632	252.0	8.0	0.118	2.683	0.004	0.043	0.013	0.066	0.002	0.029	0.010	0.058
V13050.00-V13051.00	4629	308.0	6.0	0.000	0.000	0.003	0.156	0.005	0.196	0.001	0.096	0.003	0.159
V13051.00-V13052.00	4635	164.0	8.0	0.040	1.562	0.010	0.090	0.022	0.118	0.004	0.064	0.016	0.101
V13052.00-V13055.00	4631	297.2	8.0	0.049	1.729	0.055	0.129	0.088	0.162	0.031	0.097	0.064	0.138
V13053.00-V13054.00	4641	160.0	6.0	0.023	0.550	0.001	0.047	0.003	0.067	0.000	0.032	0.002	0.059
V13054.00-V13055.00	4644	250.0	6.0	0.038	0.707	0.005	0.120	0.009	0.154	0.003	0.091	0.007	0.132
V13055.00-V13056.00	5023	126.0	8.0	0.043	1.620	0.063	0.163	0.102	0.222	0.034	0.141	0.074	0.206
V13056.00-V13057.00	5024	194.0	8.0	0.034	1.440	0.115	0.191	0.236	0.273	0.102	0.180	0.224	0.266
V13057.00-V13058.00	5010	194.0	8.0	0.028	1.307	0.121	0.201	0.247	0.288	0.106	0.188	0.232	0.279
V13057.A0-V13057.00	5002	375.0	6.0	0.006	0.281	0.003	0.165	0.005	0.229	0.002	0.153	0.005	0.221
V13058.00-V13065.00	5012	350.0	8.0	0.026	1.259	0.123	0.217	0.250	0.311	0.106	0.198	0.234	0.298
V13059.00-V13060.00	4134	144.0	6.0	0.072	0.973	0.001	0.039	0.003	0.058	0.001	0.018	0.002	0.047
V13060.00-V13061.00	4133	332.0	6.0	0.040	0.725	0.004	0.068	0.008	0.093	0.001	0.033	0.005	0.073
V13061.00-V13063.00	4862	222.8	6.0	0.018	0.487	0.007	0.090	0.013	0.125	0.002	0.045	0.008	0.099
V13062.00-V13063.00	4863	138.0	8.0	0.031	1.375	0.002	0.050	0.004	0.071	0.000	0.025	0.003	0.057
V13063.00-V13064.00	4864	126.0	6.0	0.018	0.487	0.010	0.115	0.020	0.164	0.002	0.059	0.013	0.131
V13064.00-V13065.00	5011	217.0	6.0	0.007	0.303	0.012	0.215	0.024	0.308	0.003	0.168	0.015	0.278
V13065.00-V13082.00	5013	350.0	8.0	0.026	1.259	0.136	0.273	0.278	0.398	0.110	0.242	0.252	0.375
V13066.00-V13067.00	4243	20.0	6.0	0.001	0.115	0.014	0.198	0.016	0.219	0.008	0.150	0.010	0.176
V13067.00-V13068.00	4245	57.7	6.0	0.002	0.162	0.014	0.217	0.018	0.245	0.008	0.161	0.012	0.198
V13068.00-V13074.00	4247	146.3	8.0	0.002	0.349	0.014	0.134	0.020	0.160	0.008	0.101	0.014	0.134
V13069.00-V13070.00	4252	160.0	8.0	0.084	2.264	0.001	0.023	0.003	0.038	0.002	0.028	0.004	0.041
V13070.00-V13072.00	4254	144.0	8.0	0.030	1.353	0.002	0.032	0.006	0.053	0.003	0.035	0.007	0.054
V13071.00-V13072.00	4137	154.0	8.0	0.097	2.432	0.001	0.023	0.003	0.041	0.001	0.023	0.003	0.040
V13072.00-V13073.00	4246	180.0	8.0	0.066	2.006	0.004	0.047	0.013	0.076	0.004	0.047	0.013	0.076
V13073.00-V13074.00	4248	153.0	8.0	0.011	0.819	0.006	0.075	0.016	0.109	0.006	0.067	0.016	0.103
V13074.00-V13079.00	4249	250.8	8.0	0.028	1.307	0.022	0.104	0.041	0.142	0.014	0.089	0.033	0.131
V13075.00-V13076.00	4258	28.0	8.0	0.016	0.988	0.001	0.021	0.003	0.033	0.002	0.024	0.004	0.034
V13076.00-V13077.00	4138	218.0	8.0	0.103	2.507	0.003	0.033	0.007	0.047	0.003	0.034	0.008	0.048
V13077.00-V13078.00	4865	83.0	8.0	0.042	1.601	0.005	0.046	0.012	0.066	0.006	0.048	0.012	0.068
V13078.00-V13079.00	4866	150.0	8.0	0.025	1.235	0.007	0.085	0.015	0.120	0.007	0.080	0.016	0.116
V13079.00-V13080.00	4867	183.0	8.0	0.017	1.018	0.030	0.117	0.059	0.162	0.022	0.102	0.051	0.152
V13080.00-V13081.00	4861	227.0	8.0	0.020	1.104	0.031	0.119	0.062	0.166	0.023	0.101	0.054	0.153
V13081.00-V13082.00	5014	215.0	8.0	0.018	1.048	0.033	0.222	0.066	0.323	0.023	0.193	0.056	0.302
V13082.00-V13085.00	5015	179.0	8.0	0.009	0.741	0.171	0.338	0.349	0.486	0.134	0.299	0.311	0.457
V13083.00-V13084.00	5016	114.0	8.0	0.006	0.605	0.003	0.055	0.005	0.072	0.003	0.050	0.005	0.069
V13084.00-V13085.00	5017	125.0	8.0	0.008	0.699	0.005	0.207	0.009	0.289	0.004	0.183	0.008	0.272
V13085.00-V13086.00	5019	54.0	10.0	0.005	1.001	0.182	0.239	0.365	0.338	0.142	0.213	0.326	0.319
V13086.00-V13087.A0	5020	143.0	10.0	0.023	2.148	0.182	0.207	0.368	0.294	0.143	0.183	0.328	0.276
V13087.00-V13099.00	5007	249.0	10.0	0.022	2.100	0.196	0.205	0.386	0.288	0.154	0.182	0.343	0.271
V13087.A0-V13087.00	5021	205.0	10.0	0.017	1.846	0.193	0.235	0.380	0.331	0.148	0.207	0.335	0.311
V13089.00-V13090.00	3791	147.0	8.0	0.042	1.601	0.008	0.058	0.010	0.066	0.012	0.070	0.015	0.076

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V13090.00-V13091.00	3800	262.0	8.0	0.034	1.440	0.012	0.089	0.017	0.100	0.017	0.094	0.022	0.104
V13091.00-V13092.00	3798	290.0	8.0	0.063	1.960	0.053	0.158	0.065	0.178	0.051	0.156	0.063	0.175
V13091.A0-V13091.B0	3802	281.0	8.0	0.008	0.699	0.008	0.077	0.011	0.085	0.011	0.087	0.013	0.095
V13091.B0-V13091.C0	3795	268.0	8.0	0.027	1.283	0.010	0.080	0.014	0.089	0.013	0.080	0.017	0.089
V13091.C0-V13091.00	3801	292.0	8.0	0.062	1.945	0.038	0.104	0.044	0.114	0.031	0.099	0.037	0.110
V13092.00-V13094.00	3799	316.0	8.0	0.005	0.552	0.053	0.288	0.067	0.327	0.051	0.284	0.065	0.323
V13094.00-V13097.00	3796	350.0	8.0	0.003	0.428	0.053	0.225	0.070	0.257	0.052	0.223	0.069	0.255
V13096.00-V13097.00	3797	274.0	8.0	0.065	1.991	0.005	0.059	0.007	0.067	0.008	0.064	0.010	0.072
V13100.00-V13104.00	5009	238.0	8.0	0.009	0.741	0.009	0.126	0.013	0.152	0.003	0.104	0.008	0.135
V13100.A0-V13100.00	5008	277.0	8.0	0.009	0.741	0.000	0.039	0.002	0.066	0.000	0.025	0.002	0.055
V13101.00-V13102.00	4651	243.0	6.0	0.064	0.917	0.004	0.062	0.006	0.073	0.005	0.066	0.007	0.076
V13102.00-V13103.00	4646	245.0	6.0	0.073	0.980	0.011	0.097	0.015	0.114	0.012	0.103	0.016	0.119
V13103.00-V13104.00	4648	177.0	8.0	0.013	0.890	0.015	0.132	0.021	0.158	0.017	0.128	0.023	0.155
V13104.00-V13140.00	4649	184.0	8.0	0.009	0.741	0.024	0.122	0.036	0.149	0.020	0.113	0.033	0.142
V13105.00-V13106.00	4640	110.7	6.0	0.002	0.162	0.001	0.070	0.003	0.116	0.000	0.034	0.002	0.099
V13106.00-V13108.00	4653	99.8	6.0	0.002	0.162	0.002	0.147	0.006	0.202	0.000	0.097	0.004	0.167
V13107.00-V13108.00	4638	215.2	6.0	0.002	0.162	0.014	0.210	0.016	0.243	0.006	0.146	0.008	0.186
V13108.00-V13109.00	4645	328.4	6.0	0.002	0.162	0.017	0.218	0.025	0.266	0.009	0.166	0.017	0.222
V13109.00-V13110.A0	4652	500.0	6.0	0.004	0.229	0.023	0.299	0.034	0.356	0.015	0.240	0.025	0.308
V13110.A0-V13110.00	4647	265.0	8.0	0.002	0.349	0.027	0.180	0.040	0.215	0.017	0.144	0.029	0.186
V13111.00-V13112.00	4659	92.0	6.0	0.027	0.596	0.002	0.045	0.004	0.062	0.001	0.030	0.003	0.051
V13112.00-V13115.00	4657	200.0	6.0	0.093	1.106	0.005	0.059	0.009	0.082	0.002	0.045	0.006	0.073
V13113.00-V13115.00	4658	277.0	6.0	0.050	0.811	0.002	0.055	0.004	0.077	0.001	0.042	0.003	0.069
V13114.00-V13115.00	4656	204.1	8.0	0.002	0.349	0.001	0.050	0.003	0.073	0.004	0.077	0.006	0.093
V13115.00-V13116.00	4655	121.0	8.0	0.047	1.693	0.009	0.057	0.020	0.079	0.007	0.047	0.017	0.073
V13116.00-V13118.00	4654	186.0	8.0	0.052	1.781	0.012	0.071	0.025	0.095	0.008	0.053	0.020	0.083
V13117.00-V13118.00	4660	214.0	6.0	0.097	1.129	0.001	0.068	0.003	0.092	0.002	0.055	0.004	0.083
V13118.00-V13121.00	5025	223.0	8.0	0.039	1.542	0.021	0.098	0.038	0.129	0.010	0.071	0.027	0.110
V13119.00-V13120.00	5034	239.7	6.0	0.002	0.162	0.002	0.111	0.005	0.144	0.001	0.065	0.003	0.113
V13120.00-V13121.00	5030	222.4	6.0	0.002	0.162	0.006	0.144	0.011	0.187	0.003	0.100	0.007	0.155
V13121.00-V13123.00	5026	190.0	6.0	0.026	0.585	0.029	0.164	0.052	0.214	0.016	0.120	0.038	0.183
V13122.00-V13123.00	5027	390.0	6.0	0.012	0.397	0.007	0.134	0.009	0.166	0.004	0.097	0.006	0.138
V13123.00-V13135.00	5028	170.0	6.0	0.025	0.573	0.039	0.203	0.066	0.278	0.020	0.147	0.047	0.239
V13124.00-V13125.00	5043	163.0	6.0	0.030	0.628	0.001	0.032	0.003	0.053	0.000	0.024	0.002	0.049
V13125.00-V13126.00	4149	247.0	6.0	0.084	1.051	0.003	0.062	0.007	0.090	0.002	0.053	0.006	0.085
V13126.00-V13134.H0	8218	105.0	6.0	0.010	0.363	0.006	0.110	0.012	0.169	0.004	0.086	0.010	0.155
V13134.00-V13135.00	5029	460.0	6.0	0.010	0.363	0.015	0.184	0.039	0.276	0.008	0.136	0.033	0.244
V13134.A0-V13134.B0	8219	16.0	8.0	0.009	0.741	0.001	0.021	0.003	0.036	0.000	0.010	0.002	0.032
V13134.B0-V13134.C0	8220	109.0	8.0	0.043	1.620	0.001	0.029	0.005	0.051	0.000	0.015	0.004	0.045
V13134.C0-V13134.E0	8223	70.6	8.0	0.019	1.077	0.003	0.037	0.009	0.064	0.001	0.021	0.007	0.057
V13134.D0-V13134.E0	8227	70.0	8.0	0.040	1.562	0.000	0.024	0.002	0.047	0.000	0.014	0.002	0.043
V13134.E0-V13134.G0	8224	91.1	8.0	0.031	1.375	0.004	0.046	0.015	0.079	0.001	0.028	0.011	0.070
V13134.F0-V13134.G0	8226	44.5	8.0	0.010	0.781	0.001	0.038	0.003	0.063	0.000	0.017	0.002	0.055
V13134.G0-V13134.H0	8225	156.6	8.0	0.030	1.353	0.008	0.077	0.022	0.125	0.003	0.054	0.017	0.113
V13134.H0-V13134.00	5033	180.0	6.0	0.010	0.363	0.014	0.136	0.037	0.218	0.008	0.102	0.030	0.199
V13135.00-V13138.00	4666	210.0	6.0	0.028	0.607	0.065	0.220	0.118	0.298	0.033	0.158	0.087	0.254
V13136.00-V13137.00	5031	280.0	6.0	0.008	0.324	0.016	0.171	0.018	0.185	0.004	0.091	0.006	0.115
V13137.00-V13138.00	4667	460.0	6.0	0.005	0.256	0.020	0.200	0.025	0.238	0.006	0.129	0.011	0.181
V13138.00-V13139.00	4665	171.5	8.0	0.068	2.037	0.088	0.141	0.147	0.182	0.044	0.101	0.103	0.153
V13139.00-V13139.A0	4662	215.0	8.0	-0.009	Adverse	0.000	0.072	0.001	0.097	0.001	0.056	0.001	0.086
V13139.A0-V13110.00	4642	300.0	8.0	0.020	1.104	0.001	0.045	0.002	0.059	0.001	0.040	0.002	0.055
V14001.00-V14002.00	4869	110.0	8.0	0.010	0.781	0.001	0.023	0.003	0.043	0.001	0.027	0.003	0.045
V14002.00-V14003.00	5075	70.0	8.0	0.123	2.739	0.001	0.032	0.006	0.056	0.001	0.033	0.006	0.057
V14003.00-V14006.00	4716	138.2	8.0	0.005	0.552	0.003	0.062	0.009	0.108	0.003	0.064	0.009	0.109
V14004.00-V14005.00	4873	200.0	8.0	0.065	1.991	0.001	0.023	0.003	0.037	0.002	0.023	0.004	0.037

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V14005.00-V14006.00	4872	110.0	8.0	0.022	1.158	0.002	0.053	0.006	0.090	0.002	0.052	0.006	0.090
V14006.00-V14007.00	4871	96.0	8.0	0.004	0.494	0.006	0.079	0.018	0.135	0.006	0.078	0.018	0.135
V14007.00-V14009.00	4870	308.0	8.0	0.004	0.494	0.007	0.090	0.022	0.152	0.007	0.088	0.021	0.151
V14008.00-V14009.00	4874	50.0	8.0	0.006	0.605	0.001	0.064	0.003	0.105	0.001	0.061	0.003	0.103
V14009.00-V14010.00	3219	215.0	8.0	0.004	0.494	0.010	0.102	0.028	0.168	0.009	0.098	0.027	0.166
V14010.00-V14019.00	4876	278.0	8.0	0.004	0.494	0.012	0.136	0.033	0.212	0.011	0.130	0.032	0.209
V14011.00-V14012.00	4882	173.0	8.0	0.094	2.394	0.001	0.031	0.003	0.046	0.001	0.028	0.003	0.044
V14012.00-V14019.00	4886	248.0	8.0	0.013	0.890	0.003	0.104	0.007	0.158	0.003	0.098	0.007	0.154
V14013.00-V14014.00	4881	90.0	8.0	0.004	0.494	0.001	0.036	0.003	0.062	0.001	0.038	0.003	0.064
V14014.00-V14015.00	4880	246.0	8.0	0.006	0.605	0.002	0.064	0.006	0.099	0.003	0.071	0.007	0.104
V14015.00-V14016.00	4879	147.0	8.0	0.006	0.605	0.004	0.060	0.010	0.091	0.005	0.065	0.011	0.094
V14016.00-V14018.00	4878	192.0	8.0	0.089	2.330	0.005	0.058	0.013	0.084	0.006	0.059	0.014	0.085
V14017.00-V14018.00	3220	389.0	8.0	0.010	0.781	0.004	0.068	0.006	0.090	0.004	0.064	0.006	0.087
V14018.00-V14019.00	4877	221.0	8.0	0.012	0.856	0.012	0.123	0.024	0.183	0.011	0.119	0.024	0.180
V14019.00-V14020.00	4885	230.0	8.0	0.004	0.494	0.029	0.166	0.068	0.254	0.026	0.160	0.066	0.250
V14020.00-V14021.00	4884	350.0	8.0	0.004	0.494	0.030	0.169	0.072	0.260	0.028	0.163	0.069	0.256
V14021.00-V14022.00	3221	341.0	8.0	0.004	0.494	0.031	0.171	0.075	0.264	0.029	0.166	0.073	0.261
V14022.00-V14023.00	3222	271.0	8.0	0.004	0.494	0.032	0.176	0.077	0.271	0.031	0.171	0.076	0.268
V14023.00-V14024.00	3223	159.0	8.0	0.004	0.494	0.033	0.177	0.081	0.275	0.032	0.176	0.079	0.276
V14024.00-V14051.00	3094	14.0	8.0	0.001	0.247	0.033	0.185	0.083	0.283	0.032	0.215	0.081	0.306
V14025.00-V14027.00	4714	258.0	6.0	0.110	1.203	0.001	0.032	0.003	0.052	0.005	0.059	0.007	0.072
V14026.00-V14027.00	4713	71.0	6.0	0.009	0.344	0.001	0.041	0.003	0.068	0.003	0.070	0.005	0.088
V14027.00-V14028.00	4712	330.0	8.0	0.066	2.006	0.004	0.056	0.010	0.084	0.011	0.090	0.018	0.109
V14028.00-V14030.00	4157	355.0	8.0	0.004	0.494	0.006	0.113	0.015	0.167	0.017	0.172	0.025	0.211
V14029.00-V14030.A0	4156	275.0	6.0	0.108	1.192	0.002	0.031	0.004	0.043	0.004	0.043	0.006	0.052
V14030.00-V14031.00	4155	355.0	8.0	0.004	0.494	0.012	0.106	0.026	0.155	0.026	0.155	0.041	0.192
V14030.A0-V14030.00	7596	55.0	6.0	0.093	1.106	0.004	0.113	0.008	0.166	0.007	0.166	0.011	0.206
V14031.00-V14033.00	4154	168.0	8.0	0.048	1.711	0.015	0.068	0.031	0.098	0.030	0.095	0.047	0.118
V14032.00-V14033.00	3207	221.0	8.0	0.035	1.461	0.001	0.044	0.005	0.073	0.002	0.064	0.006	0.086
V14032.A0-V14032.00	7560	31.0	8.0	0.001	0.247	0.000	0.009	0.002	0.053	0.001	0.044	0.003	0.066
V14033.00-V14034.00	2067	292.0	8.0	0.053	1.798	0.018	0.075	0.040	0.111	0.036	0.104	0.059	0.131
V14034.00-V14039.00	4888	291.0	8.0	0.039	1.542	0.021	0.134	0.045	0.195	0.040	0.179	0.064	0.229
V14035.00-V14036.00	2072	168.0	6.0	0.050	0.811	0.001	0.038	0.003	0.055	0.002	0.045	0.004	0.060
V14036.00-V14038.00	3208	275.0	8.0	0.056	1.848	0.004	0.042	0.008	0.059	0.006	0.050	0.010	0.065
V14037.00-V14038.00	2068	230.0	6.0	0.030	0.628	0.002	0.055	0.004	0.077	0.003	0.063	0.005	0.082
V14038.00-V14039.00	3975	265.0	8.0	0.040	1.562	0.008	0.119	0.016	0.172	0.011	0.154	0.019	0.198
V14039.00-V14041.00	4887	267.0	8.0	0.005	0.552	0.030	0.156	0.065	0.228	0.052	0.204	0.087	0.264
V14040.00-V14041.00	3976	224.0	8.0	0.041	1.581	0.001	0.073	0.003	0.108	0.002	0.092	0.004	0.122
V14041.00-V14043.00	3977	257.0	8.0	0.016	0.988	0.032	0.138	0.071	0.194	0.055	0.161	0.094	0.211
V14042.00-V14043.00	3979	159.0	6.0	0.041	0.734	0.016	0.153	0.018	0.192	0.000	0.116	0.002	0.163
V14043.00-V14044.00	3978	100.0	8.0	0.017	1.018	0.050	0.207	0.093	0.282	0.057	0.219	0.100	0.291
V14044.00-V14048.00	1819	153.8	8.0	0.004	0.494	0.051	0.214	0.096	0.293	0.057	0.227	0.103	0.303
V14045.00-V14046.00	3213	170.0	6.0	0.040	0.725	0.001	0.042	0.003	0.061	0.002	0.045	0.004	0.063
V14046.00-V14047.00	3224	200.0	6.0	0.040	0.725	0.004	0.056	0.008	0.080	0.004	0.063	0.008	0.085
V14047.00-V14048.00	3225	195.0	6.0	0.040	0.725	0.005	0.140	0.012	0.196	0.008	0.154	0.014	0.206
V14048.00-V14050.00	4503	262.0	8.0	0.016	0.988	0.058	0.407	0.111	0.504	0.067	0.438	0.120	0.526
V14049.00-V14050.00	4504	150.0	6.0	0.053	0.835	0.001	0.441	0.003	0.515	0.001	0.476	0.003	0.516
V14050.00-V14051.00	3095	37.0	8.0	-0.004	Adverse	0.059	0.423	0.116	0.536	0.069	0.475	0.126	0.574
V14051.00-V14052.00	3104	298.0	8.0	0.020	1.104	0.093	0.237	0.204	0.354	0.152	0.304	0.264	0.407
V14051.A0-V14051.00	2484	160.0	8.0	0.047	1.693	0.001	0.104	0.003	0.156	0.052	0.165	0.054	0.207
V14052.00-V14053.00	3105	300.0	8.0	0.005	0.552	0.097	0.285	0.210	0.430	0.157	0.367	0.271	0.497
V14053.00-V14087.00	3106	230.0	8.0	0.005	0.552	0.099	0.341	0.215	0.533	0.160	0.449	0.276	0.623
V14054.00-V14059.00	2069	168.0	8.0	0.025	1.235	0.001	0.031	0.003	0.052	0.001	0.033	0.003	0.054
V14055.00-V14056.00	2401	137.0	8.0	0.005	0.552	0.001	0.050	0.003	0.081	0.002	0.060	0.004	0.087
V14056.00-V14057.00	2400	120.0	8.0	0.005	0.552	0.002	0.048	0.007	0.076	0.004	0.057	0.008	0.082

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V14057.00-V14058.00	2399	176.0	8.0	0.099	2.457	0.005	0.032	0.011	0.048	0.006	0.037	0.012	0.051
V14058.00-V14059.00	2071	161.0	8.0	0.127	2.783	0.005	0.037	0.014	0.059	0.008	0.043	0.016	0.062
V14059.00-V14072.00	3209	192.0	8.0	0.062	1.945	0.007	0.074	0.019	0.121	0.009	0.089	0.021	0.131
V14060.00-V14063.00	1598	138.0	8.0	0.077	2.167	0.002	0.046	0.006	0.072	0.007	0.062	0.011	0.082
V14060.A0-V14060.00	1605	178.0	8.0	0.124	2.750	0.001	0.018	0.003	0.032	0.004	0.035	0.006	0.043
V14061.00-V14062.00	1603	346.0	8.0	0.003	0.428	0.019	0.178	0.046	0.273	0.024	0.195	0.050	0.284
V14061.A0-V14061.B0	358	168.1	8.0	0.035	1.461	0.001	0.032	0.003	0.050	0.003	0.041	0.005	0.056
V14061.B0-V14061.D0	4506	210.9	8.0	0.011	0.819	0.002	0.045	0.007	0.070	0.004	0.053	0.008	0.075
V14061.C0-V14061.D0	4507	183.0	8.0	0.010	0.781	0.001	0.036	0.003	0.060	0.001	0.040	0.003	0.063
V14061.D0-V14061.E0	2074	320.9	8.0	0.021	1.132	0.005	0.052	0.014	0.079	0.007	0.059	0.015	0.083
V14061.E0-V14061.F0	354	144.9	8.0	0.030	1.353	0.008	0.056	0.018	0.085	0.010	0.063	0.020	0.089
V14061.F0-V14061.G0	352	345.6	8.0	0.037	1.502	0.010	0.057	0.022	0.084	0.012	0.063	0.024	0.088
V14061.G0-V14061.H0	1599	326.0	8.0	0.069	2.052	0.012	0.078	0.027	0.113	0.015	0.086	0.030	0.118
V14061.H0-V14061.L0	2412	50.0	8.0	0.005	0.552	0.014	0.109	0.030	0.163	0.017	0.119	0.034	0.170
V14061.I0-V14061.J0	1771	153.0	8.0	0.105	2.531	0.001	0.023	0.003	0.037	0.001	0.024	0.003	0.037
V14061.J0-V14061.K0	353	137.4	8.0	0.042	1.601	0.002	0.028	0.006	0.045	0.002	0.029	0.006	0.046
V14061.K0-V14061.L0	2411	216.0	8.0	0.102	2.494	0.003	0.072	0.009	0.112	0.003	0.078	0.009	0.116
V14061.L0-V14061.00	2410	156.8	8.0	0.006	0.605	0.017	0.129	0.042	0.198	0.021	0.141	0.046	0.206
V14062.00-V14063.00	1604	347.4	8.0	0.003	0.428	0.020	0.142	0.049	0.218	0.026	0.159	0.054	0.229
V14063.00-V14064.00	2409	18.0	8.0	0.015	0.957	0.023	0.068	0.058	0.106	0.035	0.082	0.070	0.115
V14064.00-V14067.00	2407	144.0	8.0	0.095	2.407	0.024	0.342	0.061	0.452	0.035	0.375	0.072	0.479
V14065.00-V14066.00	2406	154.0	6.0	0.007	0.303	0.001	0.044	0.003	0.072	0.002	0.056	0.004	0.080
V14066.00-V14067.00	2405	133.0	6.0	0.018	0.487	0.001	0.429	0.006	0.536	0.002	0.468	0.006	0.538
V14067.00-V14068.00	2404	133.0	6.0	-0.004	Adverse	0.026	0.556	0.069	0.741	0.037	0.619	0.081	0.760
V14068.00-V14070.00	2403	272.0	6.0	0.007	0.303	0.027	0.196	0.072	0.322	0.038	0.235	0.084	0.348
V14069.00-V14070.00	2402	184.0	6.0	0.063	0.910	0.001	0.063	0.003	0.102	0.003	0.081	0.005	0.114
V14070.00-V14071.00	4150	323.0	8.0	0.101	2.482	0.028	0.087	0.078	0.140	0.043	0.106	0.092	0.152
V14071.00-V14072.00	3210	125.0	8.0	0.037	1.502	0.030	0.102	0.082	0.165	0.046	0.125	0.098	0.180
V14072.00-V14079.00	2397	379.0	8.0	0.042	1.601	0.037	0.120	0.103	0.197	0.057	0.156	0.123	0.221
V14073.00-V14074.00	1601	346.0	8.0	0.068	2.037	0.001	0.024	0.003	0.037	0.001	0.026	0.003	0.038
V14074.00-V14075.00	4151	284.0	8.0	0.057	1.865	0.003	0.035	0.007	0.054	0.003	0.041	0.007	0.058
V14075.00-V14076.00	2394	150.0	8.0	0.029	1.330	0.004	0.042	0.010	0.066	0.007	0.052	0.013	0.073
V14076.00-V14077.00	2392	190.0	8.0	0.049	1.729	0.006	0.050	0.016	0.079	0.010	0.070	0.020	0.092
V14076.A0-V14076.00	4153	126.0	8.0	0.002	0.349	0.001	0.042	0.003	0.068	0.002	0.060	0.005	0.080
V14077.00-V14078.00	2391	321.0	8.0	0.069	2.052	0.013	0.075	0.033	0.118	0.030	0.118	0.051	0.149
V14077.A0-V14077.B0	2390	229.0	8.0	0.034	1.440	0.002	0.043	0.004	0.060	0.003	0.080	0.005	0.091
V14077.B0-V14077.C0	2389	319.0	8.0	0.005	0.552	0.004	0.057	0.008	0.082	0.016	0.115	0.020	0.128
V14077.C0-V14077.D0	2490	84.0	8.0	0.011	0.819	0.005	0.058	0.011	0.087	0.017	0.113	0.023	0.129
V14077.D0-V14077.00	2489	178.0	8.0	0.011	0.819	0.006	0.060	0.014	0.091	0.019	0.105	0.027	0.125
V14078.00-V14079.00	2398	297.0	8.0	0.010	0.781	0.014	0.114	0.037	0.185	0.038	0.167	0.061	0.221
V14079.00-V14080.00	2396	379.0	8.0	0.032	1.397	0.052	0.131	0.143	0.214	0.097	0.177	0.187	0.245
V14080.00-V14084.00	2395	329.0	8.0	0.039	1.542	0.053	0.135	0.146	0.219	0.099	0.184	0.191	0.253
V14081.00-V14083.00	4505	230.0	6.0	0.018	0.487	0.002	0.059	0.004	0.083	0.003	0.090	0.005	0.106
V14082.00-V14083.00	3214	276.0	6.0	0.086	1.063	0.002	0.055	0.005	0.075	0.006	0.086	0.008	0.100
V14083.00-V14084.00	1200	343.0	8.0	0.018	1.048	0.006	0.100	0.013	0.154	0.018	0.144	0.024	0.187
V14084.00-V14085.00	3096	337.0	8.0	0.031	1.375	0.061	0.150	0.162	0.242	0.118	0.206	0.219	0.281
V14085.00-V14086.00	3107	338.0	8.0	0.023	1.184	0.063	0.200	0.166	0.325	0.121	0.275	0.224	0.379
V14086.00-V14087.00	3199	164.0	10.0	0.003	0.776	0.064	0.253	0.169	0.408	0.121	0.342	0.226	0.479
V14087.00-V14088.00	3201	227.0	10.0	0.003	0.776	0.163	0.328	0.386	0.511	0.282	0.419	0.504	0.593
V14088.00-V14089.B0	3098	377.0	10.0	0.003	0.776	0.200	0.351	0.425	0.532	0.290	0.433	0.514	0.800
V14089.00-V14090.00	3202	124.0	8.0	0.002	0.349	0.206	0.515	0.445	0.858	0.309	0.660	0.545	1.000
V14089.A0-V14089.B0	3099	74.0	8.0	0.020	1.104	0.005	0.246	0.013	0.373	0.018	0.319	0.026	0.549
V14089.AA-V14089.AB	2487	373.0	8.0	0.002	0.349	0.005	0.082	0.007	0.104	0.013	0.144	0.015	0.157
V14089.AB-V14089.AC	2486	206.0	8.0	0.002	0.349	0.005	0.100	0.009	0.137	0.018	0.179	0.022	0.201
V14089.AC-V14089.A0	2485	69.0	8.0	0.002	0.349	0.005	0.080	0.011	0.117	0.018	0.143	0.024	0.165

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V14089.B0-V14089.C0	3100	191.0	10.0	0.003	0.776	0.205	0.350	0.440	0.568	0.308	0.436	0.541	1.000
V14089.C0-V14089.00	3203	72.0	10.0	0.003	0.776	0.205	0.402	0.442	0.685	0.308	0.506	0.542	1.000
V14090.00-V14091.00	3204	342.0	8.0	0.004	0.494	0.209	0.509	0.450	0.830	0.322	0.662	0.560	1.000
V14091.00-V14109.00	3205	226.0	8.0	0.004	0.494	0.211	0.445	0.454	0.701	0.325	0.567	0.565	0.776
V14092.00-V14093.00	5158	190.0	8.0	0.024	1.210	0.001	0.032	0.003	0.046	0.003	0.039	0.005	0.052
V14093.00-V14095.00	5157	183.0	8.0	0.032	1.397	0.004	0.040	0.008	0.058	0.005	0.048	0.009	0.063
V14094.00-V14095.00	5163	125.0	8.0	0.055	1.832	0.002	0.034	0.004	0.049	0.003	0.040	0.005	0.053
V14095.00-V14097.00	5159	271.4	8.0	0.059	1.897	0.007	0.078	0.015	0.109	0.009	0.080	0.018	0.110
V14096.00-V14097.00	5164	35.0	8.0	0.002	0.349	0.005	0.092	0.007	0.120	0.001	0.071	0.003	0.104
V14097.00-V14098.00	5156	320.0	8.0	0.004	0.494	0.013	0.126	0.026	0.168	0.013	0.119	0.025	0.163
V14098.00-V14108.00	5155	320.0	8.0	0.004	0.494	0.017	0.125	0.031	0.169	0.017	0.125	0.031	0.169
V14099.00-V14100.00	5161	202.0	8.0	0.070	2.066	0.002	0.028	0.004	0.039	0.005	0.038	0.007	0.046
V14100.00-V14108.00	5160	156.0	8.0	0.071	2.081	0.004	0.072	0.008	0.101	0.006	0.081	0.011	0.108
V14101.00-V14102.00	678	171.0	8.0	0.018	1.048	0.001	0.031	0.003	0.047	0.002	0.031	0.004	0.047
V14102.00-V14105.00	3215	362.0	8.0	0.016	0.988	0.002	0.060	0.007	0.087	0.003	0.064	0.007	0.090
V14103.00-V14104.A0	1600	296.0	8.0	0.100	2.470	0.012	0.050	0.022	0.067	0.016	0.058	0.027	0.073
V14103.A0-V14103.C0	1772	167.7	8.0	0.046	1.675	0.000	0.035	0.002	0.056	0.000	0.037	0.002	0.057
V14103.B0-V14103.C0	355	309.8	8.0	0.020	1.104	0.003	0.050	0.005	0.067	0.003	0.051	0.006	0.068
V14103.C0-V14103.D0	356	317.3	8.0	0.011	0.819	0.006	0.072	0.012	0.099	0.006	0.072	0.012	0.098
V14103.D0-V14103.00	357	336.1	8.0	0.018	1.048	0.010	0.068	0.018	0.091	0.011	0.071	0.019	0.093
V14104.00-V14105.00	3211	275.0	8.0	0.095	2.407	0.017	0.073	0.031	0.101	0.021	0.080	0.035	0.106
V14104.A0-V14104.00	4152	300.0	8.0	0.157	3.095	0.015	0.054	0.027	0.073	0.019	0.061	0.031	0.078
V14105.00-V14106.00	1201	362.0	8.0	0.027	1.283	0.020	0.102	0.041	0.143	0.024	0.112	0.045	0.150
V14106.00-V14107.00	1202	250.0	8.0	0.025	1.235	0.026	0.100	0.052	0.141	0.031	0.109	0.058	0.148
V14106.A0-V14106.B0	3212	164.8	8.0	0.091	2.356	0.002	0.027	0.004	0.037	0.003	0.029	0.005	0.039
V14106.B0-V14106.00	3217	269.1	8.0	0.093	2.382	0.004	0.074	0.008	0.103	0.005	0.081	0.009	0.108
V14107.00-V14108.00	5153	100.0	8.0	0.046	1.675	0.027	0.097	0.055	0.137	0.032	0.105	0.061	0.143
V14108.00-V14109.00	5154	261.0	8.0	0.054	1.815	0.049	0.219	0.098	0.325	0.057	0.260	0.106	0.358
V14109.00-V14116.00	3101	231.0	8.0	0.022	1.158	0.263	0.450	0.557	0.701	0.385	0.542	0.676	0.776
V14110.00-V14113.00	7423	120.0	8.0	0.010	0.781	0.014	0.109	0.037	0.158	0.008	0.087	0.030	0.145
V14110.A0-V14110.D0	7416	102.0	8.0	0.024	1.210	0.001	0.028	0.003	0.048	0.000	0.021	0.002	0.045
V14110.B0-V14110.C0	3014	111.0	8.0	0.008	0.699	0.000	0.035	0.002	0.065	0.003	0.055	0.005	0.073
V14110.C0-V14110.D0	3013	109.0	8.0	0.008	0.699	0.004	0.053	0.008	0.075	0.003	0.047	0.007	0.071
V14110.D0-V14110.E0	7417	269.0	8.0	0.054	1.815	0.005	0.041	0.013	0.067	0.003	0.035	0.012	0.064
V14110.E0-V14110.F0	7418	94.0	8.0	0.027	1.283	0.005	0.042	0.015	0.074	0.003	0.036	0.014	0.071
V14110.F0-V14110.H0	7419	114.0	8.0	0.037	1.502	0.005	0.085	0.017	0.131	0.003	0.067	0.016	0.120
V14110.G0-V14110.H0	7424	195.0	8.0	0.044	1.638	0.000	0.065	0.002	0.107	0.004	0.068	0.006	0.107
V14110.H0-V14110.I0	7420	52.0	8.0	0.006	0.605	0.013	0.088	0.030	0.129	0.007	0.068	0.024	0.117
V14110.I0-V14110.J0	7421	98.0	8.0	0.085	2.277	0.013	0.060	0.032	0.093	0.007	0.047	0.026	0.086
V14110.J0-V14110.00	7422	97.0	8.0	0.023	1.184	0.013	0.083	0.034	0.132	0.008	0.064	0.028	0.121
V14111.00-V14112.00	2065	101.3	8.0	0.054	1.815	0.002	0.032	0.004	0.043	0.001	0.025	0.003	0.038
V14112.00-V14113.00	3097	222.0	8.0	0.040	1.562	0.005	0.084	0.010	0.113	0.003	0.068	0.007	0.102
V14113.00-V14114.00	3206	345.0	8.0	0.016	0.988	0.032	0.132	0.061	0.178	0.022	0.110	0.051	0.163
V14114.00-V14115.00	5167	213.3	8.0	0.014	0.924	0.037	0.136	0.068	0.183	0.025	0.113	0.056	0.167
V14115.00-V14116.00	5166	201.9	8.0	0.016	0.988	0.037	0.353	0.070	0.545	0.025	0.397	0.058	0.582
V14116.00-V14117.00	5526	72.7	8.0	0.005	0.552	0.302	0.483	0.631	0.748	0.412	0.575	0.738	0.822
V14117.00-V14118.00	5165	430.0	10.0	0.010	1.416	0.302	0.312	0.633	0.466	0.416	0.369	0.745	0.512
V14118.00-V14119.00	3102	298.4	10.0	0.010	1.416	0.302	0.311	0.635	0.465	0.416	0.369	0.746	0.511
V14119.00-V14120.00	3103	280.3	10.0	0.011	1.485	0.306	0.313	0.640	0.468	0.424	0.372	0.756	0.515
V14121.00-V14122.A0	1657	261.0	8.0	0.006	0.605	0.000	0.122	0.002	0.161	0.000	0.128	0.002	0.166
V14122.A0-V14122.B0	1658	106.0	8.0	-0.001	Adverse	0.008	0.178	0.012	0.213	0.010	0.185	0.014	0.218
V14122.B0-V14122.00	5168	324.0	8.0	0.004	0.494	0.008	0.087	0.014	0.114	0.010	0.096	0.016	0.121
V15013.00-V15014.00	5204	114.0	8.0	0.029	1.330	0.000	0.000	0.002	0.033	0.000	0.000	0.002	0.033
V15014.00-V15015.00	4277	135.0	8.0	0.050	1.746	0.000	0.110	0.004	0.158	0.000	0.089	0.004	0.141
V15015.00-V15017.00	4281	260.0	8.0	0.005	0.552	0.061	0.246	0.098	0.312	0.039	0.200	0.076	0.275

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V15015.B0-V15015.C0	5211	211.0	8.0	0.018	1.048	0.009	0.069	0.011	0.075	0.017	0.089	0.019	0.094
V15015.C0-V15015.D0	5210	98.0	8.0	0.041	1.581	0.025	0.099	0.029	0.106	0.017	0.082	0.021	0.092
V15015.D0-V15015.F0	5209	55.0	8.0	0.013	0.890	0.025	0.113	0.031	0.126	0.017	0.095	0.024	0.110
V15015.E0-V15015.F0	4897	77.0	8.0	0.018	1.048	0.000	0.050	0.002	0.074	0.000	0.044	0.002	0.068
V15015.F0-V15015.H0	5214	177.0	8.0	0.023	1.184	0.025	0.107	0.035	0.126	0.017	0.084	0.028	0.106
V15015.G0-V15015.H0	4893	80.0	8.0	0.009	0.741	0.011	0.099	0.013	0.113	0.000	0.041	0.002	0.073
V15015.H0-V15015.I0	4895	141.0	8.0	0.027	1.283	0.036	0.144	0.050	0.171	0.017	0.101	0.032	0.138
V15015.I0-V15015.P0	4282	110.0	8.0	0.005	0.552	0.036	0.195	0.052	0.237	0.017	0.147	0.034	0.200
V15015.J0-V15015.K0	4898	150.0	8.0	0.047	1.693	0.000	0.000	0.002	0.033	0.000	0.000	0.002	0.033
V15015.K0-V15015.L0	5215	209.0	8.0	0.030	1.353	0.000	0.082	0.004	0.106	0.000	0.069	0.004	0.095
V15015.L0-V15015.O0	4896	64.0	8.0	0.005	0.552	0.024	0.140	0.030	0.157	0.018	0.123	0.024	0.142
V15015.M0-V15015.N0	4899	25.0	8.0	0.010	0.781	0.000	0.000	0.002	0.033	0.000	0.015	0.002	0.037
V15015.N0-V15015.O0	5216	240.0	8.0	0.045	1.657	0.000	0.058	0.004	0.089	0.003	0.069	0.007	0.091
V15015.O0-V15015.P0	4283	203.0	8.0	0.012	0.856	0.024	0.166	0.036	0.204	0.021	0.140	0.033	0.184
V15015.P0-V15015.00	4285	442.0	8.0	0.006	0.605	0.060	0.218	0.091	0.273	0.038	0.175	0.069	0.239
V15016.00-V15017.00	4286	117.0	8.0	0.000	0.000	0.011	0.279	0.013	0.348	0.008	0.229	0.010	0.308
V15017.00-V15020.00	4287	210.0	8.0	0.003	0.428	0.072	0.298	0.114	0.378	0.048	0.244	0.089	0.336
V15018.00-V15019.00	5205	114.0	8.0	0.010	0.781	0.000	0.000	0.002	0.038	0.000	0.000	0.002	0.038
V15019.00-V15020.00	4278	135.0	8.0	0.085	2.277	0.000	0.162	0.004	0.222	0.000	0.133	0.004	0.200
V15020.00-V15021.00	4288	90.0	8.0	0.003	0.428	0.073	0.264	0.121	0.339	0.049	0.217	0.096	0.303
V15021.00-V15028.00	4289	23.0	8.0	0.003	0.428	0.073	0.241	0.123	0.306	0.049	0.203	0.098	0.276
V15022.00-V15023.00	5206	350.0	8.0	0.047	1.693	0.034	0.128	0.036	0.133	0.019	0.110	0.021	0.117
V15023.00-V15024.00	4279	156.6	8.0	0.007	0.653	0.034	0.156	0.038	0.165	0.029	0.144	0.033	0.154
V15024.00-V15028.00	4290	188.0	8.0	0.018	1.048	0.034	0.201	0.040	0.241	0.029	0.176	0.035	0.221
V15025.00-V15026.00	5192	360.0	8.0	0.060	1.913	0.001	0.027	0.003	0.040	0.001	0.025	0.003	0.039
V15026.00-V15027.00	5194	225.0	8.0	0.040	1.562	0.004	0.068	0.008	0.094	0.003	0.063	0.008	0.090
V15027.00-V15028.00	5195	345.0	8.0	0.002	0.349	0.006	0.187	0.013	0.241	0.006	0.164	0.012	0.223
V15028.00-V15029.00	5196	245.0	8.0	0.008	0.699	0.116	0.306	0.180	0.386	0.086	0.262	0.150	0.350
V15029.00-V15030.00	5197	298.0	8.0	0.004	0.494	0.119	0.338	0.185	0.429	0.088	0.292	0.154	0.390
V15030.00-V15050.00	2226	330.0	8.0	0.004	0.494	0.124	0.524	0.192	0.652	0.094	0.495	0.162	0.628
V15031.00-V15032.00	5189	120.0	8.0	0.021	1.132	0.001	0.031	0.003	0.047	0.002	0.043	0.004	0.055
V15032.00-V15033.00	5188	300.0	8.0	0.030	1.353	0.003	0.042	0.007	0.060	0.007	0.062	0.011	0.075
V15033.00-V15036.00	5187	334.0	8.0	0.029	1.330	0.006	0.058	0.012	0.082	0.014	0.084	0.020	0.102
V15034.00-V15035.00	5193	291.0	8.0	0.059	1.897	0.004	0.042	0.008	0.059	0.012	0.064	0.016	0.075
V15034.A0-V15034.00	5208	305.0	8.0	0.042	1.601	0.001	0.029	0.003	0.041	0.009	0.055	0.011	0.062
V15035.00-V15036.00	5207	58.0	8.0	0.015	0.957	0.006	0.059	0.012	0.083	0.013	0.084	0.019	0.102
V15036.00-V15037.00	5184	334.0	8.0	0.023	1.184	0.013	0.072	0.028	0.103	0.028	0.102	0.042	0.126
V15037.00-V15040.00	2225	285.0	8.0	0.023	1.184	0.013	0.092	0.030	0.130	0.028	0.123	0.044	0.152
V15038.00-V15039.00	4280	235.0	8.0	0.010	0.781	0.003	0.055	0.005	0.069	0.002	0.055	0.004	0.069
V15039.00-V15040.00	5182	350.0	8.0	0.011	0.819	0.007	0.088	0.011	0.116	0.008	0.104	0.012	0.129
V15040.00-V15043.00	5183	238.0	8.0	0.016	0.988	0.025	0.136	0.048	0.185	0.041	0.171	0.063	0.212
V15041.00-V15042.00	5198	225.0	6.0	0.007	0.303	0.002	0.078	0.004	0.099	0.003	0.082	0.005	0.103
V15042.00-V15043.00	2227	300.0	8.0	0.009	0.741	0.008	0.117	0.012	0.154	0.008	0.138	0.012	0.170
V15043.00-V15049.00	2228	231.0	8.0	0.008	0.699	0.036	0.153	0.064	0.205	0.052	0.184	0.081	0.229
V15044.00-V15045.00	5202	350.0	6.0	0.020	0.513	0.002	0.073	0.004	0.094	0.004	0.087	0.006	0.106
V15045.00-V15047.00	5199	119.0	8.0	0.005	0.552	0.006	0.088	0.011	0.114	0.008	0.095	0.012	0.119
V15046.00-V15047.00	5200	161.0	6.0	0.012	0.397	0.003	0.099	0.005	0.129	0.003	0.102	0.005	0.131
V15047.00-V15048.00	5201	329.0	8.0	0.004	0.494	0.011	0.114	0.020	0.146	0.013	0.118	0.021	0.149
V15048.00-V15049.00	2229	300.0	8.0	0.004	0.494	0.017	0.135	0.027	0.174	0.018	0.146	0.028	0.183
V15049.00-V15050.00	5181	234.0	8.0	0.024	1.210	0.055	0.425	0.096	0.530	0.072	0.429	0.113	0.534
V15050.00-V15076.00	3081	115.2	12.0	-0.001	Adverse	0.182	0.395	0.293	0.499	0.169	0.392	0.280	0.497
V15051.00-V15053.00	4521	110.0	6.0	0.007	0.303	0.001	0.049	0.003	0.076	0.001	0.041	0.003	0.070
V15052.00-V15053.00	4520	123.0	6.0	0.021	0.526	0.000	0.028	0.002	0.057	0.000	0.027	0.003	0.056
V15053.00-V15054.00	4519	96.0	8.0	0.044	1.638	0.002	0.039	0.009	0.073	0.002	0.034	0.008	0.070
V15054.00-V15055.00	4518	27.0	8.0	0.003	0.428	0.003	0.053	0.011	0.101	0.002	0.045	0.010	0.097

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V15055.00-V15057.00	4517	82.0	8.0	0.006	0.605	0.004	0.062	0.014	0.118	0.003	0.051	0.013	0.107
V15056.00-V15057.00	4515	50.0	8.0	0.003	0.428	0.002	0.056	0.004	0.098	0.001	0.046	0.003	0.086
V15057.00-V15058.00	4516	155.0	8.0	0.007	0.653	0.006	0.065	0.020	0.119	0.004	0.079	0.018	0.124
V15058.00-V15059.00	4514	220.0	8.0	0.028	1.307	0.008	0.057	0.025	0.095	0.022	0.090	0.039	0.118
V15059.00-V15060.00	3093	160.0	8.0	0.060	1.913	0.010	0.057	0.029	0.096	0.023	0.087	0.042	0.116
V15060.00-V15065.00	2220	340.0	8.0	0.027	1.283	0.010	0.097	0.031	0.168	0.025	0.149	0.046	0.203
V15061.00-V15062.00	4513	231.0	8.0	0.017	1.018	0.001	0.028	0.003	0.043	0.001	0.023	0.003	0.040
V15062.00-V15064.00	4512	189.0	8.0	0.046	1.675	0.002	0.025	0.006	0.045	0.001	0.021	0.005	0.043
V15063.00-V15064.00	4511	170.0	8.0	0.056	1.848	0.001	0.020	0.003	0.038	0.001	0.018	0.003	0.037
V15064.00-V15065.00	4510	60.0	8.0	0.041	1.581	0.003	0.078	0.011	0.138	0.002	0.112	0.010	0.161
V15065.00-V15066.00	2221	396.0	8.0	0.004	0.494	0.014	0.111	0.045	0.197	0.034	0.172	0.065	0.237
V15066.00-V15069.00	4528	172.0	8.0	0.010	0.781	0.014	0.109	0.047	0.191	0.034	0.159	0.067	0.224
V15067.00-V15068.00	4527	277.0	8.0	0.037	1.502	0.002	0.045	0.004	0.062	0.002	0.040	0.004	0.059
V15068.00-V15069.00	4526	300.0	8.0	0.005	0.552	0.004	0.095	0.008	0.152	0.003	0.116	0.007	0.166
V15069.00-V15072.00	4525	328.0	8.0	0.005	0.552	0.019	0.144	0.058	0.239	0.038	0.194	0.077	0.269
V15070.00-V15071.00	2222	188.0	8.0	0.010	0.781	0.002	0.039	0.004	0.054	0.002	0.038	0.004	0.053
V15071.00-V15072.00	4524	350.0	8.0	0.032	1.397	0.004	0.101	0.008	0.158	0.004	0.126	0.008	0.171
V15072.00-V15073.00	4523	328.0	8.0	0.005	0.552	0.024	0.141	0.070	0.236	0.043	0.185	0.088	0.266
V15073.00-V15074.00	4532	340.0	8.0	0.012	0.856	0.026	0.127	0.073	0.199	0.044	0.155	0.092	0.222
V15074.00-V15075.00	4531	320.0	8.0	0.030	1.353	0.053	0.190	0.102	0.266	0.067	0.214	0.117	0.285
V15075.00-V15076.00	4530	338.0	8.0	0.003	0.428	0.054	0.363	0.106	0.487	0.069	0.379	0.120	0.500
V15076.00-V15077.00	4535	247.2	12.0	0.004	1.456	0.237	0.276	0.402	0.362	0.239	0.277	0.404	0.363
V15077.00-V15078.00	4534	249.2	12.0	0.008	2.060	0.237	0.242	0.404	0.318	0.239	0.243	0.406	0.321
V15078.00-V15079.00	4533	350.8	12.0	0.006	1.784	0.237	0.254	0.406	0.330	0.239	0.253	0.408	0.330
V15079.00-V15080.00	3091	330.0	12.0	0.007	1.927	0.290	0.261	0.461	0.330	0.280	0.255	0.451	0.326
V15080.00-V15081.00	3092	330.0	12.0	0.007	1.927	0.301	0.268	0.474	0.340	0.287	0.258	0.460	0.332
V15081.00-V15105.00	4902	331.1	12.0	0.007	1.927	0.301	0.263	0.476	0.332	0.287	0.257	0.462	0.328
V15082.00-V15084.00	5221	144.0	8.0	0.004	0.494	0.001	0.036	0.003	0.058	0.002	0.050	0.004	0.067
V15083.00-V15084.00	5220	210.0	8.0	0.010	0.781	0.002	0.038	0.004	0.056	0.003	0.046	0.005	0.061
V15084.00-V15085.00	5219	206.0	8.0	0.033	1.419	0.004	0.038	0.010	0.059	0.006	0.047	0.012	0.065
V15085.00-V15087.00	5218	481.0	8.0	0.063	1.960	0.005	0.045	0.014	0.068	0.009	0.055	0.017	0.075
V15086.00-V15087.00	5217	180.0	8.0	0.024	1.210	0.002	0.041	0.004	0.060	0.002	0.045	0.004	0.063
V15087.00-V15088.00	4992	35.0	8.0	0.016	0.988	0.009	0.054	0.021	0.082	0.013	0.065	0.026	0.089
V15088.00-V15089.00	4991	137.0	8.0	0.040	1.562	0.010	0.132	0.024	0.167	0.015	0.144	0.029	0.176
V15089.00-V15092.A0	4911	416.0	8.0	0.007	0.653	0.035	0.155	0.052	0.186	0.040	0.164	0.057	0.195
V15090.00-V15091.00	4910	190.0	8.0	0.043	1.620	0.002	0.029	0.004	0.041	0.004	0.040	0.007	0.049
V15091.00-V15092.A0	4909	59.0	8.0	0.029	1.330	0.004	0.066	0.008	0.085	0.006	0.075	0.010	0.092
V15092.00-V15093.00	4987	94.0	8.0	0.037	1.502	0.041	0.107	0.065	0.135	0.048	0.116	0.073	0.143
V15092.A0-V15092.00	4908	251.0	8.0	0.058	1.881	0.040	0.104	0.063	0.129	0.048	0.113	0.070	0.137
V15093.00-V15094.00	4986	326.0	8.0	0.048	1.711	0.042	0.112	0.068	0.143	0.050	0.124	0.077	0.153
V15094.00-V15104.00	4903	60.0	8.0	0.019	1.077	0.043	0.155	0.072	0.192	0.053	0.169	0.082	0.203
V15095.00-V15096.00	3086	105.0	8.0	0.022	1.158	0.000	0.012	0.002	0.034	0.000	0.011	0.002	0.033
V15096.00-V15097.00	3085	340.0	8.0	0.021	1.132	0.001	0.039	0.005	0.077	0.001	0.057	0.005	0.089
V15097.00-V15098.00	3083	262.0	8.0	0.005	0.552	0.003	0.055	0.010	0.090	0.006	0.074	0.012	0.102
V15098.00-V15102.00	3082	246.0	8.0	0.044	1.638	0.010	0.072	0.018	0.094	0.010	0.081	0.018	0.101
V15099.00-V15100.00	3089	186.0	8.0	0.008	0.699	0.002	0.063	0.004	0.084	0.001	0.098	0.004	0.114
V15100.00-V15101.00	3088	308.0	8.0	0.007	0.653	0.005	0.062	0.009	0.082	0.018	0.113	0.022	0.125
V15101.00-V15102.00	3087	250.0	8.0	0.092	2.369	0.006	0.063	0.013	0.083	0.019	0.084	0.025	0.100
V15102.00-V15103.00	2218	270.0	8.0	0.036	1.482	0.024	0.109	0.040	0.131	0.034	0.122	0.051	0.142
V15103.00-V15104.00	4904	272.0	8.0	0.039	1.542	0.055	0.160	0.073	0.190	0.064	0.173	0.082	0.201
V15104.00-V15105.00	4901	345.0	8.0	0.027	1.283	0.104	0.286	0.153	0.354	0.121	0.294	0.170	0.361
V15105.00-V15106.00	4900	292.6	12.0	0.016	2.913	0.405	0.255	0.632	0.320	0.408	0.255	0.634	0.320
V15106.00-V15109.00	4989	287.0	12.0	0.015	2.820	0.409	0.285	0.638	0.359	0.412	0.285	0.641	0.359
V15107.00-V15108.00	5223	235.0	8.0	0.158	3.104	0.006	0.041	0.008	0.048	0.005	0.039	0.007	0.045
V15108.00-V15109.00	5528	66.8	8.0	0.042	1.601	0.012	0.260	0.016	0.326	0.010	0.258	0.014	0.325

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V15109.00-V15110.00	5226	327.0	12.0	0.007	1.927	0.422	0.351	0.656	0.441	0.422	0.343	0.657	0.435
V15110.00-V15111.00	5224	359.0	12.0	0.008	2.060	0.445	0.315	0.682	0.393	0.422	0.306	0.659	0.386
V15111.00-V15112.00	4331	400.0	12.0	0.023	3.492	0.445	0.259	0.684	0.324	0.444	0.260	0.683	0.324
V15113.00-V15114.00	4906	305.0	8.0	0.010	0.781	0.001	0.070	0.006	0.094	0.002	0.073	0.006	0.096
V15113.A0-V15113.00	7559	2.0	8.0	0.001	0.247	0.000	0.016	0.002	0.043	0.000	0.018	0.002	0.044
V15114.00-V15115.00	4907	286.0	8.0	0.010	0.781	0.011	0.084	0.018	0.104	0.012	0.086	0.018	0.105
V15115.00-V15116.00	5527	141.8	8.0	0.042	1.601	0.011	0.070	0.020	0.093	0.012	0.071	0.020	0.094
V15116.00-V15117.00	4990	399.0	8.0	0.012	0.856	0.011	0.083	0.022	0.114	0.012	0.084	0.022	0.115
V15117.00-V15118.00	5227	360.0	8.0	0.010	0.781	0.011	0.085	0.024	0.122	0.012	0.092	0.024	0.128
V15118.00-V15119.00	5229	330.0	8.0	0.010	0.781	0.011	0.103	0.026	0.143	0.016	0.113	0.030	0.150
V15119.00-V15120.00	4334	304.0	8.0	0.010	0.781	0.019	0.108	0.036	0.146	0.022	0.116	0.039	0.151
V15120.00-V15121.00	4332	300.0	8.0	0.018	1.048	0.020	0.113	0.038	0.153	0.024	0.122	0.043	0.160
V15112.00-V16050.00	4330	461.0	12.0	0.013	2.625	0.445	0.277	0.687	0.347	0.452	0.279	0.693	0.349
V15121.00-V16048.00	4329	397.0	8.0	0.007	0.653	0.024	0.131	0.045	0.177	0.027	0.138	0.048	0.182
V16001.00-V16002.00	4342	64.0	6.0	0.035	0.678	0.001	0.032	0.003	0.053	0.003	0.047	0.005	0.063
V16002.00-V16003.00	4341	70.0	6.0	0.034	0.669	0.002	0.039	0.006	0.068	0.004	0.056	0.009	0.078
V16003.00-V16004.00	4340	56.0	6.0	0.026	0.585	0.003	0.047	0.009	0.085	0.005	0.065	0.012	0.096
V16004.00-V16005.00	4338	101.0	6.0	0.025	0.573	0.003	0.058	0.011	0.102	0.006	0.082	0.014	0.117
V16005.00-V16006.00	4347	378.0	8.0	0.023	1.184	0.005	0.077	0.016	0.125	0.011	0.105	0.021	0.144
V16006.00-V16007.00	4349	268.0	8.0	0.006	0.605	0.008	0.078	0.020	0.123	0.014	0.103	0.026	0.139
V16007.00-V16015.00	4345	280.0	8.0	0.081	2.223	0.011	0.062	0.025	0.093	0.019	0.082	0.033	0.107
V16008.00-V16009.00	4344	289.2	8.0	-0.105	Adverse	0.002	0.515	0.005	0.519	0.006	0.521	0.008	0.524
V16009.00-V16011.00	4350	128.4	8.0	0.096	2.420	0.004	0.030	0.008	0.044	0.008	0.044	0.012	0.054
V16010.00-V16011.00	4351	84.0	8.0	-0.042	Adverse	0.002	0.516	0.003	0.525	0.004	0.524	0.004	0.530
V16011.00-V16012.00	4348	252.1	8.0	0.126	2.772	0.005	0.036	0.014	0.057	0.012	0.053	0.020	0.068
V16012.00-V16014.00	4346	161.9	8.0	0.070	2.066	0.006	0.042	0.016	0.068	0.014	0.063	0.024	0.082
V16013.00-V16014.00	4354	288.0	8.0	0.128	2.794	0.002	0.032	0.004	0.050	0.004	0.048	0.006	0.062
V16014.00-V16015.00	868	61.1	8.0	0.031	1.375	0.008	0.059	0.023	0.092	0.019	0.083	0.033	0.109
V16015.00-V16016.00	610	310.0	8.0	0.065	1.991	0.021	0.075	0.052	0.114	0.041	0.100	0.072	0.132
V16016.00-V16019.00	4355	202.0	8.0	0.065	1.991	0.023	0.079	0.056	0.121	0.043	0.104	0.076	0.138
V16017.00-V16018.00	210	105.0	8.0	0.012	0.856	0.002	0.034	0.004	0.048	0.001	0.026	0.003	0.044
V16018.00-V16019.00	4352	162.0	8.0	0.100	2.470	0.003	0.054	0.007	0.082	0.002	0.063	0.006	0.089
V16019.00-V16020.00	866	202.0	8.0	0.011	0.819	0.027	0.086	0.066	0.128	0.046	0.107	0.086	0.143
V16020.00-V16021.00	861	310.0	8.0	0.070	2.066	0.034	0.107	0.076	0.157	0.050	0.127	0.091	0.172
V16021.00-V16022.00	863	303.0	8.0	0.019	1.077	0.035	0.125	0.079	0.186	0.050	0.150	0.093	0.204
V16022.00-V16023.00	4364	191.0	8.0	0.018	1.048	0.035	0.128	0.081	0.192	0.054	0.156	0.099	0.212
V16023.00-V16035.00	4370	55.0	8.0	0.010	0.781	0.037	0.203	0.084	0.282	0.054	0.234	0.102	0.306
V16024.00-V16025.00	216	288.0	8.0	0.017	1.018	0.028	0.142	0.041	0.173	0.035	0.156	0.047	0.185
V16024.A0-V16024.B0	211	65.0	8.0	0.010	0.781	0.000	0.020	0.002	0.045	0.001	0.032	0.003	0.051
V16024.B0-V16024.C0	213	85.0	8.0	0.014	0.924	0.001	0.032	0.005	0.061	0.003	0.042	0.007	0.067
V16024.C0-V16024.D0	214	200.0	8.0	0.014	0.924	0.002	0.049	0.009	0.083	0.004	0.058	0.010	0.089
V16024.D0-V16024.E0	215	317.0	8.0	0.010	0.781	0.005	0.057	0.013	0.090	0.007	0.066	0.015	0.096
V16024.E0-V16024.00	4356	216.0	8.0	0.027	1.283	0.007	0.084	0.017	0.109	0.010	0.094	0.020	0.117
V16025.00-V16026.00	4358	360.0	8.0	0.011	0.819	0.032	0.136	0.046	0.162	0.038	0.148	0.053	0.173
V16026.00-V16027.00	4359	304.0	8.0	0.114	2.637	0.056	0.140	0.073	0.159	0.067	0.152	0.083	0.170
V16027.00-V16034.A0	4360	136.0	8.0	0.013	0.890	0.062	0.196	0.081	0.220	0.072	0.210	0.091	0.233
V16028.00-V16029.00	4367	133.0	6.0	0.197	1.610	0.002	0.081	0.003	0.124	0.003	0.099	0.005	0.136
V16029.00-V16031.00	208	150.0	6.0	0.001	0.115	0.002	0.094	0.007	0.147	0.004	0.112	0.008	0.159
V16030.00-V16031.00	209	189.0	8.0	0.061	1.929	0.001	0.027	0.003	0.045	0.001	0.030	0.003	0.047
V16031.00-V16032.00	869	117.0	8.0	0.048	1.711	0.004	0.047	0.012	0.079	0.005	0.054	0.014	0.083
V16032.00-V16033.00	4366	233.0	8.0	0.022	1.158	0.006	0.050	0.016	0.082	0.007	0.057	0.018	0.086
V16033.00-V16034.00	4361	250.0	8.0	0.085	2.277	0.008	0.104	0.020	0.133	0.010	0.113	0.022	0.140
V16034.00-V16035.00	4365	273.0	8.0	0.026	1.259	0.075	0.221	0.110	0.284	0.087	0.243	0.122	0.303
V16034.A0-V16034.00	4362	136.0	8.0	0.011	0.819	0.063	0.189	0.084	0.217	0.073	0.203	0.093	0.230
V16035.00-V16039.00	4369	324.0	8.0	0.017	1.018	0.112	0.224	0.196	0.298	0.142	0.252	0.226	0.320

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V16036.00-V16037.00	4377	128.0	8.0	0.011	0.819	0.004	0.062	0.007	0.075	0.005	0.069	0.007	0.080
V16037.00-V16038.00	4376	350.0	8.0	0.010	0.781	0.008	0.076	0.012	0.096	0.011	0.094	0.015	0.110
V16038.00-V16039.00	4373	350.0	8.0	0.007	0.653	0.009	0.128	0.015	0.167	0.015	0.151	0.021	0.185
V16039.00-V16050.00	4372	56.0	15.0	0.009	3.961	0.121	0.220	0.213	0.304	0.158	0.269	0.251	0.345
V16041.00-V16042.00	4336	219.0	15.0	0.019	5.755	0.783	0.249	1.636	0.364	1.435	0.339	2.290	0.437
V16041.A0-V16041.00	4337	61.3	15.0	0.018	5.601	0.783	0.224	1.634	0.326	1.435	0.304	2.288	0.390
V16042.00-V16043.00	859	425.0	15.0	0.022	6.192	0.785	0.258	1.640	0.379	1.437	0.354	2.294	0.457
V16043.00-V16044.00	862	252.0	15.0	0.013	4.760	0.786	0.280	1.643	0.413	1.442	0.386	2.301	0.501
V16044.00-V16045.00	864	356.0	15.0	0.014	4.940	0.786	0.271	1.645	0.399	1.452	0.373	2.313	0.483
V16045.00-V16046.00	865	222.0	15.0	0.017	5.443	0.786	0.260	1.647	0.382	1.452	0.357	2.315	0.462
V16046.00-V16047.00	857	550.0	15.0	0.019	5.755	0.786	0.250	1.653	0.366	1.455	0.343	2.324	0.442
V16046.A0-V16046.B0	1005	14.4	8.0	0.000	0.000	0.000	0.000	0.002	0.051	0.003	0.056	0.005	0.073
V16046.B0-V16046.00	858	390.0	8.0	0.040	1.562	0.000	0.246	0.004	0.381	0.003	0.354	0.007	0.462
V16047.00-V16048.00	4368	342.0	15.0	0.024	6.468	0.786	0.251	1.654	0.368	1.455	0.343	2.326	0.442
V16048.00-V16049.00	4374	27.0	15.0	0.003	2.287	0.812	0.263	1.702	0.386	1.484	0.359	2.377	0.465
V16049.00-V16050.00	4375	66.0	15.0	0.009	3.961	0.812	0.304	1.704	0.436	1.484	0.394	2.379	0.510
V17071.00-V16041.A0	4335	34.6	15.0	0.010	4.175	0.410	0.167	0.684	0.229	0.685	0.220	0.959	0.272
V18036.00-V16041.A0	7526	120.0	12.0	0.016	2.913	0.373	0.242	0.948	0.389	0.750	0.345	1.327	0.467
V17001.00-V17002.00	3400	183.0	6.0	0.009	0.344	0.001	0.084	0.003	0.173	0.005	0.291	0.007	0.334
V17002.00-V17004.00	4739	373.0	8.0	0.006	0.605	0.012	0.098	0.053	0.200	0.160	0.350	0.201	0.396
V17002.A0-V17002.B0	4751	213.0	8.0	0.011	0.819	0.001	0.033	0.003	0.048	0.071	0.199	0.073	0.202
V17002.B0-V17002.C0	3408	114.0	8.0	0.042	1.601	0.003	0.031	0.007	0.048	0.075	0.148	0.079	0.151
V17002.C0-V17002.D0	4749	150.0	8.0	0.064	1.976	0.003	0.031	0.009	0.054	0.076	0.140	0.082	0.147
V17002.D0-V17002.F0	4746	300.0	8.0	0.046	1.675	0.004	0.039	0.012	0.078	0.077	0.157	0.086	0.170
V17002.E0-V17002.F0	3954	184.0	8.0	0.012	0.856	0.002	0.039	0.016	0.095	0.012	0.124	0.026	0.153
V17002.EAA-V17002.EA	956	90.0	8.0	0.010	0.781	0.001	0.023	0.003	0.043	0.007	0.065	0.009	0.074
V17002.EA-V17002.EB	3399	96.2	8.0	0.040	1.562	0.001	0.020	0.005	0.045	0.007	0.051	0.012	0.064
V17002.EB-V17002.EE	3398	192.9	8.0	0.037	1.502	0.001	0.024	0.007	0.061	0.009	0.060	0.015	0.081
V17002.EC-V17002.ED	8277	10.2	8.0	0.003	0.428	0.000	0.008	0.002	0.035	0.000	0.016	0.002	0.038
V17002.ED-V17002.EE	8332	356.7	8.0	0.038	1.522	0.001	0.022	0.005	0.056	0.003	0.048	0.007	0.070
V17002.EE-V17002.E0	8366	13.7	8.0	0.004	0.494	0.002	0.030	0.014	0.083	0.012	0.073	0.024	0.105
V17002.F0-V17002.G0	4748	370.0	8.0	0.043	1.620	0.006	0.055	0.031	0.118	0.098	0.205	0.123	0.230
V17002.G0-V17002.M0	651	300.0	8.0	0.010	0.781	0.007	0.074	0.034	0.154	0.101	0.269	0.128	0.302
V17002.H0-V17002.I0	4752	114.0	8.0	0.044	1.638	0.001	0.044	0.003	0.067	0.036	0.169	0.038	0.176
V17002.I0-V17002.K0	3953	212.0	8.0	0.006	0.605	0.002	0.046	0.007	0.073	0.037	0.165	0.041	0.173
V17002.K0-V17002.L0	654	246.0	8.0	0.095	2.407	0.002	0.027	0.009	0.047	0.042	0.093	0.048	0.100
V17002.L0-V17002.M0	652	300.0	8.0	0.098	2.445	0.004	0.055	0.012	0.109	0.045	0.195	0.053	0.217
V17002.M0-V17002.00	650	254.0	8.0	0.010	0.781	0.011	0.089	0.048	0.188	0.149	0.334	0.186	0.378
V17004.00-V17010.00	4740	271.0	10.0	0.012	1.551	0.019	0.078	0.063	0.137	0.161	0.216	0.205	0.244
V17005.00-V17006.00	1297	347.0	8.0	0.004	0.494	0.000	0.021	0.002	0.061	0.003	0.075	0.005	0.092
V17006.00-V17007.00	1298	155.0	8.0	0.004	0.494	0.002	0.041	0.006	0.081	0.009	0.092	0.013	0.114
V17007.00-V17008.00	4741	112.0	8.0	0.004	0.494	0.002	0.105	0.008	0.145	0.009	0.141	0.015	0.170
V17008.00-V17009.00	4742	278.0	8.0	0.004	0.494	0.016	0.119	0.024	0.145	0.021	0.135	0.029	0.159
V17009.00-V17010.00	4743	60.0	8.0	0.021	1.132	0.016	0.083	0.026	0.119	0.021	0.145	0.031	0.168
V17010.00-V17011.00	1304	240.9	10.0	0.043	2.936	0.036	0.090	0.091	0.144	0.184	0.200	0.240	0.230
V17011.00-V17012.00	5048	310.0	10.0	0.015	1.734	0.037	0.123	0.103	0.200	0.200	0.277	0.266	0.322
V17011.A0-V17011.B0	7592	217.4	8.0	0.011	0.819	0.000	0.018	0.002	0.045	0.001	0.033	0.003	0.052
V17011.B0-V17011.C0	7593	121.8	8.0	0.017	1.018	0.001	0.021	0.005	0.054	0.002	0.039	0.006	0.063
V17011.C0-V17011.D0	7595	175.4	8.0	0.016	0.988	0.001	0.023	0.007	0.064	0.003	0.053	0.010	0.079
V17011.D0-V17011.00	7594	311.9	8.0	0.016	0.988	0.001	0.077	0.009	0.138	0.008	0.176	0.016	0.211
V17012.00-V17013.00	5049	300.0	10.0	0.004	0.896	0.040	0.159	0.108	0.259	0.203	0.354	0.271	0.413
V17013.00-V17014.I0	5050	30.0	10.0	0.001	0.448	0.041	0.170	0.111	0.281	0.204	0.367	0.274	0.436
V17014.00-V17015.00	649	380.0	10.0	0.004	0.896	0.056	0.168	0.161	0.282	0.247	0.351	0.352	0.423
V17014.A0-V17014.C0	4744	297.0	8.0	0.020	1.104	0.001	0.029	0.003	0.049	0.003	0.047	0.005	0.061
V17014.B0-V17014.C0	5530	4.0	8.0	0.000	0.000	0.000	0.028	0.002	0.057	0.004	0.063	0.006	0.079

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V17014.C0-V17014.F0	4745	203.0	8.0	0.032	1.397	0.002	0.044	0.009	0.084	0.008	0.075	0.014	0.103
V17014.D0-V17014.F0	5531	4.0	8.0	0.000	0.000	0.001	0.053	0.002	0.106	0.001	0.092	0.002	0.130
V17014.E0-V17014.F0	5532	3.3	8.0	0.000	0.000	0.001	0.053	0.002	0.107	0.001	0.093	0.002	0.131
V17014.F0-V17014.G0	1305	288.0	8.0	0.029	1.330	0.009	0.069	0.035	0.128	0.026	0.114	0.053	0.156
V17014.FAA-V17014.FA	7506	18.8	8.0	0.003	0.428	0.000	0.011	0.002	0.044	0.010	0.075	0.012	0.085
V17014.FA-V17014.FB	7505	146.0	8.0	0.011	0.819	0.001	0.026	0.005	0.063	0.011	0.082	0.015	0.099
V17014.FB-V17014.FC	7501	254.9	8.0	0.009	0.741	0.001	0.038	0.007	0.079	0.011	0.088	0.017	0.110
V17014.FC-V17014.FE	7500	230.1	8.0	0.008	0.699	0.003	0.055	0.011	0.095	0.012	0.096	0.020	0.122
V17014.FD-V17014.FE	7499	227.6	8.0	0.035	1.461	0.002	0.044	0.004	0.070	0.004	0.071	0.006	0.088
V17014.FE-V17014.FG	7598	116.0	8.0	0.030	1.353	0.006	0.048	0.018	0.081	0.018	0.080	0.030	0.103
V17014.FG-V17014.F0	7597	113.6	8.0	0.086	2.290	0.006	0.046	0.020	0.087	0.018	0.077	0.032	0.106
V17014.G0-V17014.H0	5051	295.0	8.0	0.014	0.924	0.012	0.082	0.041	0.147	0.033	0.132	0.062	0.180
V17014.H0-V17014.I0	5052	111.0	8.0	0.013	0.890	0.012	0.145	0.043	0.250	0.034	0.285	0.064	0.356
V17014.I0-V17014.00	5053	267.0	10.0	0.004	0.896	0.055	0.199	0.158	0.337	0.243	0.420	0.346	0.508
V17015.00-V17016.00	648	270.0	10.0	0.035	2.649	0.058	0.102	0.165	0.169	0.256	0.209	0.363	0.249
V17016.00-V17018.00	1294	127.0	10.0	0.038	2.760	0.060	0.103	0.170	0.169	0.259	0.208	0.368	0.248
V17017.00-V17018.00	1295	300.0	8.0	0.032	1.397	0.002	0.080	0.004	0.127	0.007	0.157	0.009	0.185
V17018.00-V17019.00	1287	475.0	10.0	0.039	2.796	0.063	0.109	0.176	0.178	0.268	0.219	0.382	0.261
V17019.00-V17036.00	3956	475.0	10.0	0.030	2.453	0.068	0.164	0.183	0.275	0.277	0.326	0.392	0.403
V17020.00-V17021.00	1299	285.0	8.0	0.043	1.620	0.001	0.033	0.007	0.070	0.003	0.047	0.009	0.077
V17020.A0-V17020.00	5533	3.2	8.0	0.000	0.000	0.001	0.016	0.002	0.051	0.001	0.037	0.003	0.060
V17020.B0-V17020.00	5534	17.4	8.0	0.001	0.247	0.001	0.037	0.003	0.062	0.002	0.047	0.004	0.068
V17021.00-V17022.00	1300	222.0	8.0	0.006	0.605	0.003	0.054	0.011	0.101	0.005	0.070	0.013	0.110
V17022.00-V17025.00	1301	102.0	8.0	0.006	0.605	0.004	0.069	0.015	0.122	0.007	0.089	0.017	0.134
V17023.00-V17024.00	4750	190.0	8.0	0.020	1.104	0.001	0.026	0.003	0.042	0.003	0.038	0.005	0.049
V17024.00-V17025.00	1302	349.0	8.0	0.054	1.815	0.002	0.052	0.007	0.090	0.005	0.069	0.009	0.100
V17025.00-V17026.00	646	304.0	8.0	0.006	0.605	0.007	0.081	0.023	0.146	0.012	0.128	0.029	0.177
V17026.00-V17027.A0	7496	49.9	8.0	0.014	0.924	0.018	0.084	0.063	0.153	0.062	0.152	0.108	0.199
V17026.A0-V17026.B0	7510	213.3	8.0	0.010	0.781	0.001	0.031	0.003	0.050	0.000	0.020	0.002	0.045
V17026.B0-V17026.E0	7509	225.6	8.0	0.018	1.048	0.002	0.040	0.006	0.069	0.001	0.057	0.005	0.082
V17026.C0-V17026.D0	7503	102.0	8.0	0.022	1.158	0.002	0.030	0.008	0.059	0.023	0.098	0.029	0.110
V17026.CA-V17026.CB	7508	144.3	8.0	0.022	1.158	0.000	0.019	0.002	0.042	0.021	0.096	0.023	0.102
V17026.CB-V17026.C0	7507	135.3	8.0	0.020	1.104	0.001	0.027	0.005	0.054	0.022	0.105	0.027	0.114
V17026.D0-V17026.E0	7504	200.3	8.0	0.042	1.601	0.003	0.039	0.011	0.071	0.024	0.088	0.032	0.106
V17026.E0-V17026.00	7511	284.0	8.0	0.035	1.461	0.006	0.067	0.021	0.119	0.025	0.124	0.040	0.158
V17026.F0-V17026.H0	6863	21.9	8.0	0.007	0.653	0.000	0.009	0.002	0.040	0.008	0.070	0.010	0.079
V17026.G0-V17026.H0	6862	28.0	8.0	0.007	0.653	0.000	0.015	0.002	0.042	0.012	0.078	0.014	0.086
V17026.H0-V17026.J0	7492	266.8	8.0	0.029	1.330	0.001	0.025	0.007	0.060	0.020	0.091	0.026	0.105
V17026.I0-V17026.J0	7494	150.0	8.0	0.031	1.375	0.001	0.027	0.003	0.052	0.003	0.065	0.005	0.078
V17026.J0-V17026.K0	7493	81.5	8.0	0.024	1.210	0.002	0.033	0.013	0.069	0.023	0.091	0.034	0.108
V17026.K0-V17026.00	7495	282.4	8.0	0.041	1.581	0.004	0.061	0.016	0.113	0.024	0.121	0.036	0.154
V17027.00-V17028.00	1306	322.0	8.0	0.021	1.132	0.018	0.087	0.067	0.165	0.070	0.169	0.120	0.219
V17027.A0-V17027.00	7497	115.0	8.0	0.029	1.330	0.018	0.092	0.065	0.171	0.062	0.171	0.110	0.224
V17028.00-V17030.00	5054	166.0	8.0	0.048	1.711	0.018	0.073	0.069	0.140	0.075	0.144	0.126	0.186
V17029.00-V17030.00	1307	205.0	8.0	0.054	1.815	0.000	0.037	0.002	0.084	0.002	0.087	0.004	0.113
V17030.00-V17031.00	5055	160.0	8.0	0.048	1.711	0.019	0.075	0.074	0.145	0.078	0.148	0.134	0.193
V17031.00-V17032.00	3409	303.0	8.0	0.044	1.638	0.019	0.097	0.077	0.190	0.080	0.201	0.138	0.259
V17032.00-V17034.00	643	248.0	8.0	0.014	0.924	0.020	0.101	0.080	0.197	0.091	0.210	0.150	0.270
V17033.00-V17034.00	645	135.0	8.0	0.031	1.375	0.002	0.056	0.004	0.100	0.002	0.097	0.004	0.128
V17034.00-V17035.00	644	236.0	8.0	0.038	1.522	0.022	0.091	0.086	0.164	0.092	0.166	0.156	0.216
V17035.00-V17036.00	3957	300.0	8.0	0.044	1.638	0.033	0.183	0.099	0.311	0.097	0.347	0.163	0.440
V17036.00-V17037.00	819	336.4	10.0	0.005	1.001	0.101	0.214	0.284	0.365	0.374	0.424	0.558	0.534
V17037.00-V17049.00	641	332.0	10.0	0.005	1.001	0.101	0.264	0.286	0.413	0.374	0.456	0.560	0.578
V17038.00-V17039.00	1296	363.0	8.0	0.035	1.461	0.018	0.105	0.034	0.138	0.022	0.114	0.039	0.145
V17038.A0-V17038.B0	1308	402.0	8.0	0.045	1.657	0.002	0.036	0.006	0.056	0.006	0.057	0.010	0.071

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V17038.AA-V17038.A0	5047	11.0	8.0	0.000	0.000	0.000	0.012	0.002	0.062	0.004	0.079	0.006	0.095
V17038.B0-V17038.00	3955	167.0	8.0	0.024	1.210	0.005	0.062	0.011	0.087	0.013	0.079	0.019	0.099
V17038.C0-V17038.D0	5046	5.0	6.0	0.001	0.115	0.009	0.126	0.011	0.141	0.004	0.084	0.006	0.105
V17038.D0-V17038.E0	5045	83.0	6.0	0.009	0.344	0.009	0.101	0.013	0.125	0.004	0.071	0.008	0.103
V17038.E0-V17038.F0	5044	300.0	6.0	0.010	0.363	0.010	0.131	0.016	0.168	0.005	0.088	0.011	0.133
V17038.F0-V17038.00	5233	137.0	8.0	0.005	0.552	0.010	0.094	0.019	0.125	0.005	0.078	0.014	0.110
V17039.00-V17040.00	5231	350.0	8.0	0.020	1.104	0.027	0.108	0.046	0.139	0.031	0.115	0.050	0.144
V17040.00-V17041.00	5230	77.0	8.0	0.040	1.562	0.030	0.109	0.051	0.140	0.034	0.112	0.055	0.142
V17041.00-V17042.00	1290	5.0	8.0	0.002	0.349	0.030	0.125	0.053	0.164	0.035	0.143	0.058	0.177
V17042.00-V17043.00	1291	324.0	8.0	0.018	1.048	0.030	0.148	0.055	0.193	0.050	0.172	0.075	0.212
V17043.00-V17048.00	3958	319.0	8.0	0.011	0.819	0.048	0.163	0.074	0.203	0.050	0.168	0.077	0.207
V17044.00-V17045.00	1288	415.0	8.0	0.032	1.397	0.012	0.077	0.014	0.084	0.006	0.061	0.008	0.070
V17045.00-V17046.00	4380	350.0	8.0	0.022	1.158	0.019	0.107	0.024	0.119	0.013	0.086	0.017	0.100
V17046.00-V17047.00	4379	316.0	8.0	0.010	0.781	0.021	0.113	0.028	0.128	0.014	0.093	0.020	0.110
V17047.00-V17048.00	3968	88.0	8.0	0.019	1.077	0.024	0.124	0.033	0.146	0.018	0.114	0.026	0.137
V17048.00-V17049.00	655	163.0	8.0	0.054	1.815	0.085	0.270	0.122	0.375	0.078	0.376	0.115	0.473
V17049.00-V17054.00	657	332.0	10.0	0.005	1.001	0.221	0.325	0.445	0.464	0.479	0.478	0.704	0.604
V17050.00-V17051.00	7512	325.0	8.0	0.030	1.353	0.000	0.052	0.002	0.070	0.000	0.045	0.002	0.064
V17051.00-V17052.00	1292	328.0	8.0	0.030	1.353	0.031	0.108	0.035	0.116	0.023	0.096	0.027	0.104
V17052.00-V17053.00	3959	328.0	8.0	0.031	1.375	0.037	0.134	0.043	0.143	0.029	0.108	0.035	0.120
V17053.00-V17054.00	658	328.0	8.0	0.022	1.158	0.059	0.287	0.067	0.375	0.033	0.351	0.041	0.432
V17054.00-V17055.00	659	333.0	10.0	0.007	1.185	0.280	0.334	0.515	0.466	0.513	0.464	0.748	0.583
V17055.00-V17056.00	660	300.0	10.0	0.007	1.185	0.281	0.358	0.518	0.499	0.514	0.496	0.751	0.622
V17056.00-V17057.00	661	215.0	10.0	0.007	1.185	0.283	0.328	0.522	0.454	0.522	0.454	0.761	0.564
V17057.00-V17058.00	3962	392.0	10.0	0.016	1.791	0.290	0.286	0.531	0.393	0.539	0.397	0.780	0.489
V17058.00-V17068.00	3964	276.0	10.0	0.005	1.001	0.290	0.338	0.533	0.461	0.544	0.469	0.787	0.580
V17059.00-V17060.00	1293	91.0	8.0	0.006	0.605	0.025	0.139	0.029	0.150	0.018	0.119	0.022	0.132
V17059.A0-V17059.00	5529	32.0	8.0	0.001	0.247	0.019	0.171	0.021	0.181	0.018	0.147	0.020	0.157
V17060.00-V17062.00	3960	281.0	8.0	0.031	1.375	0.025	0.104	0.031	0.119	0.033	0.126	0.039	0.139
V17061.00-V17062.00	3961	192.0	8.0	0.019	1.077	0.007	0.086	0.011	0.103	0.020	0.121	0.024	0.133
V17061.A0-V17061.00	821	5.1	8.0	0.000	0.000	0.007	0.077	0.009	0.089	0.004	0.090	0.006	0.100
V17062.00-V17063.00	662	277.0	8.0	0.021	1.132	0.032	0.139	0.044	0.168	0.052	0.217	0.065	0.237
V17063.00-V17064.00	1284	285.1	8.0	0.010	0.781	0.032	0.137	0.046	0.164	0.078	0.212	0.093	0.230
V17064.00-V17065.00	1285	83.0	8.0	0.040	1.562	0.052	0.357	0.068	0.390	0.078	0.385	0.095	0.415
V17065.00-V17066.00	1286	183.2	8.0	0.000	0.000	0.091	0.397	0.109	0.432	0.102	0.418	0.120	0.452
V17066.00-V17067.00	3963	270.0	8.0	0.021	1.132	0.091	0.205	0.111	0.227	0.102	0.224	0.122	0.245
V17067.00-V17068.00	3965	350.0	8.0	0.014	0.924	0.099	0.345	0.121	0.439	0.125	0.448	0.148	0.536
V17068.00-V17069.00	3966	276.0	10.0	0.008	1.267	0.389	0.377	0.657	0.506	0.670	0.511	0.937	0.631
V17069.00-V17070.00	3967	300.0	10.0	0.009	1.343	0.402	0.454	0.672	0.605	0.670	0.606	0.940	0.747
V17070.00-V17071.00	4754	317.0	10.0	0.009	1.343	0.410	0.373	0.682	0.491	0.685	0.492	0.957	0.598
V18001.00-V18002.00	5291	10.0	8.0	0.006	0.605	0.000	0.009	0.002	0.041	0.001	0.026	0.003	0.046
V18002.00-V18003.00	4757	152.0	8.0	0.008	0.699	0.000	0.017	0.004	0.061	0.002	0.037	0.006	0.069
V18003.00-V18004.00	4758	54.0	8.0	0.007	0.653	0.000	0.019	0.007	0.063	0.002	0.035	0.008	0.070
V18004.00-V18005.00	4759	156.0	8.0	0.027	1.283	0.001	0.026	0.009	0.070	0.002	0.038	0.010	0.075
V18005.00-V18009.00	380	55.0	8.0	0.009	0.741	0.001	0.038	0.012	0.098	0.004	0.082	0.014	0.122
V18006.00-V18007.00	5289	183.0	8.0	0.050	1.746	0.001	0.022	0.006	0.041	0.019	0.074	0.024	0.081
V18006.A0-V18006.00	5290	90.0	8.0	0.008	0.699	0.001	0.033	0.003	0.050	0.016	0.102	0.018	0.108
V18007.00-V18008.00	5057	111.0	8.0	0.088	2.317	0.002	0.019	0.008	0.039	0.021	0.060	0.027	0.068
V18008.00-V18009.00	5234	72.0	8.0	0.090	2.343	0.002	0.032	0.010	0.077	0.021	0.085	0.030	0.109
V18009.00-V18010.00	381	101.0	8.0	0.011	0.819	0.004	0.057	0.024	0.146	0.025	0.145	0.046	0.196
V18010.00-V18011.00	5056	92.0	8.0	0.011	0.819	0.004	0.047	0.026	0.120	0.026	0.119	0.049	0.161
V18011.00-V18012.00	4756	148.0	8.0	0.133	2.848	0.004	0.042	0.029	0.105	0.031	0.106	0.055	0.143
V18012.00-V18013.00	391	33.0	8.0	0.004	0.494	0.004	0.056	0.031	0.143	0.031	0.142	0.057	0.193
V18013.00-V18014.00	397	87.3	8.0	0.010	0.781	0.005	0.062	0.033	0.161	0.032	0.157	0.061	0.214
V18014.00-V18015.00	398	102.0	8.0	0.009	0.741	0.005	0.056	0.036	0.146	0.032	0.139	0.063	0.192

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V18015.00-V18016.00	399	138.0	8.0	0.032	1.397	0.005	0.043	0.038	0.115	0.032	0.111	0.065	0.152
V18016.00-V18017.00	400	163.0	8.0	0.032	1.397	0.005	0.045	0.040	0.120	0.040	0.118	0.075	0.161
V18017.00-V18019.00	392	97.0	8.0	0.029	1.330	0.005	0.056	0.045	0.139	0.043	0.134	0.082	0.184
V18017.A0-V18017.00	7660	70.0	8.0	0.032	1.397	0.000	0.022	0.002	0.074	0.003	0.074	0.005	0.101
V18018.00-V18019.00	377	155.0	8.0	0.008	0.699	0.003	0.056	0.005	0.108	0.001	0.086	0.003	0.125
V18019.00-V18020.00	394	343.0	8.0	0.019	1.077	0.008	0.062	0.051	0.150	0.044	0.138	0.087	0.193
V18020.00-V18021.00	382	332.0	8.0	0.025	1.235	0.008	0.093	0.054	0.158	0.044	0.142	0.089	0.188
V18021.00-V18022.00	390	330.0	8.0	0.040	1.562	0.055	0.149	0.102	0.204	0.081	0.181	0.129	0.228
V18022.00-V18023.F0	1687	179.9	8.0	0.012	0.856	0.055	0.198	0.104	0.284	0.081	0.245	0.131	0.320
V18023.00-V18024.F0	1689	142.4	8.0	0.013	0.890	0.083	0.233	0.147	0.317	0.107	0.267	0.171	0.344
V18023.A0-V18023.B0	7603	202.0	8.0	0.005	0.552	0.001	0.035	0.003	0.057	0.000	0.030	0.002	0.055
V18023.B0-V18023.D0	7604	140.2	8.0	0.013	0.890	0.002	0.051	0.006	0.084	0.002	0.060	0.007	0.090
V18023.C0-V18023.D0	1681	61.0	8.0	0.053	1.798	0.001	0.041	0.003	0.066	0.003	0.052	0.005	0.074
V18023.D0-V18023.E0	7601	350.0	8.0	0.010	0.781	0.005	0.057	0.013	0.090	0.007	0.067	0.015	0.097
V18023.E0-V18023.F0	7602	183.4	8.0	0.045	1.657	0.008	0.137	0.018	0.203	0.009	0.168	0.019	0.227
V18023.F0-V18023.00	1688	148.6	8.0	0.006	0.605	0.062	0.216	0.124	0.304	0.091	0.259	0.152	0.337
V18024.00-V18025.00	386	332.0	8.0	0.009	0.741	0.098	0.273	0.177	0.364	0.122	0.300	0.200	0.386
V18024.A0-V18024.B0	1682	128.0	8.0	0.015	0.957	0.001	0.030	0.003	0.049	0.003	0.048	0.005	0.062
V18024.B0-V18024.D0	1683	168.6	8.0	0.016	0.988	0.002	0.036	0.006	0.063	0.006	0.054	0.010	0.075
V18024.C0-V18024.D0	1684	82.7	8.0	0.010	0.781	0.001	0.035	0.003	0.059	0.001	0.037	0.003	0.061
V18024.D0-V18024.E0	1685	350.0	8.0	0.033	1.419	0.004	0.039	0.012	0.065	0.006	0.048	0.014	0.071
V18024.E0-V18024.F0	1686	184.5	9.0	0.078	2.986	0.007	0.133	0.017	0.187	0.007	0.152	0.018	0.201
V18024.F0-V18024.00	1690	185.0	8.0	0.007	0.653	0.091	0.252	0.167	0.344	0.117	0.285	0.193	0.371
V18025.00-V18026.00	387	321.0	10.0	0.004	0.896	0.111	0.251	0.191	0.340	0.131	0.280	0.211	0.363
V18026.00-V18027.00	389	300.0	10.0	0.005	1.001	0.121	0.236	0.213	0.315	0.144	0.257	0.237	0.331
V18026.A0-V18026.C0	395	63.0	8.0	0.035	1.461	0.000	0.023	0.002	0.051	0.002	0.036	0.004	0.057
V18026.B0-V18026.C0	383	90.0	8.0	0.011	0.819	0.001	0.034	0.003	0.061	0.002	0.042	0.004	0.066
V18026.C0-V18026.D0	396	219.0	8.0	0.010	0.781	0.002	0.035	0.008	0.070	0.004	0.049	0.010	0.078
V18026.D0-V18026.E0	384	327.0	8.0	0.028	1.307	0.002	0.043	0.011	0.070	0.006	0.055	0.014	0.078
V18026.E0-V18026.00	385	326.0	8.0	0.046	1.675	0.009	0.190	0.020	0.263	0.013	0.217	0.023	0.284
V18027.00-V18028.00	5292	360.0	10.0	0.012	1.551	0.154	0.258	0.249	0.331	0.163	0.262	0.257	0.335
V18028.00-V18029.00	5293	310.0	10.0	0.004	0.896	0.154	0.279	0.251	0.359	0.163	0.288	0.259	0.366
V18029.00-V18030.00	5295	202.0	10.0	0.007	1.185	0.162	0.379	0.261	0.579	0.180	0.498	0.279	0.668
V18030.00-V18031.00	5296	486.0	12.0	0.006	1.784	0.372	0.303	0.940	0.495	0.741	0.434	1.310	0.602
V18031.00-V18034.00	5301	252.0	12.0	0.047	4.992	0.373	0.195	0.942	0.311	0.743	0.275	1.313	0.371
V18034.00-V18035.00	5300	330.0	12.0	0.031	4.054	0.373	0.226	0.944	0.364	0.743	0.321	1.316	0.437
V18035.00-V18036.00	5299	329.0	12.0	0.015	2.820	0.373	0.246	0.946	0.416	0.750	0.359	1.325	0.503
V19111.00-V18030.00	3417	287.0	12.0	0.007	1.927	0.202	0.222	0.659	0.410	0.546	0.370	1.004	0.521
V19116.00-V18030.00	3416	171.0	8.0	0.067	2.022	0.007	0.337	0.018	0.533	0.014	0.485	0.024	0.539
V19001.00-V19002.00	5327	58.0	8.0	0.029	1.330	0.001	0.014	0.003	0.028	0.000	0.000	0.002	0.026
V19002.00-V19003.00	5326	118.0	8.0	0.107	2.555	0.001	0.011	0.005	0.032	0.000	0.000	0.004	0.030
V19003.00-V19004.00	5321	204.0	8.0	0.161	3.134	0.002	0.012	0.007	0.039	0.000	0.000	0.006	0.037
V19004.00-V19006.00	5324	257.0	8.0	0.114	2.637	0.001	0.016	0.009	0.052	0.000	0.038	0.008	0.068
V19005.00-V19006.00	5325	201.0	8.0	0.146	2.984	0.002	0.016	0.003	0.042	0.020	0.067	0.022	0.078
V19006.00-V19007.00	5322	249.0	8.0	0.072	2.096	0.001	0.022	0.014	0.058	0.020	0.069	0.032	0.087
V19007.00-V19008.00	5323	274.0	8.0	0.145	2.974	0.003	0.024	0.017	0.056	0.022	0.062	0.037	0.079
V19008.00-V19009.00	4674	290.0	8.0	0.167	3.192	0.004	0.029	0.020	0.062	0.025	0.068	0.042	0.087
V19009.00-V19013.00	5319	208.0	8.0	0.106	2.543	0.005	0.036	0.023	0.075	0.028	0.087	0.046	0.108
V19010.00-V19011.00	4670	128.0	8.0	0.158	3.104	0.002	0.020	0.003	0.035	0.021	0.079	0.023	0.083
V19011.00-V19012.00	4669	170.0	8.0	0.046	1.675	0.001	0.022	0.006	0.042	0.023	0.082	0.027	0.089
V19012.00-V19013.00	4668	250.0	8.0	0.215	3.621	0.001	0.027	0.008	0.058	0.024	0.079	0.030	0.093
V19013.00-V19014.00	5320	149.0	8.0	0.096	2.420	0.007	0.040	0.034	0.083	0.052	0.101	0.079	0.123
V19014.00-V19018.00	5308	347.0	8.0	0.102	2.494	0.008	0.049	0.037	0.094	0.054	0.109	0.082	0.134
V19015.00-V19016.00	5309	344.0	8.0	0.118	2.683	0.002	0.030	0.005	0.041	0.007	0.047	0.009	0.055
V19016.00-V19017.00	5316	295.0	8.0	0.042	1.601	0.004	0.049	0.008	0.068	0.010	0.072	0.014	0.086

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V19017.00-V19018.00	5318	349.0	8.0	0.010	0.781	0.005	0.059	0.012	0.094	0.012	0.101	0.018	0.125
V19018.00-V19019.00	5311	218.0	8.0	0.090	2.343	0.015	0.061	0.052	0.111	0.067	0.125	0.104	0.155
V19019.00-V19020.00	5304	204.0	8.0	0.053	1.798	0.016	0.086	0.055	0.157	0.069	0.175	0.108	0.219
V19020.00-V19021.00	5303	305.0	8.0	0.008	0.699	0.017	0.107	0.058	0.194	0.071	0.214	0.112	0.269
V19021.00-V19025.00	5315	306.0	8.0	0.009	0.741	0.019	0.113	0.062	0.197	0.074	0.219	0.117	0.273
V19022.00-V19023.00	5317	200.0	8.0	0.070	2.066	0.002	0.026	0.004	0.038	0.011	0.061	0.013	0.067
V19023.00-V19024.00	5313	343.0	8.0	0.065	1.991	0.003	0.037	0.007	0.052	0.020	0.076	0.024	0.084
V19024.00-V19025.00	5314	404.0	8.0	0.048	1.711	0.006	0.080	0.012	0.130	0.023	0.154	0.029	0.185
V19025.00-V19026.00	5536	205.0	8.0	0.026	1.259	0.025	0.098	0.077	0.167	0.098	0.189	0.149	0.233
V19026.00-V19027.00	4675	305.0	8.0	0.068	2.037	0.026	0.092	0.079	0.158	0.100	0.176	0.154	0.217
V19027.00-V19028.00	4678	179.0	8.0	0.023	1.184	0.028	0.117	0.083	0.199	0.103	0.221	0.159	0.274
V19028.00-V19029.00	4679	261.0	8.0	0.011	0.819	0.029	0.129	0.087	0.220	0.106	0.241	0.163	0.302
V19029.00-V19030.00	4680	261.0	8.0	0.011	0.819	0.031	0.136	0.090	0.233	0.107	0.255	0.167	0.320
V19030.00-V19035.00	5306	389.0	8.0	0.007	0.653	0.031	0.149	0.092	0.258	0.110	0.277	0.172	0.351
V19031.00-V19032.00	5332	188.0	8.0	0.131	2.827	0.001	0.029	0.003	0.050	0.003	0.036	0.005	0.054
V19032.00-V19033.00	4676	103.0	8.0	0.005	0.552	0.002	0.045	0.006	0.079	0.003	0.054	0.007	0.085
V19033.00-V19034.00	4677	226.0	8.0	0.013	0.890	0.003	0.041	0.009	0.071	0.004	0.050	0.011	0.076
V19034.00-V19035.00	5307	200.0	8.0	0.064	1.976	0.004	0.094	0.012	0.164	0.006	0.164	0.014	0.214
V19035.00-V19036.00	5341	389.0	8.0	0.012	0.856	0.034	0.137	0.107	0.238	0.118	0.250	0.190	0.320
V19036.00-V19037.00	5335	301.0	8.0	0.023	1.184	0.036	0.119	0.110	0.207	0.120	0.215	0.194	0.274
V19037.00-V19038.00	5338	342.0	8.0	0.025	1.235	0.038	0.151	0.118	0.263	0.126	0.273	0.206	0.351
V19037.A0-V19037.B0	5336	126.0	8.0	0.043	1.620	0.000	0.015	0.002	0.036	0.003	0.035	0.005	0.047
V19037.B0-V19037.00	5337	282.0	8.0	0.027	1.283	0.001	0.069	0.005	0.126	0.004	0.127	0.008	0.166
V19038.00-V19040.00	5339	263.0	8.0	0.010	0.781	0.039	0.152	0.121	0.266	0.129	0.275	0.212	0.354
V19039.00-V19040.00	5439	335.0	8.0	0.021	1.132	0.001	0.071	0.005	0.131	0.002	0.126	0.006	0.168
V19039.A0-V19039.00	7558	5.0	8.0	0.000	0.000	0.001	0.012	0.002	0.051	0.001	0.041	0.003	0.062
V19040.00-V19041.00	5440	110.0	8.0	0.026	1.259	0.040	0.142	0.129	0.251	0.133	0.254	0.221	0.331
V19041.00-V19098.00	5436	376.0	8.0	0.009	0.741	0.042	0.211	0.133	0.383	0.135	0.383	0.226	0.507
V19042.00-V19043.00	4892	100.0	8.0	0.087	2.304	0.001	0.008	0.002	0.027	0.002	0.027	0.004	0.037
V19043.00-V19045.00	5344	120.0	8.0	0.068	2.037	0.000	0.029	0.004	0.073	0.005	0.087	0.009	0.108
V19044.00-V19045.00	5345	115.0	8.0	0.047	1.693	0.007	0.047	0.038	0.106	0.065	0.134	0.096	0.163
V19044.A0-V19044.B0	4761	201.0	8.0	0.088	2.317	0.002	0.027	0.007	0.062	0.025	0.092	0.032	0.107
V19044.AA-V19044.AB	1219	187.2	8.0	0.095	2.407	0.001	0.014	0.002	0.034	0.024	0.091	0.026	0.095
V19044.AB-V19044.A0	1220	20.0	8.0	0.007	0.653	0.001	0.018	0.005	0.043	0.025	0.092	0.029	0.099
V19044.B0-V19044.00	4762	105.0	8.0	0.067	2.022	0.006	0.041	0.035	0.092	0.064	0.121	0.093	0.145
V19044.BA-V19044.BB	1691	38.0	8.0	0.021	1.132	0.001	0.015	0.003	0.031	0.025	0.076	0.027	0.080
V19044.BB-V19044.BC	1692	173.6	8.0	0.100	2.470	0.001	0.018	0.005	0.037	0.027	0.077	0.031	0.082
V19044.BC-V19044.BD	1693	119.5	8.0	0.086	2.290	0.002	0.021	0.008	0.042	0.031	0.077	0.037	0.084
V19044.BD-V19044.BE	1694	119.6	8.0	0.098	2.445	0.002	0.023	0.010	0.047	0.032	0.076	0.040	0.086
V19044.BE-V19044.BF	1695	172.2	8.0	0.110	2.590	0.003	0.027	0.013	0.055	0.033	0.083	0.043	0.095
V19044.BF-V19044.BG	1696	94.0	8.0	0.054	1.815	0.003	0.030	0.016	0.063	0.035	0.090	0.047	0.104
V19044.BG-V19044.BH	1697	111.0	8.0	0.055	1.832	0.004	0.037	0.018	0.081	0.036	0.111	0.051	0.131
V19044.BH-V19044.BI	1701	143.0	8.0	0.039	1.542	0.004	0.037	0.020	0.080	0.037	0.106	0.053	0.127
V19044.BI-V19044.BJ	1702	221.0	8.0	0.116	2.660	0.005	0.048	0.023	0.101	0.038	0.119	0.056	0.147
V19044.BJ-V19044.B0	1703	94.0	8.0	0.017	1.018	0.005	0.052	0.026	0.109	0.039	0.133	0.059	0.163
V19045.00-V19046.00	4889	150.0	8.0	0.050	1.746	0.008	0.050	0.045	0.112	0.071	0.138	0.108	0.169
V19046.00-V19051.00	3981	350.0	8.0	0.051	1.764	0.009	0.052	0.048	0.118	0.072	0.140	0.111	0.174
V19047.00-V19048.00	4891	48.0	8.0	0.033	1.419	0.001	0.014	0.003	0.031	0.005	0.034	0.007	0.043
V19048.00-V19049.00	3980	190.0	8.0	0.069	2.052	0.001	0.017	0.005	0.041	0.005	0.037	0.009	0.052
V19049.00-V19050.00	4890	174.0	8.0	0.055	1.832	0.001	0.019	0.007	0.048	0.005	0.043	0.011	0.061
V19050.00-V19051.00	3982	224.0	8.0	0.061	1.929	0.001	0.036	0.009	0.086	0.008	0.094	0.017	0.122
V19051.00-V19053.00	3986	326.0	8.0	0.057	1.865	0.010	0.058	0.060	0.128	0.081	0.146	0.130	0.184
V19052.00-V19053.00	5329	320.0	8.0	0.056	1.848	0.005	0.051	0.016	0.099	0.016	0.108	0.027	0.137
V19052.A0-V19052.B0	4763	28.0	8.0	0.009	0.741	0.000	0.016	0.002	0.034	0.001	0.036	0.003	0.048
V19052.B0-V19052.C0	1698	265.0	8.0	0.069	2.052	0.001	0.025	0.006	0.044	0.012	0.059	0.016	0.069

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V19052.C0-V19052.D0	1699	151.0	8.0	0.053	1.798	0.003	0.055	0.009	0.094	0.014	0.110	0.020	0.132
V19052.D0-V19052.00	1700	61.0	8.0	0.004	0.494	0.004	0.060	0.012	0.101	0.015	0.112	0.024	0.137
V19053.00-V19054.00	3984	237.0	8.0	0.070	2.066	0.016	0.096	0.078	0.203	0.101	0.231	0.163	0.296
V19054.00-V19055.00	5078	390.0	8.0	0.004	0.494	0.017	0.153	0.081	0.320	0.105	0.361	0.168	0.463
V19055.00-V19062.00	5105	58.0	8.0	0.001	0.247	0.019	0.169	0.085	0.342	0.106	0.377	0.172	0.482
V19056.00-V19057.00	5092	166.0	6.0	0.019	0.500	0.001	0.039	0.004	0.060	0.004	0.063	0.006	0.077
V19057.00-V19059.00	5104	194.0	6.0	0.063	0.910	0.002	0.044	0.006	0.076	0.007	0.077	0.011	0.098
V19058.00-V19059.00	5107	5.0	6.0	-0.001	Adverse	0.000	0.113	0.002	0.155	0.003	0.155	0.005	0.184
V19059.00-V19060.00	5108	129.0	6.0	0.032	0.649	0.004	0.088	0.012	0.153	0.011	0.148	0.020	0.193
V19060.00-V19061.00	5095	195.0	6.0	0.007	0.303	0.005	0.090	0.015	0.153	0.014	0.146	0.024	0.191
V19061.00-V19062.00	5094	331.0	6.0	0.074	0.986	0.006	0.135	0.018	0.259	0.015	0.272	0.028	0.352
V19062.00-V19063.00	5106	128.0	8.0	0.009	0.741	0.026	0.128	0.106	0.251	0.123	0.270	0.204	0.347
V19063.00-V19078.00	5097	340.0	8.0	0.036	1.482	0.027	0.099	0.110	0.188	0.125	0.198	0.207	0.255
V19064.00-V19065.00	5083	154.0	8.0	0.084	2.264	0.001	0.022	0.003	0.037	0.002	0.028	0.004	0.041
V19065.00-V19068.00	5080	161.0	8.0	0.025	1.235	0.002	0.034	0.006	0.057	0.003	0.051	0.007	0.069
V19066.00-V19067.00	5082	360.0	8.0	0.068	2.037	0.002	0.026	0.004	0.037	0.012	0.056	0.014	0.062
V19067.00-V19068.00	5081	40.0	8.0	0.022	1.158	0.003	0.034	0.007	0.053	0.014	0.062	0.018	0.074
V19068.00-V19069.00	5079	203.0	8.0	0.058	1.881	0.005	0.068	0.016	0.113	0.017	0.116	0.028	0.146
V19069.00-V19070.00	5087	334.0	8.0	0.004	0.494	0.006	0.076	0.018	0.128	0.019	0.130	0.031	0.165
V19070.00-V19077.00	5100	224.0	8.0	0.019	1.077	0.006	0.073	0.021	0.122	0.021	0.122	0.035	0.156
V19071.00-V19072.00	5090	66.0	8.0	0.021	1.132	0.001	0.022	0.003	0.041	0.009	0.060	0.011	0.068
V19072.00-V19073.00	5091	143.0	8.0	0.017	1.018	0.002	0.031	0.006	0.054	0.011	0.073	0.015	0.085
V19073.00-V19075.00	5089	331.3	8.0	0.073	2.110	0.003	0.035	0.009	0.057	0.016	0.067	0.022	0.080
V19074.00-V19075.00	5085	190.0	8.0	0.008	0.699	0.002	0.040	0.004	0.059	0.002	0.054	0.004	0.070
V19075.00-V19076.00	5088	265.0	8.0	0.060	1.913	0.006	0.047	0.017	0.073	0.020	0.076	0.030	0.094
V19076.00-V19077.00	5101	185.0	8.0	0.042	1.601	0.008	0.071	0.021	0.114	0.021	0.114	0.034	0.145
V19077.00-V19078.00	5102	293.0	8.0	0.014	0.924	0.016	0.097	0.044	0.171	0.044	0.174	0.073	0.223
V19078.00-V19088.00	5103	157.0	8.0	0.062	1.945	0.044	0.149	0.158	0.275	0.170	0.282	0.283	0.366
V19079.00-V19080.00	5310	289.0	6.0	0.131	1.313	0.001	0.027	0.003	0.044	0.002	0.046	0.004	0.057
V19080.00-V19081.00	3983	258.0	8.0	0.093	2.382	0.002	0.037	0.007	0.063	0.010	0.072	0.014	0.088
V19081.00-V19082.00	3985	303.0	8.0	0.013	0.890	0.002	0.039	0.009	0.069	0.011	0.076	0.017	0.095
V19082.00-V19085.00	5333	303.0	8.0	0.080	2.209	0.003	0.042	0.011	0.077	0.013	0.074	0.021	0.098
V19083.00-V19084.00	5143	3.0	8.0	0.000	0.000	0.001	0.014	0.002	0.046	0.002	0.041	0.004	0.058
V19084.00-V19085.00	5334	342.0	8.0	0.065	1.991	0.001	0.037	0.005	0.070	0.003	0.062	0.007	0.085
V19085.00-V19086.00	5343	376.0	8.0	0.013	0.890	0.005	0.067	0.020	0.124	0.017	0.114	0.031	0.155
V19086.00-V19087.00	5340	216.0	8.0	0.004	0.494	0.006	0.080	0.023	0.146	0.019	0.134	0.036	0.181
V19087.00-V19088.00	5077	350.0	8.0	0.005	0.552	0.007	0.137	0.026	0.251	0.022	0.248	0.040	0.327
V19088.00-V19089.00	5099	300.0	12.0	0.006	1.784	0.054	0.119	0.188	0.219	0.194	0.223	0.328	0.290
V19089.00-V19092.00	5441	256.0	12.0	0.017	3.002	0.054	0.093	0.190	0.170	0.195	0.172	0.331	0.224
V19090.00-V19091.00	5443	126.0	8.0	0.004	0.494	0.002	0.051	0.005	0.070	0.005	0.071	0.007	0.085
V19091.00-V19092.00	5444	136.0	8.0	0.008	0.699	0.004	0.084	0.008	0.142	0.007	0.140	0.011	0.180
V19092.00-V19097.00	5427	104.0	12.0	0.029	3.921	0.058	0.083	0.200	0.150	0.202	0.150	0.344	0.194
V19094.00-V19095.00	5433	227.0	8.0	0.004	0.494	0.001	0.046	0.003	0.076	0.002	0.054	0.004	0.081
V19095.00-V19096.00	5432	135.0	8.0	0.004	0.494	0.002	0.043	0.006	0.076	0.003	0.053	0.007	0.082
V19096.00-V19097.00	5431	120.0	8.0	0.026	1.259	0.003	0.084	0.009	0.149	0.004	0.139	0.010	0.186
V19097.00-V19098.A0	5429	180.0	12.0	0.037	4.429	0.061	0.082	0.212	0.148	0.207	0.147	0.357	0.192
V19098.00-V19101.00	5437	235.0	12.0	0.005	1.628	0.104	0.200	0.350	0.365	0.344	0.363	0.589	0.482
V19098.A0-V19098.00	5428	226.0	12.0	0.052	5.251	0.062	0.076	0.214	0.138	0.208	0.136	0.360	0.178
V19101.00-V19105.00	5438	323.0	12.0	0.005	1.628	0.105	0.174	0.353	0.315	0.347	0.312	0.594	0.413
V19102.00-V19103.00	5522	247.2	8.0	0.031	1.375	0.001	0.024	0.005	0.048	0.005	0.045	0.009	0.061
V19102.A0-V19102.00	5538	5.0	8.0	0.010	0.781	0.000	0.011	0.002	0.029	0.004	0.031	0.006	0.040
V19103.00-V19104.00	5445	300.0	8.0	0.043	1.620	0.002	0.028	0.008	0.053	0.007	0.048	0.013	0.066
V19104.00-V19105.00	5519	122.0	8.0	0.055	1.832	0.003	0.106	0.011	0.192	0.009	0.187	0.017	0.247
V19105.00-V19106.00	5520	223.0	12.0	0.023	3.492	0.109	0.135	0.367	0.245	0.357	0.249	0.615	0.325
V19106.00-V19107.00	5523	297.0	12.0	0.013	2.625	0.111	0.141	0.370	0.255	0.359	0.250	0.619	0.331

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V19107.00-V19109.00	3411	402.0	12.0	0.050	5.149	0.197	0.187	0.646	0.344	0.538	0.312	0.987	0.436
V19108.00-V19109.00	5235	350.0	6.0	0.013	0.413	0.001	0.262	0.003	0.481	0.004	0.439	0.006	0.541
V19109.00-V19110.00	3412	254.0	12.0	0.005	1.628	0.199	0.235	0.652	0.436	0.543	0.394	0.996	0.559
V19110.00-V19111.00	3413	393.0	12.0	0.006	1.784	0.201	0.226	0.656	0.417	0.544	0.377	0.999	0.531
V19112.00-V19113.00	5539	2.4	8.0	0.000	0.000	0.001	0.037	0.003	0.076	0.004	0.086	0.006	0.111
V19113.00-V19116.00	3419	328.0	8.0	0.004	0.494	0.001	0.041	0.006	0.072	0.006	0.074	0.010	0.095
V19114.00-V19115.00	3414	300.0	6.0	0.124	1.277	0.002	0.038	0.004	0.052	0.003	0.046	0.005	0.058
V19115.00-V19116.00	3418	300.0	6.0	0.086	1.063	0.004	0.052	0.008	0.076	0.006	0.067	0.010	0.086
V20080.00-V19107.00	3421	420.0	8.0	0.006	0.605	0.085	0.252	0.272	0.466	0.175	0.367	0.363	0.552
V20001.00-V20002.00	5606	215.0	8.0	0.004	0.494	0.001	0.028	0.003	0.053	0.010	0.098	0.012	0.107
V20002.00-V20004.00	5585	125.0	8.0	0.061	1.929	0.001	0.031	0.006	0.053	0.011	0.062	0.015	0.075
V20003.00-V20004.00	5584	248.0	6.0	0.061	0.896	0.002	0.046	0.005	0.070	0.004	0.072	0.006	0.088
V20004.00-V20005.00	5605	142.0	8.0	0.032	1.397	0.004	0.042	0.013	0.069	0.015	0.074	0.023	0.090
V20005.00-V20007.00	5603	325.0	8.0	0.042	1.601	0.006	0.043	0.016	0.072	0.016	0.071	0.027	0.089
V20006.00-V20007.00	5524	56.9	8.0	0.002	0.349	0.001	0.042	0.003	0.070	0.001	0.053	0.003	0.078
V20007.00-V20013.00	5553	345.0	8.0	0.065	1.991	0.007	0.084	0.022	0.148	0.018	0.156	0.032	0.198
V20008.00-V20009.A0	7425	17.0	8.0	0.001	0.247	0.007	0.080	0.024	0.136	0.050	0.186	0.066	0.209
V20008.A0-V20008.00	5604	138.0	8.0	0.011	0.819	0.001	0.068	0.003	0.114	0.001	0.141	0.003	0.163
V20008.B0-V20008.D0	7521	184.0	8.0	0.071	2.081	0.001	0.022	0.003	0.038	0.018	0.083	0.020	0.088
V20008.C0-V20008.D0	7522	253.0	8.0	0.047	1.693	0.001	0.026	0.003	0.042	0.019	0.088	0.021	0.093
V20008.D0-V20008.F0	7524	347.0	8.0	0.060	1.913	0.003	0.049	0.009	0.081	0.040	0.150	0.047	0.163
V20008.E0-V20008.F0	7523	239.0	8.0	0.008	0.699	0.001	0.051	0.003	0.081	0.005	0.131	0.007	0.145
V20008.F0-V20008.G0	4102	148.0	8.0	0.010	0.781	0.005	0.059	0.016	0.098	0.047	0.166	0.057	0.183
V20008.G0-V20008.00	4103	45.0	8.0	0.013	0.890	0.006	0.081	0.018	0.135	0.048	0.193	0.060	0.214
V20009.00-V20010.00	5588	300.0	8.0	0.042	1.601	0.009	0.090	0.029	0.163	0.053	0.217	0.073	0.256
V20009.A0-V20009.00	7426	260.0	8.0	0.045	1.657	0.007	0.050	0.026	0.090	0.050	0.122	0.068	0.142
V20010.00-V20012.00	5602	385.0	8.0	0.004	0.494	0.010	0.096	0.032	0.172	0.055	0.223	0.078	0.265
V20011.00-V20012.00	5590	350.0	8.0	0.051	1.764	0.001	0.043	0.003	0.073	0.002	0.081	0.004	0.100
V20012.00-V20013.00	5552	44.0	8.0	0.020	1.104	0.012	0.095	0.039	0.168	0.058	0.191	0.085	0.236
V20013.00-V20014.00	5551	195.0	8.0	0.013	0.890	0.019	0.100	0.062	0.177	0.076	0.194	0.119	0.243
V20014.00-V20015.00	5593	205.0	8.0	0.053	1.798	0.021	0.127	0.066	0.221	0.078	0.240	0.124	0.301
V20015.00-V20016.00	5587	109.0	8.0	0.004	0.494	0.022	0.140	0.069	0.245	0.080	0.263	0.127	0.331
V20016.00-V20022.00	5586	257.0	8.0	0.018	1.048	0.023	0.155	0.073	0.273	0.081	0.279	0.131	0.360
V20017.00-V20018.00	5543	50.0	8.0	-0.026	Adverse	0.001	0.511	0.003	0.527	0.002	0.518	0.004	0.530
V20018.00-V20019.00	5544	270.0	8.0	0.012	0.856	0.001	0.027	0.005	0.057	0.002	0.042	0.006	0.065
V20019.00-V20021.00	5260	192.0	8.0	0.023	1.184	0.002	0.048	0.008	0.088	0.005	0.065	0.011	0.098
V20020.00-V20021.00	5875	11.9	8.0	0.000	0.000	0.001	0.052	0.003	0.100	0.001	0.067	0.003	0.110
V20021.00-V20022.00	5599	341.0	8.0	0.004	0.494	0.004	0.136	0.015	0.241	0.007	0.227	0.018	0.305
V20022.00-V20025.00	5598	243.0	8.0	0.005	0.552	0.029	0.152	0.091	0.267	0.090	0.266	0.152	0.347
V20023.00-V20024.00	5592	372.0	8.0	0.029	1.330	0.002	0.031	0.004	0.044	0.002	0.033	0.004	0.045
V20024.00-V20025.00	5595	187.0	8.0	0.057	1.865	0.004	0.067	0.008	0.108	0.005	0.099	0.009	0.130
V20025.00-V20026.00	5597	33.0	8.0	0.013	0.890	0.033	0.099	0.101	0.169	0.095	0.163	0.163	0.213
V20026.00-V20037.00	5550	153.0	8.0	0.044	1.638	0.034	0.156	0.104	0.278	0.095	0.258	0.165	0.349
V20027.00-V20028.00	5247	141.0	8.0	0.034	1.440	0.000	0.016	0.002	0.037	0.002	0.035	0.005	0.047
V20028.00-V20031.00	5248	250.0	8.0	0.038	1.522	0.001	0.034	0.005	0.070	0.004	0.054	0.009	0.080
V20029.00-V20031.00	5541	49.3	8.0	0.002	0.349	0.001	0.047	0.003	0.084	0.001	0.055	0.003	0.086
V20030.00-V20031.00	5249	250.0	8.0	0.005	0.552	0.001	0.037	0.003	0.074	0.002	0.055	0.004	0.083
V20031.00-V20032.00	5250	210.0	8.0	0.010	0.781	0.003	0.046	0.014	0.091	0.007	0.071	0.018	0.104
V20032.00-V20033.00	5258	300.0	8.0	0.026	1.259	0.004	0.041	0.016	0.080	0.011	0.066	0.023	0.094
V20033.00-V20035.00	5259	149.0	8.0	0.028	1.307	0.004	0.040	0.019	0.080	0.011	0.062	0.026	0.092
V20034.00-V20035.00	5596	305.0	8.0	0.008	0.699	0.001	0.036	0.003	0.067	0.002	0.052	0.004	0.077
V20035.00-V20036.00	5549	67.0	8.0	0.025	1.235	0.005	0.052	0.024	0.106	0.013	0.079	0.032	0.121
V20036.00-V20037.00	5583	149.0	8.0	0.010	0.781	0.006	0.136	0.026	0.256	0.014	0.223	0.035	0.314
V20037.00-V20040.00	5582	368.0	8.0	0.007	0.653	0.040	0.165	0.133	0.298	0.110	0.271	0.202	0.370
V20038.00-V20039.00	5253	240.0	8.0	0.009	0.741	0.001	0.040	0.003	0.064	0.001	0.040	0.003	0.064

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V20039.00-V20040.00	5581	230.0	8.0	0.004	0.494	0.002	0.085	0.007	0.146	0.002	0.120	0.007	0.169
V20040.00-V20041.00	5251	242.0	8.0	0.036	1.482	0.044	0.122	0.143	0.217	0.114	0.193	0.213	0.264
V20041.00-V20053.00	5243	241.0	8.0	0.030	1.353	0.045	0.174	0.146	0.317	0.116	0.271	0.217	0.385
V20042.00-V20043.00	5254	61.0	8.0	0.016	0.988	0.000	0.027	0.002	0.049	0.000	0.027	0.002	0.049
V20043.00-V20044.00	7775	360.8	8.0	0.008	0.699	0.002	0.050	0.007	0.080	0.002	0.051	0.007	0.080
V20044.00-V20052.00	5580	162.9	8.0	0.005	0.552	0.004	0.059	0.010	0.100	0.004	0.064	0.010	0.103
V20045.00-V20046.00	5601	116.0	8.0	0.010	0.781	0.002	0.035	0.004	0.050	0.002	0.041	0.004	0.054
V20046.00-V20047.00	5591	205.0	8.0	0.040	1.562	0.002	0.030	0.007	0.047	0.003	0.033	0.007	0.048
V20047.00-V20049.00	5594	113.0	8.0	0.077	2.167	0.003	0.034	0.009	0.060	0.006	0.044	0.012	0.067
V20048.00-V20049.00	5548	133.0	8.0	0.006	0.605	0.000	0.030	0.002	0.061	0.000	0.037	0.002	0.065
V20049.00-V20051.00	5547	210.0	8.0	0.022	1.158	0.004	0.045	0.014	0.082	0.007	0.055	0.017	0.088
V20050.00-V20051.00	5244	162.0	8.0	0.016	0.988	0.001	0.037	0.003	0.063	0.001	0.041	0.003	0.066
V20051.00-V20052.00	5579	183.0	8.0	0.029	1.330	0.006	0.055	0.020	0.098	0.008	0.064	0.023	0.103
V20052.00-V20053.00	5568	378.0	8.0	0.027	1.283	0.010	0.142	0.032	0.261	0.013	0.207	0.036	0.307
V20053.00-V20056.00	5574	94.0	8.0	0.004	0.494	0.056	0.265	0.181	0.487	0.129	0.405	0.255	0.587
V20054.00-V20055.00	5578	270.0	8.0	0.041	1.581	0.001	0.023	0.002	0.035	0.001	0.026	0.002	0.037
V20054.00-V20071.00	5567	280.0	8.0	0.074	2.125	0.001	0.035	0.002	0.051	0.001	0.044	0.003	0.058
V20055.00-V20056.00	5566	180.0	8.0	0.023	1.184	0.002	0.168	0.005	0.304	0.002	0.249	0.005	0.361
V20056.00-V20059.00	5572	65.0	8.0	0.001	0.247	0.058	0.280	0.189	0.507	0.132	0.420	0.263	0.603
V20057.00-V20058.00	5255	155.0	8.0	0.067	2.022	0.001	0.030	0.003	0.046	0.002	0.029	0.004	0.045
V20058.00-V20059.00	5565	298.0	8.0	0.015	0.957	0.003	0.147	0.007	0.256	0.002	0.205	0.007	0.295
V20059.00-V20060.00	5571	79.0	8.0	0.007	0.653	0.061	0.205	0.198	0.365	0.135	0.301	0.272	0.430
V20060.00-V20061.00	5245	192.0	8.0	0.023	1.184	0.062	0.243	0.201	0.443	0.136	0.360	0.275	0.526
V20061.00-V20068.00	3422	298.0	8.0	0.004	0.494	0.063	0.236	0.204	0.429	0.137	0.348	0.278	0.509
V20062.00-V20064.00	5545	287.0	8.0	0.086	2.290	0.002	0.026	0.004	0.042	0.004	0.039	0.006	0.051
V20063.00-V20064.00	5577	80.0	8.0	0.002	0.349	0.001	0.035	0.003	0.066	0.003	0.068	0.005	0.087
V20064.00-V20065.00	5576	192.0	8.0	0.044	1.638	0.003	0.040	0.009	0.067	0.007	0.060	0.013	0.080
V20065.00-V20066.00	5575	188.0	8.0	0.021	1.132	0.004	0.045	0.013	0.074	0.009	0.064	0.018	0.087
V20066.00-V20068.00	5564	160.0	8.0	0.049	1.729	0.005	0.091	0.016	0.159	0.011	0.131	0.021	0.185
V20067.00-V20068.00	5540	51.7	8.0	0.002	0.349	0.000	0.082	0.002	0.174	0.001	0.127	0.003	0.216
V20068.00-V20069.00	5569	212.0	8.0	0.044	1.638	0.069	0.154	0.225	0.276	0.149	0.224	0.305	0.323
V20069.00-V20070.00	5570	320.0	8.0	0.022	1.158	0.071	0.182	0.228	0.328	0.151	0.265	0.309	0.385
V20070.00-V20072.00	5557	131.0	8.0	0.012	0.856	0.072	0.218	0.231	0.396	0.152	0.316	0.311	0.464
V20071.00-V20072.A0	5237	293.0	8.0	0.014	0.924	0.002	0.038	0.006	0.056	0.004	0.048	0.007	0.063
V20072.00-V20073.00	5563	201.0	8.0	0.012	0.856	0.076	0.201	0.245	0.363	0.159	0.290	0.328	0.424
V20072.A0-V20072.B0	5238	68.0	8.0	0.065	1.991	0.004	0.038	0.009	0.063	0.006	0.048	0.011	0.069
V20072.B0-V20072.00	5562	120.0	8.0	0.006	0.605	0.004	0.147	0.011	0.264	0.006	0.208	0.013	0.306
V20073.00-V20077.00	5561	203.0	8.0	0.030	1.353	0.077	0.164	0.248	0.293	0.160	0.234	0.331	0.339
V20074.00-V20075.00	5241	251.0	8.0	0.154	3.065	0.002	0.027	0.007	0.042	0.004	0.034	0.008	0.046
V20074.A0-V20074.00	5239	62.0	8.0	0.007	0.653	0.001	0.027	0.003	0.044	0.002	0.038	0.004	0.051
V20075.00-V20076.00	5556	329.0	8.0	0.079	2.195	0.004	0.048	0.010	0.076	0.006	0.058	0.012	0.083
V20076.00-V20077.00	5560	53.0	8.0	0.004	0.494	0.005	0.115	0.013	0.199	0.007	0.156	0.015	0.227
V20077.00-V20078.00	5559	314.0	8.0	0.032	1.397	0.083	0.179	0.264	0.320	0.169	0.255	0.350	0.372
V20078.00-V20079.00	5554	319.0	8.0	0.018	1.048	0.083	0.231	0.266	0.428	0.170	0.335	0.354	0.506
V20079.00-V20080.00	5555	253.0	8.0	0.004	0.494	0.084	0.288	0.269	0.541	0.172	0.401	0.358	0.634
V12038.00-V21195.00	7166	35.4	8.0	0.012	0.856	0.054	0.376	0.137	0.563	0.091	0.498	0.173	0.613
V16050.00-V21192.00	3255	577.5	18.0	0.012	7.437	1.378	0.319	2.606	0.467	2.093	0.417	3.324	0.553
V21001.00-V21002.00	3253	5.0	8.0	0.002	0.349	0.000	0.007	0.002	0.036	0.000	0.008	0.002	0.036
V21002.00-V21003.00	3252	346.0	8.0	0.086	2.290	0.001	0.022	0.005	0.042	0.001	0.023	0.005	0.042
V21003.00-V21004.00	3245	350.0	8.0	0.065	1.991	0.003	0.035	0.009	0.055	0.003	0.036	0.009	0.055
V21004.00-V21009.00	3247	350.0	8.0	0.060	1.913	0.006	0.043	0.014	0.067	0.006	0.051	0.014	0.072
V21005.00-V21006.00	6602	360.0	8.0	0.088	2.317	0.002	0.027	0.004	0.038	0.001	0.025	0.003	0.037
V21006.00-V21008.00	3246	371.0	8.0	0.070	2.066	0.004	0.048	0.008	0.073	0.004	0.072	0.008	0.090
V21007.A0-V21008.00	6603	117.0	8.0	0.002	0.349	0.000	0.044	0.002	0.080	0.007	0.103	0.009	0.121
V21008.00-V21009.00	3251	229.0	8.0	0.012	0.856	0.005	0.055	0.013	0.087	0.013	0.085	0.021	0.108

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V21009.00-V21012.00	3250	74.0	8.0	0.056	1.848	0.011	0.063	0.030	0.097	0.020	0.089	0.038	0.116
V21010.00-V21011.00	6601	29.0	8.0	0.001	0.247	0.005	0.082	0.007	0.097	0.023	0.165	0.025	0.169
V21011.00-V21012.00	6600	300.0	8.0	0.006	0.605	0.005	0.073	0.009	0.104	0.023	0.133	0.028	0.147
V21012.00-V21013.00	3249	215.0	8.0	0.037	1.502	0.017	0.075	0.042	0.115	0.043	0.117	0.068	0.145
V21013.00-V21014.00	6523	200.0	8.0	0.058	1.881	0.018	0.068	0.045	0.106	0.049	0.111	0.076	0.137
V21014.00-V21017.00	2304	381.0	8.0	0.069	2.052	0.018	0.094	0.047	0.151	0.051	0.171	0.079	0.207
V21015.00-V21016.00	3244	16.0	8.0	0.001	0.247	0.002	0.051	0.004	0.070	0.028	0.159	0.030	0.165
V21016.00-V21017.00	2307	282.0	8.0	0.021	1.132	0.002	0.077	0.006	0.125	0.028	0.171	0.032	0.199
V21017.00-V21018.J0	2306	283.0	8.0	0.007	0.653	0.021	0.169	0.056	0.290	0.079	0.373	0.114	0.445
V21018.00-V21019.00	2305	299.0	8.0	0.022	1.158	0.029	0.109	0.097	0.196	0.170	0.259	0.238	0.307
V21018.A0-V21018.B0	6876	30.0	8.0	0.004	0.494	0.001	0.029	0.009	0.104	0.062	0.261	0.071	0.279
V21018.AA-V21018.AB	7616	163.7	8.0	0.033	1.419	0.000	0.000	0.002	0.037	0.048	0.141	0.051	0.145
V21018.AB-V21018.AC	7617	36.4	8.0	0.008	0.699	0.000	0.009	0.004	0.057	0.054	0.176	0.058	0.184
V21018.AC-V21018.A0	7618	292.0	8.0	0.008	0.699	0.000	0.022	0.007	0.079	0.058	0.212	0.064	0.224
V21018.B0-V21018.C0	6877	305.0	8.0	0.005	0.552	0.001	0.027	0.011	0.098	0.064	0.228	0.074	0.246
V21018.C0-V21018.DB	7612	35.3	8.0	0.008	0.699	0.001	0.028	0.013	0.084	0.065	0.173	0.078	0.189
V21018.D0-V21018.E0	7613	236.8	8.0	0.020	1.104	0.002	0.042	0.021	0.101	0.077	0.184	0.095	0.205
V21018.DA-V21018.DB	7615	233.0	8.0	0.028	1.307	0.001	0.028	0.003	0.064	0.010	0.123	0.012	0.134
V21018.DB-V21018.D0	7090	25.1	8.0	0.006	0.605	0.002	0.034	0.019	0.094	0.076	0.181	0.092	0.200
V21018.E0-V21018.G0	6875	300.0	8.0	0.018	1.048	0.005	0.052	0.025	0.114	0.082	0.196	0.103	0.220
V21018.F0-V21018.G0	7614	281.0	8.0	0.074	2.125	0.001	0.035	0.003	0.073	0.003	0.114	0.005	0.131
V21018.G0-V21018.H0	6874	88.5	8.0	0.021	1.132	0.006	0.052	0.031	0.110	0.086	0.180	0.111	0.204
V21018.H0-V21018.I0	6873	219.8	8.0	0.041	1.581	0.007	0.054	0.034	0.113	0.087	0.175	0.114	0.201
V21018.I0-V21018.J0	6872	86.9	8.0	0.018	1.048	0.008	0.138	0.037	0.254	0.087	0.352	0.116	0.416
V21018.J0-V21018.00	8324	283.0	8.0	0.003	0.428	0.029	0.169	0.095	0.301	0.168	0.402	0.234	0.478
V21019.00-V21020.00	2022	109.0	8.0	0.037	1.502	0.029	0.096	0.100	0.172	0.173	0.226	0.243	0.268
V21020.00-V21021.00	2303	188.0	8.0	0.041	1.581	0.030	0.101	0.102	0.184	0.176	0.240	0.248	0.286
V21021.00-V21022.00	2026	267.0	8.0	0.033	1.419	0.030	0.101	0.104	0.184	0.181	0.241	0.255	0.287
V21022.00-V21024.00	7952	435.0	8.0	0.045	1.657	0.030	0.094	0.106	0.175	0.188	0.236	0.265	0.279
V21023.00-V21024.00	7184	180.0	8.0	0.000	0.000	0.002	0.131	0.019	0.252	0.051	0.359	0.067	0.409
V21023.A0-V21023.B0	7177	124.3	8.0	0.042	1.601	0.001	0.024	0.003	0.043	0.042	0.125	0.044	0.129
V21023.B0-V21023.C0	7178	61.2	8.0	0.012	0.856	0.001	0.030	0.006	0.060	0.042	0.154	0.046	0.162
V21023.C0-V21023.D0	7179	122.0	8.0	0.011	0.819	0.001	0.031	0.008	0.069	0.048	0.164	0.054	0.174
V21023.D0-V21023.E0	7180	207.2	8.0	0.016	0.988	0.001	0.029	0.010	0.071	0.048	0.151	0.057	0.163
V21023.E0-V21023.F0	7181	32.1	8.0	0.007	0.653	0.001	0.032	0.012	0.081	0.049	0.152	0.059	0.169
V21023.F0-V21023.G0	7182	235.3	8.0	0.013	0.890	0.002	0.037	0.014	0.094	0.051	0.166	0.063	0.186
V21023.G0-V21023.00	7183	162.6	8.0	0.010	0.781	0.002	0.103	0.017	0.212	0.051	0.322	0.065	0.362
V21024.00-V21025.00	584	63.0	10.0	0.021	2.052	0.032	0.537	0.127	0.572	0.242	0.598	0.336	0.615
V21025.00-V21026.00	6599	182.0	10.0	-0.009	Adverse	0.033	0.529	0.130	0.556	0.243	0.576	0.340	0.589
V21026.00-V21036.B0	7185	245.0	10.0	0.059	3.440	0.033	0.072	0.132	0.139	0.243	0.187	0.342	0.222
V21027.00-V21030.00	2338	4.3	8.0	0.000	0.000	0.001	0.017	0.002	0.088	0.054	0.326	0.056	0.337
V21028.00-V21030.00	5525	5.0	8.0	0.000	0.000	0.000	0.024	0.002	0.088	0.035	0.323	0.037	0.335
V21029.00-V21030.00	2335	4.1	8.0	0.000	0.000	0.001	0.017	0.002	0.089	0.017	0.324	0.019	0.336
V21030.00-V21031.00	5150	230.0	8.0	0.006	0.605	0.000	0.019	0.009	0.084	0.103	0.280	0.112	0.291
V21031.00-V21032.00	583	217.0	8.0	0.016	0.988	0.000	0.015	0.011	0.079	0.113	0.238	0.123	0.250
V21032.00-V21037.A0	8255	24.6	8.0	0.004	0.494	0.000	0.017	0.013	0.096	0.113	0.272	0.126	0.287
V21036.00-V21037.00	1121	210.0	10.0	0.022	2.100	0.034	0.179	0.142	0.353	0.252	0.503	0.359	0.599
V21036.A0-V21036.B0	7189	290.0	8.0	0.045	1.657	0.001	0.063	0.005	0.124	0.008	0.163	0.012	0.196
V21036.AA-V21036.A0	7188	5.0	8.0	0.000	0.000	0.001	0.032	0.003	0.058	0.007	0.081	0.009	0.091
V21036.B0-V21036.00	7186	245.0	10.0	0.026	2.283	0.034	0.087	0.139	0.171	0.251	0.228	0.356	0.272
V21037.00-V21038.00	343	244.0	10.0	0.001	0.448	0.043	0.195	0.184	0.386	0.387	0.565	0.527	0.670
V21037.A0-V21037.B0	8256	277.5	8.0	0.006	0.605	0.000	0.019	0.015	0.108	0.113	0.290	0.128	0.308
V21037.B0-V21037.C0	8254	113.7	8.0	0.007	0.653	0.000	0.018	0.017	0.110	0.114	0.286	0.131	0.306
V21037.C0-V21037.D0	8253	51.1	8.0	0.006	0.605	0.000	0.050	0.019	0.127	0.135	0.301	0.154	0.323
V21037.D0-V21037.E0	8252	118.1	8.0	0.007	0.653	0.009	0.082	0.030	0.145	0.135	0.306	0.156	0.330

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V21037.E0-V21037.F0	8251	74.2	8.0	0.008	0.699	0.009	0.080	0.032	0.148	0.135	0.300	0.158	0.326
V21037.F0-V21037.G0	8250	84.3	8.0	0.008	0.699	0.009	0.081	0.034	0.154	0.135	0.303	0.160	0.332
V21037.G0-V21037.H0	8249	115.8	8.0	0.007	0.653	0.009	0.082	0.036	0.161	0.135	0.309	0.162	0.340
V21037.H0-V21037.I0	8234	141.8	8.0	0.007	0.653	0.009	0.084	0.038	0.170	0.135	0.318	0.164	0.354
V21037.I0-V21037.00	8233	252.0	8.0	0.006	0.605	0.009	0.211	0.040	0.419	0.135	0.646	0.166	0.682
V21038.00-V21039.00	342	362.0	10.0	0.010	1.416	0.044	0.120	0.187	0.243	0.390	0.354	0.532	0.419
V21039.00-V21040.00	341	188.0	10.0	0.011	1.485	0.044	0.129	0.189	0.263	0.392	0.382	0.537	0.452
V21040.00-V21041.00	340	199.0	10.0	0.014	1.675	0.044	0.111	0.191	0.225	0.394	0.324	0.541	0.382
V21041.00-V21042.00	2471	367.0	10.0	0.053	3.260	0.045	0.107	0.193	0.218	0.395	0.311	0.543	0.367
V21042.00-V21043.00	754	367.0	10.0	0.025	2.239	0.045	0.098	0.195	0.199	0.395	0.284	0.545	0.335
V21043.00-V21044.D0	752	270.0	10.0	0.015	1.734	0.045	0.087	0.197	0.179	0.395	0.252	0.548	0.299
V21044.00-V21045.00	6541	298.0	10.0	0.038	2.760	0.045	0.089	0.208	0.186	0.411	0.261	0.574	0.310
V21044.A0-V21044.B0	339	5.0	8.0	0.006	0.605	0.000	0.012	0.002	0.031	0.010	0.061	0.012	0.066
V21044.B0-V21044.C0	2470	244.0	8.0	0.151	3.035	0.002	0.012	0.004	0.045	0.011	0.061	0.015	0.073
V21044.C0-V21044.D0	751	58.0	8.0	0.010	0.781	0.000	0.076	0.007	0.173	0.011	0.241	0.018	0.289
V21044.D0-V21044.00	405	270.0	10.0	0.019	1.952	0.045	0.104	0.206	0.218	0.407	0.308	0.568	0.367
V21045.00-V21058.00	5122	350.0	10.0	0.064	3.582	0.046	0.081	0.211	0.169	0.413	0.234	0.578	0.279
V21046.00-V21047.00	586	318.0	8.0	0.090	2.343	0.001	0.011	0.002	0.029	0.011	0.054	0.013	0.060
V21047.00-V21052.00	2029	139.0	8.0	0.043	1.620	0.001	0.017	0.005	0.046	0.016	0.072	0.021	0.083
V21048.00-V21049.00	2339	7.1	8.0	0.000	0.000	0.000	0.023	0.002	0.051	0.004	0.061	0.006	0.074
V21049.00-V21050.00	585	230.0	8.0	0.060	1.913	0.001	0.015	0.005	0.037	0.004	0.047	0.009	0.057
V21050.00-V21051.00	2024	114.0	8.0	0.082	2.236	0.001	0.016	0.007	0.053	0.017	0.074	0.023	0.089
V21051.00-V21052.00	2028	28.0	8.0	0.007	0.653	0.001	0.020	0.009	0.064	0.017	0.087	0.025	0.105
V21052.00-V21053.00	6597	139.0	8.0	0.041	1.581	0.002	0.021	0.016	0.061	0.034	0.084	0.049	0.100
V21053.00-V21054.00	6598	388.0	8.0	0.091	2.356	0.002	0.031	0.018	0.087	0.035	0.116	0.051	0.140
V21054.00-V21055.00	2469	271.0	8.0	0.011	0.819	0.002	0.049	0.021	0.132	0.037	0.174	0.056	0.211
V21055.00-V21056.00	758	110.0	8.0	0.013	0.890	0.003	0.041	0.023	0.111	0.040	0.144	0.061	0.175
V21056.00-V21057.00	6540	363.0	8.0	0.125	2.761	0.003	0.031	0.026	0.084	0.042	0.105	0.064	0.129
V21057.00-V21058.00	5121	311.0	8.0	0.030	1.353	0.003	0.069	0.028	0.158	0.044	0.211	0.069	0.255
V21058.00-V21060.00	4562	215.0	10.0	0.067	3.665	0.050	0.100	0.242	0.216	0.460	0.298	0.651	0.359
V21059.00-V21060.00	5145	24.6	10.0	0.001	0.448	0.000	0.089	0.003	0.229	0.003	0.328	0.003	0.404
V21060.00-V21062.00	5114	252.0	10.0	0.014	1.675	0.050	0.171	0.246	0.319	0.460	0.424	0.656	0.505
V21061.00-V21062.00	5144	24.5	10.0	0.002	0.633	0.000	0.112	0.003	0.259	0.003	0.371	0.005	0.456
V21062.00-V21066.00	6827	17.4	10.0	0.000	0.000	0.050	0.161	0.250	0.298	0.461	0.391	0.661	0.464
V21063.00-V21064.00	404	73.0	8.0	0.073	2.110	0.000	0.004	0.002	0.022	0.002	0.018	0.004	0.028
V21064.00-V21065.00	6539	206.0	8.0	0.188	3.386	0.000	0.014	0.004	0.044	0.002	0.032	0.007	0.052
V21065.00-V21066.00	6145	81.0	8.0	0.014	0.924	0.001	0.072	0.007	0.166	0.003	0.204	0.010	0.256
V21066.00-V21067.00	6822	304.0	10.0	0.032	2.533	0.051	0.098	0.259	0.215	0.464	0.289	0.672	0.350
V21067.00-V21078.00	1671	228.0	10.0	0.033	2.572	0.051	0.100	0.262	0.220	0.464	0.288	0.675	0.352
V21068.00-V21069.00	2023	138.0	8.0	0.096	2.420	0.001	0.017	0.003	0.033	0.003	0.032	0.005	0.042
V21069.00-V21070.00	2027	167.0	8.0	0.050	1.746	0.001	0.025	0.006	0.049	0.004	0.041	0.009	0.058
V21070.00-V21071.00	5149	241.0	8.0	0.038	1.522	0.002	0.028	0.008	0.053	0.005	0.043	0.012	0.062
V21071.00-V21072.00	335	130.0	8.0	0.084	2.264	0.003	0.028	0.011	0.050	0.007	0.041	0.016	0.058
V21072.00-V21073.00	2468	125.0	8.0	0.097	2.432	0.004	0.031	0.015	0.055	0.009	0.043	0.019	0.063
V21073.00-V21074.00	2479	89.0	8.0	0.070	2.066	0.005	0.030	0.017	0.055	0.009	0.041	0.021	0.061
V21074.00-V21075.00	6537	152.0	8.0	0.170	3.220	0.005	0.028	0.019	0.053	0.010	0.038	0.024	0.059
V21075.00-V21076.00	4561	109.0	8.0	0.113	2.625	0.005	0.030	0.022	0.059	0.010	0.041	0.026	0.065
V21076.00-V21077.00	6821	118.0	8.0	0.099	2.457	0.005	0.035	0.024	0.071	0.010	0.047	0.029	0.077
V21077.00-V21078.00	1670	47.0	8.0	0.023	1.184	0.006	0.083	0.026	0.179	0.011	0.206	0.031	0.264
V21078.00-V21081.00	6144	295.0	10.0	0.034	2.611	0.057	0.103	0.290	0.226	0.475	0.289	0.708	0.357
V21079.00-V21080.00	5881	183.0	8.0	0.052	1.781	0.001	0.020	0.003	0.034	0.001	0.024	0.003	0.037
V21080.00-V21081.00	6143	208.0	8.0	0.078	2.181	0.002	0.077	0.006	0.162	0.003	0.195	0.007	0.244
V21081.00-V21082.00	6803	222.0	10.0	0.034	2.611	0.059	0.104	0.298	0.229	0.478	0.292	0.717	0.360
V21082.00-V21083.00	2018	214.0	10.0	0.035	2.649	0.059	0.103	0.300	0.227	0.480	0.288	0.721	0.356
V21083.00-V21108.00	6755	245.0	10.0	0.038	2.760	0.060	0.125	0.303	0.274	0.480	0.332	0.723	0.418

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V21084.00-V21085.00	7619	322.0	8.0	0.035	1.461	0.002	0.026	0.004	0.038	0.002	0.031	0.004	0.041
V21085.00-V21087.00	6536	319.0	8.0	0.114	2.637	0.003	0.033	0.007	0.048	0.005	0.038	0.009	0.052
V21086.00-V21087.00	6535	175.0	8.0	0.028	1.307	0.002	0.033	0.004	0.049	0.002	0.037	0.004	0.051
V21087.00-V21088.00	5120	242.0	8.0	0.076	2.153	0.006	0.039	0.014	0.060	0.008	0.045	0.016	0.064
V21088.00-V21091.00	4560	206.0	8.0	0.086	2.290	0.007	0.043	0.017	0.069	0.009	0.049	0.019	0.073
V21089.00-V21090.00	4559	176.0	8.0	0.013	0.890	0.001	0.023	0.003	0.042	0.002	0.033	0.004	0.048
V21090.00-V21091.00	6826	267.0	8.0	0.035	1.461	0.001	0.035	0.006	0.060	0.003	0.042	0.007	0.064
V21091.00-V21093.00	6820	124.0	8.0	0.070	2.066	0.009	0.052	0.025	0.086	0.012	0.060	0.029	0.091
V21092.00-V21093.00	6819	339.0	8.0	0.020	1.104	0.001	0.039	0.003	0.067	0.001	0.042	0.003	0.069
V21093.00-V21094.00	5877	144.0	8.0	0.039	1.542	0.010	0.064	0.031	0.108	0.014	0.076	0.034	0.115
V21094.00-V21095.00	5878	222.0	8.0	0.025	1.235	0.011	0.066	0.033	0.113	0.016	0.079	0.038	0.120
V21095.00-V21097.00	5879	337.0	8.0	0.038	1.522	0.011	0.064	0.036	0.113	0.016	0.078	0.041	0.121
V21096.00-V21097.00	6801	109.0	8.0	0.002	0.349	0.001	0.050	0.003	0.092	0.002	0.069	0.004	0.103
V21097.00-V21105.00	2017	233.0	8.0	0.028	1.307	0.012	0.098	0.041	0.187	0.019	0.125	0.048	0.202
V21098.00-V21099.00	5148	113.0	8.0	0.012	0.856	0.001	0.027	0.003	0.044	0.001	0.030	0.003	0.046
V21099.00-V21100.00	5147	180.0	8.0	0.039	1.542	0.002	0.032	0.006	0.057	0.002	0.035	0.006	0.059
V21100.00-V21101.00	5119	196.0	8.0	0.036	1.482	0.002	0.028	0.008	0.054	0.003	0.035	0.009	0.057
V21101.00-V21102.00	4558	81.0	8.0	0.088	2.317	0.002	0.021	0.010	0.046	0.004	0.031	0.012	0.051
V21102.00-V21103.00	6824	106.0	8.0	0.058	1.881	0.002	0.024	0.012	0.056	0.005	0.037	0.016	0.063
V21103.00-V21104.00	6142	284.0	8.0	0.076	2.153	0.002	0.025	0.015	0.062	0.006	0.040	0.018	0.068
V21104.00-V21105.00	2016	251.0	8.0	0.068	2.037	0.002	0.078	0.017	0.158	0.006	0.104	0.021	0.172
V21105.00-V21106.00	6754	186.0	8.0	0.010	0.781	0.015	0.094	0.060	0.184	0.025	0.121	0.070	0.199
V21106.00-V21107.00	6753	134.0	8.0	0.035	1.461	0.015	0.083	0.062	0.167	0.025	0.106	0.072	0.179
V21107.00-V21108.00	6752	134.0	8.0	0.006	0.605	0.015	0.146	0.064	0.311	0.025	0.307	0.075	0.421
V21108.00-V21109.00	6750	349.0	12.0	0.011	2.415	0.075	0.121	0.370	0.263	0.506	0.309	0.800	0.394
V21109.00-V21110.00	6277	345.0	12.0	0.013	2.625	0.075	0.118	0.372	0.259	0.506	0.303	0.802	0.386
V21110.00-V21118.00	1632	344.0	12.0	0.012	2.522	0.075	0.168	0.374	0.386	0.506	0.457	0.804	0.696
V21111.00-V21112.00	239	132.0	8.0	0.092	2.369	0.001	0.016	0.003	0.028	0.003	0.025	0.005	0.034
V21112.00-V21117.00	6141	235.0	8.0	0.172	3.239	0.003	0.023	0.006	0.044	0.004	0.033	0.008	0.050
V21113.00-V21114.00	6140	100.0	8.0	0.010	0.781	0.001	0.026	0.003	0.055	0.001	0.035	0.003	0.059
V21114.00-V21115.00	6465	350.0	8.0	0.008	0.699	0.001	0.029	0.005	0.061	0.002	0.042	0.006	0.068
V21115.00-V21116.00	6466	287.0	8.0	0.033	1.419	0.002	0.056	0.008	0.100	0.004	0.069	0.010	0.108
V21116.00-V21117.00	6467	60.0	8.0	0.003	0.428	0.003	0.056	0.011	0.102	0.005	0.070	0.013	0.110
V21117.00-V21118.00	6276	212.0	8.0	0.138	2.901	0.005	0.177	0.019	0.412	0.009	0.476	0.024	0.532
V21118.00-V21119.00	1631	402.0	8.0	0.008	0.699	0.080	0.225	0.395	0.519	0.515	0.611	0.830	0.697
V21119.00-V21163.00	2008	214.0	12.0	0.057	5.497	0.080	0.119	0.397	0.256	0.516	0.275	0.833	0.361
V21120.00-V21121.00	4557	321.0	8.0	0.037	1.502	0.001	0.021	0.003	0.034	0.002	0.025	0.004	0.036
V21121.00-V21125.00	238	85.0	8.0	0.064	1.976	0.002	0.033	0.006	0.061	0.002	0.039	0.007	0.065
V21122.00-V21123.00	5134	30.0	8.0	0.007	0.653	0.000	0.007	0.002	0.024	0.001	0.017	0.003	0.028
V21123.00-V21124.00	4556	269.0	8.0	0.082	2.236	0.001	0.024	0.005	0.059	0.002	0.039	0.007	0.067
V21124.00-V21125.00	6818	258.0	8.0	0.004	0.494	0.001	0.040	0.007	0.087	0.003	0.055	0.009	0.094
V21125.00-V21126.00	6817	147.0	8.0	0.020	1.104	0.004	0.041	0.016	0.084	0.006	0.052	0.018	0.089
V21126.00-V21127.00	1669	114.0	8.0	0.039	1.542	0.004	0.035	0.018	0.075	0.006	0.046	0.021	0.081
V21127.00-V21128.00	6139	212.0	8.0	0.064	1.976	0.004	0.036	0.021	0.074	0.007	0.045	0.024	0.078
V21128.00-V21131.00	2015	212.0	8.0	0.072	2.096	0.006	0.046	0.024	0.089	0.009	0.054	0.027	0.093
V21129.00-V21130.00	6800	101.0	8.0	0.025	1.235	0.001	0.023	0.003	0.042	0.001	0.022	0.003	0.041
V21130.00-V21131.00	2014	242.0	8.0	0.026	1.259	0.002	0.041	0.006	0.076	0.001	0.044	0.006	0.077
V21131.00-V21132.00	6749	203.0	8.0	0.038	1.522	0.009	0.059	0.033	0.109	0.011	0.067	0.036	0.113
V21132.00-V21134.00	6275	360.0	8.0	0.028	1.307	0.011	0.086	0.038	0.151	0.014	0.101	0.041	0.160
V21133.00-V21134.00	6294	103.1	8.0	0.041	1.581	0.002	0.067	0.004	0.111	0.002	0.077	0.004	0.117
V21134.00-V21135.00	2007	261.0	8.0	0.006	0.605	0.015	0.110	0.045	0.189	0.022	0.131	0.052	0.202
V21135.00-V21136.00	2006	165.0	8.0	0.006	0.605	0.016	0.122	0.049	0.207	0.023	0.144	0.056	0.221
V21136.00-V21137.00	2005	165.0	8.0	0.007	0.653	0.018	0.116	0.053	0.195	0.025	0.136	0.060	0.208
V21137.00-V21142.00	4147	25.0	8.0	0.004	0.494	0.019	0.131	0.056	0.225	0.026	0.152	0.063	0.237
V21138.00-V21140.00	6799	59.0	8.0	0.016	0.988	0.000	0.021	0.002	0.044	0.000	0.022	0.002	0.044

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V21139.00-V21140.00	5884	110.0	8.0	0.067	2.022	0.001	0.023	0.003	0.042	0.001	0.024	0.003	0.043
V21140.00-V21141.00	2013	176.0	8.0	0.029	1.330	0.002	0.031	0.008	0.056	0.002	0.033	0.008	0.057
V21141.00-V21142.00	6680	393.0	8.0	0.058	1.881	0.004	0.097	0.012	0.168	0.004	0.110	0.012	0.176
V21142.00-V21143.00	6679	167.0	8.0	0.006	0.605	0.023	0.132	0.070	0.227	0.030	0.151	0.078	0.239
V21143.00-V21144.00	5882	269.0	8.0	0.021	1.132	0.025	0.124	0.074	0.213	0.032	0.141	0.081	0.223
V21144.00-V21145.00	5883	337.0	8.0	0.005	0.552	0.024	0.142	0.076	0.247	0.032	0.161	0.083	0.259
V21145.00-V21146.00	4146	350.0	8.0	0.006	0.605	0.024	0.155	0.078	0.274	0.032	0.179	0.086	0.288
V21146.00-V21149.00	4145	102.0	8.0	0.006	0.605	0.024	0.137	0.080	0.242	0.032	0.155	0.088	0.252
V21147.00-V21148.00	6678	100.0	8.0	0.094	2.394	0.004	0.027	0.006	0.036	0.000	0.000	0.002	0.025
V21148.00-V21149.00	4144	320.0	8.0	0.046	1.675	0.004	0.068	0.008	0.113	0.000	0.054	0.004	0.109
V21149.00-V21150.00	4860	320.0	8.0	0.026	1.259	0.028	0.124	0.090	0.222	0.032	0.132	0.094	0.226
V21150.00-V21163.00	4859	310.0	8.0	0.006	0.605	0.028	0.189	0.092	0.380	0.032	0.335	0.096	0.479
V21151.00-V21152.00	5133	168.7	8.0	0.060	1.913	0.001	0.011	0.002	0.027	0.001	0.020	0.003	0.031
V21152.00-V21153.00	4555	57.0	8.0	0.055	1.832	0.001	0.014	0.005	0.039	0.002	0.027	0.006	0.044
V21153.00-V21154.00	237	56.0	8.0	0.027	1.283	0.001	0.015	0.007	0.043	0.002	0.026	0.009	0.047
V21154.00-V21159.00	6816	51.0	8.0	0.059	1.897	0.001	0.017	0.009	0.045	0.002	0.025	0.011	0.048
V21155.00-V21156.00	236	159.0	8.0	0.030	1.353	0.001	0.018	0.003	0.035	0.003	0.032	0.005	0.042
V21156.00-V21157.00	235	80.0	8.0	0.048	1.711	0.001	0.027	0.006	0.051	0.003	0.036	0.007	0.056
V21157.00-V21158.00	3055	88.0	8.0	0.026	1.259	0.002	0.026	0.008	0.052	0.003	0.033	0.009	0.056
V21158.00-V21159.00	1668	26.0	8.0	0.025	1.235	0.002	0.020	0.010	0.047	0.003	0.026	0.011	0.050
V21159.00-V21160.00	5288	186.0	8.0	0.195	3.449	0.003	0.025	0.022	0.062	0.006	0.035	0.025	0.066
V21160.00-V21161.00	6748	40.0	8.0	0.027	1.283	0.003	0.044	0.024	0.113	0.007	0.062	0.027	0.121
V21161.00-V21162.00	6274	5.0	8.0	0.007	0.653	0.003	0.040	0.026	0.105	0.007	0.057	0.030	0.111
V21162.00-V21163.00	6464	71.0	8.0	0.070	2.066	0.003	0.125	0.028	0.273	0.007	0.270	0.032	0.371
V21163.00-V21164.00	4858	370.0	12.0	0.019	3.174	0.111	0.127	0.518	0.271	0.554	0.280	0.962	0.373
V21164.00-V21173.00	4966	386.0	12.0	0.054	5.351	0.111	0.113	0.520	0.239	0.555	0.246	0.965	0.326
V21165.00-V21166.00	6271	130.0	8.0	0.009	0.741	0.002	0.028	0.004	0.040	0.003	0.035	0.005	0.045
V21166.00-V21167.00	6273	36.0	8.0	0.030	1.353	0.002	0.021	0.006	0.037	0.003	0.026	0.007	0.040
V21167.00-V21168.00	2012	252.0	8.0	0.089	2.330	0.002	0.026	0.009	0.046	0.004	0.032	0.010	0.049
V21168.00-V21171.00	6270	241.0	8.0	0.132	2.838	0.004	0.030	0.012	0.052	0.006	0.037	0.015	0.056
V21169.00-V21170.00	6267	41.0	8.0	0.035	1.461	0.001	0.015	0.003	0.028	0.001	0.019	0.003	0.030
V21170.00-V21171.00	6268	299.0	8.0	0.142	2.943	0.001	0.025	0.006	0.045	0.002	0.030	0.006	0.048
V21171.00-V21172.00	6269	241.0	8.0	0.024	1.210	0.006	0.035	0.020	0.064	0.009	0.043	0.023	0.068
V21172.00-V21173.00	4965	259.0	8.0	0.089	2.330	0.006	0.114	0.023	0.235	0.010	0.229	0.027	0.311
V21173.00-V21179.00	6134	47.0	12.0	0.011	2.415	0.117	0.113	0.544	0.239	0.565	0.243	0.994	0.324
V21174.00-V21175.00	4964	197.0	8.0	0.071	2.081	0.000	0.016	0.002	0.036	0.001	0.025	0.003	0.040
V21175.00-V21176.00	6522	91.0	8.0	0.026	1.259	0.001	0.025	0.005	0.048	0.002	0.031	0.006	0.051
V21176.00-V21177.00	6521	145.0	8.0	0.045	1.657	0.002	0.029	0.008	0.055	0.003	0.031	0.009	0.056
V21177.00-V21178.00	6133	155.0	8.0	0.043	1.620	0.003	0.043	0.011	0.083	0.003	0.046	0.012	0.085
V21178.00-V21179.00	1563	141.1	8.0	0.005	0.552	0.003	0.102	0.013	0.212	0.004	0.189	0.014	0.267
V21179.00-V21180.00	1562	221.0	12.0	0.063	5.780	0.120	0.133	0.559	0.284	0.569	0.285	1.010	0.388
V21180.00-V21181.00	1561	324.0	12.0	0.010	2.303	0.129	0.159	0.570	0.334	0.577	0.336	1.020	0.458
V21181.00-V21182.00	1111	326.0	12.0	0.016	2.913	0.135	0.146	0.578	0.301	0.585	0.303	1.030	0.409
V21182.00-V21189.00	6482	326.0	12.0	0.019	3.174	0.135	0.246	0.579	0.495	0.586	0.488	1.033	0.673
V21183.00-V21184.00	6132	265.0	8.0	0.040	1.562	0.002	0.042	0.004	0.057	0.003	0.048	0.005	0.061
V21184.00-V21185.00	1560	270.0	8.0	0.010	0.781	0.005	0.069	0.009	0.093	0.006	0.076	0.010	0.098
V21185.00-V21186.00	1559	305.0	8.0	0.004	0.494	0.007	0.092	0.013	0.123	0.008	0.104	0.015	0.132
V21186.00-V21187.00	1558	123.0	8.0	0.006	0.605	0.009	0.085	0.017	0.115	0.011	0.092	0.019	0.121
V21187.00-V21188.00	6265	320.0	8.0	0.056	1.848	0.016	0.115	0.035	0.177	0.016	0.124	0.034	0.183
V21187.A0-V21187.B0	4148	38.0	8.0	0.016	0.988	0.002	0.028	0.004	0.041	0.001	0.020	0.003	0.036
V21187.B0-V21187.C0	6262	53.1	8.0	0.022	1.158	0.003	0.031	0.007	0.046	0.001	0.022	0.005	0.041
V21187.C0-V21187.D0	6263	229.0	8.0	0.106	2.543	0.005	0.037	0.011	0.054	0.002	0.028	0.008	0.049
V21187.D0-V21187.00	6264	124.1	8.0	0.063	1.960	0.007	0.054	0.015	0.078	0.004	0.049	0.012	0.075
V21188.00-V21189.00	6266	330.0	8.0	0.004	0.494	0.028	0.344	0.072	0.629	0.036	0.592	0.079	0.636
V21188.A0-V21188.B0	3259	187.1	8.0	0.010	0.781	0.004	0.058	0.006	0.072	0.003	0.049	0.005	0.065

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V21188.B0-V21188.C0	3261	203.0	8.0	0.010	0.781	0.007	0.069	0.011	0.088	0.005	0.059	0.009	0.081
V21188.C0-V21188.D0	3262	72.9	8.0	0.010	0.781	0.009	0.074	0.015	0.097	0.006	0.065	0.012	0.091
V21188.D0-V21188.E0	3263	49.7	8.0	0.007	0.653	0.010	0.079	0.018	0.107	0.008	0.070	0.016	0.101
V21188.E0-V21188.F0	3264	98.2	8.0	0.032	1.397	0.010	0.060	0.021	0.083	0.008	0.053	0.019	0.079
V21188.F0-V21188.G0	3265	56.0	8.0	0.075	2.139	0.011	0.060	0.023	0.088	0.010	0.064	0.022	0.090
V21188.G0-V21188.H0	3266	117.7	8.0	0.011	0.819	0.011	0.083	0.025	0.125	0.014	0.093	0.029	0.132
V21188.H0-V21188.I0	3267	104.0	8.0	0.011	0.819	0.011	0.084	0.028	0.131	0.015	0.097	0.031	0.140
V21188.I0-V21188.J0	3268	143.2	8.0	0.010	0.781	0.011	0.087	0.030	0.139	0.016	0.105	0.035	0.151
V21188.J0-V21188.K0	2696	181.3	8.0	0.010	0.781	0.011	0.084	0.032	0.137	0.019	0.105	0.039	0.151
V21188.K0-V21188.00	2697	58.5	8.0	0.010	0.781	0.012	0.121	0.034	0.195	0.019	0.142	0.042	0.208
V21189.00-V21190.00	6480	230.0	12.0	0.002	1.030	0.165	0.262	0.654	0.523	0.627	0.511	1.120	0.708
V21190.00-V21191.00	5893	231.0	12.0	0.012	2.522	0.169	0.190	0.660	0.385	0.633	0.372	1.128	0.733
V21191.00-V21192.00	5895	370.0	8.0	0.014	0.924	0.194	0.547	0.686	0.818	0.640	0.803	1.137	1.000
V21192.00-V21193.00	3256	233.0	18.0	0.008	6.072	1.573	0.374	3.294	0.561	2.736	0.505	4.466	0.678
V21193.00-V21194.00	3257	230.0	18.0	0.008	6.072	1.575	0.338	3.298	0.501	2.741	0.453	4.473	0.599
V21194.00-V21195.00	6255	364.0	18.0	0.016	8.587	1.577	0.277	3.302	0.409	2.742	0.369	4.476	0.486
V21195.00-V21196.00	6254	298.0	18.0	0.020	9.601	1.632	0.361	3.439	0.554	2.833	0.491	4.652	0.699
V21196.00-V22147.00	7152	358.0	18.0	0.004	4.294	1.633	0.424	3.442	0.666	2.835	0.586	4.655	0.856
V22001.00-V22002.00	5885	115.0	8.0	0.026	1.259	0.001	0.032	0.003	0.056	0.003	0.049	0.005	0.067
V22002.00-V22003.00	403	161.0	8.0	0.004	0.494	0.001	0.055	0.006	0.101	0.004	0.080	0.008	0.116
V22003.00-V22004.00	402	285.0	8.0	0.004	0.494	0.002	0.047	0.008	0.090	0.006	0.074	0.012	0.106
V22004.00-V22006.00	5886	300.0	8.0	0.068	2.037	0.002	0.042	0.010	0.085	0.010	0.080	0.018	0.108
V22005.00-V22006.00	6629	84.0	8.0	0.018	1.048	0.001	0.042	0.003	0.080	0.002	0.069	0.004	0.096
V22006.00-V22007.00	5887	129.0	8.0	0.009	0.741	0.004	0.050	0.016	0.101	0.013	0.092	0.025	0.127
V22007.00-V22008.00	6534	203.0	8.0	0.044	1.638	0.005	0.039	0.019	0.076	0.014	0.066	0.029	0.092
V22008.00-V22009.00	4554	373.0	8.0	0.106	2.543	0.007	0.044	0.023	0.076	0.017	0.066	0.034	0.090
V22009.00-V22010.00	4578	313.0	8.0	0.063	1.960	0.010	0.079	0.028	0.131	0.022	0.113	0.040	0.154
V22010.00-V22012.00	5287	192.0	8.0	0.011	0.819	0.011	0.079	0.031	0.132	0.024	0.116	0.044	0.156
V22011.00-V22012.00	6630	210.0	8.0	0.147	2.994	0.002	0.032	0.003	0.055	0.005	0.054	0.007	0.069
V22012.00-V22013.00	6677	328.0	8.0	0.100	2.470	0.012	0.055	0.037	0.093	0.031	0.085	0.056	0.113
V22013.00-V22025.00	6631	301.0	8.0	0.058	1.881	0.013	0.142	0.040	0.241	0.034	0.213	0.060	0.290
V22015.00-V22016.00	5286	96.0	8.0	0.050	1.746	0.002	0.025	0.004	0.036	0.004	0.039	0.006	0.046
V22016.00-V22017.00	6676	293.0	8.0	0.125	2.761	0.003	0.043	0.007	0.061	0.010	0.067	0.014	0.080
V22017.00-V22018.00	6634	115.0	8.0	0.034	1.440	0.005	0.043	0.011	0.062	0.012	0.065	0.018	0.079
V22018.00-V22022.00	6295	21.1	8.0	0.028	1.307	0.005	0.055	0.014	0.089	0.013	0.082	0.021	0.107
V22019.00-V22020.00	4577	185.0	8.0	0.162	3.143	0.003	0.022	0.004	0.031	0.004	0.027	0.006	0.035
V22020.00-V22021.00	6299	170.0	8.0	0.128	2.794	0.003	0.027	0.007	0.041	0.005	0.036	0.009	0.047
V22021.00-V22022.00	6300	350.0	8.0	0.105	2.531	0.004	0.057	0.010	0.091	0.008	0.083	0.014	0.109
V22022.00-V22023.00	6643	54.2	8.0	0.005	0.552	0.010	0.093	0.026	0.152	0.022	0.136	0.038	0.181
V22023.00-V22025.00	6297	262.0	8.0	0.004	0.494	0.010	0.163	0.029	0.274	0.022	0.240	0.040	0.327
V22024.00-V22025.00	6298	204.0	8.0	0.176	3.276	0.002	0.120	0.003	0.203	0.002	0.177	0.004	0.242
V22025.00-V22027.00	6633	375.0	8.0	0.004	0.494	0.026	0.153	0.075	0.259	0.058	0.228	0.107	0.310
V22026.00-V22027.00	6632	210.0	8.0	0.135	2.870	0.002	0.050	0.003	0.082	0.002	0.071	0.004	0.096
V22027.00-V22028.00	4963	181.0	8.0	0.081	2.223	0.028	0.079	0.082	0.131	0.063	0.115	0.116	0.155
V22028.00-V22033.00	6520	194.0	8.0	0.110	2.590	0.030	0.086	0.085	0.142	0.065	0.123	0.121	0.166
V22029.00-V22031.00	6301	195.0	8.0	0.107	2.555	0.002	0.030	0.004	0.043	0.002	0.033	0.004	0.045
V22030.00-V22031.00	6302	200.0	8.0	0.061	1.929	0.002	0.032	0.004	0.046	0.002	0.035	0.004	0.048
V22031.00-V22032.00	6304	270.0	8.0	0.054	1.815	0.005	0.046	0.012	0.068	0.007	0.053	0.013	0.072
V22032.00-V22033.00	6519	29.0	8.0	0.006	0.605	0.006	0.074	0.014	0.119	0.009	0.099	0.017	0.135
V22033.00-V22034.00	6305	200.0	8.0	0.056	1.848	0.036	0.104	0.102	0.168	0.074	0.143	0.140	0.195
V22034.00-V22037.00	6306	358.0	8.0	0.041	1.581	0.041	0.116	0.109	0.184	0.076	0.156	0.144	0.212
V22035.00-V22036.00	6308	323.0	8.0	0.143	2.953	0.002	0.026	0.004	0.036	0.003	0.031	0.005	0.040
V22036.00-V22037.00	6307	275.0	8.0	0.078	2.181	0.004	0.076	0.008	0.117	0.006	0.100	0.010	0.134
V22037.00-V22039.00	6309	222.0	8.0	0.039	1.542	0.048	0.152	0.122	0.235	0.088	0.200	0.162	0.270
V22038.00-V22039.00	5892	254.0	8.0	0.035	1.461	0.007	0.116	0.009	0.168	0.007	0.145	0.010	0.189

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V22039.00-V22040.00	6720	130.0	8.0	0.011	0.819	0.058	0.187	0.137	0.286	0.100	0.244	0.179	0.328
V22040.00-V22041.00	6721	103.0	8.0	0.009	0.741	0.060	0.193	0.141	0.294	0.102	0.250	0.182	0.336
V22041.00-V22048.00	6722	169.0	8.0	0.010	0.781	0.064	0.273	0.147	0.437	0.107	0.345	0.190	0.490
V22042.00-V22043.00	6362	70.0	8.0	0.008	0.699	0.001	0.023	0.003	0.041	0.001	0.028	0.003	0.044
V22043.00-V22044.00	4962	75.0	8.0	0.061	1.929	0.003	0.026	0.007	0.040	0.003	0.027	0.007	0.041
V22044.00-V22045.00	6131	126.0	8.0	0.094	2.394	0.004	0.030	0.010	0.047	0.004	0.034	0.010	0.049
V22045.00-V22046.00	1110	265.0	8.0	0.134	2.859	0.006	0.049	0.014	0.070	0.008	0.057	0.016	0.076
V22046.00-V22047.00	5891	175.0	8.0	0.023	1.184	0.010	0.188	0.020	0.304	0.014	0.232	0.024	0.335
V22047.00-V22048.00	5890	25.0	12.0	0.004	1.456	0.321	0.221	0.864	0.366	0.494	0.276	1.038	0.405
V22048.00-V22049.00	6723	144.0	12.0	0.019	3.174	0.385	0.248	1.013	0.411	0.602	0.312	1.230	0.459
V22049.00-V22056.00	6724	340.0	12.0	0.013	2.625	0.389	0.290	1.019	0.475	0.611	0.362	1.241	0.529
V22050.00-V22052.00	6361	210.0	8.0	0.190	3.404	0.003	0.026	0.005	0.035	0.005	0.033	0.007	0.040
V22051.00-V22052.00	6359	139.0	8.0	0.011	0.819	0.001	0.031	0.003	0.047	0.002	0.040	0.004	0.053
V22052.00-V22054.00	1109	153.0	8.0	0.155	3.075	0.005	0.036	0.011	0.052	0.009	0.047	0.015	0.059
V22053.00-V22054.00	6358	188.0	8.0	0.005	0.552	0.001	0.038	0.003	0.058	0.004	0.060	0.006	0.073
V22054.00-V22055.00	6357	300.0	8.0	0.106	2.543	0.009	0.087	0.019	0.113	0.015	0.094	0.026	0.119
V22055.00-V22056.00	6356	225.0	8.0	0.005	0.552	0.020	0.303	0.032	0.468	0.021	0.362	0.033	0.511
V22056.00-V22075.00	4823	39.0	12.0	0.003	1.261	0.410	0.287	1.055	0.466	0.633	0.357	1.277	0.518
V22057.00-V22058.00	6368	252.0	6.0	0.006	0.281	0.002	0.057	0.004	0.082	0.002	0.064	0.004	0.086
V22058.00-V22059.00	6369	125.0	6.0	0.070	0.959	0.003	0.062	0.007	0.095	0.006	0.080	0.010	0.108
V22059.00-V22060.00	6130	73.0	6.0	0.006	0.281	0.004	0.085	0.010	0.137	0.007	0.111	0.013	0.154
V22060.00-V22061.00	6129	35.0	6.0	0.003	0.199	0.005	0.098	0.013	0.168	0.008	0.126	0.016	0.185
V22061.00-V22062.00	6128	270.0	6.0	0.006	0.281	0.005	0.095	0.016	0.159	0.009	0.122	0.019	0.177
V22062.00-V22068.00	6127	344.0	6.0	0.026	0.585	0.008	0.086	0.021	0.135	0.014	0.110	0.027	0.151
V22063.00-V22065.00	6364	125.0	6.0	0.005	0.256	0.002	0.078	0.004	0.112	0.003	0.084	0.005	0.116
V22064.00-V22065.00	6365	45.0	6.0	0.003	0.199	0.001	0.076	0.003	0.113	0.001	0.074	0.003	0.112
V22065.00-V22067.00	6366	176.0	6.0	0.006	0.281	0.005	0.107	0.011	0.168	0.006	0.118	0.012	0.175
V22066.00-V22067.00	6363	74.0	6.0	0.082	1.038	0.001	0.070	0.003	0.117	0.003	0.085	0.005	0.126
V22067.00-V22068.00	6171	106.0	6.0	0.005	0.256	0.006	0.105	0.016	0.170	0.009	0.125	0.019	0.183
V22068.00-V22072.00	1108	172.0	6.0	0.068	0.946	0.016	0.105	0.040	0.161	0.026	0.136	0.050	0.183
V22069.00-V22070.00	6370	345.0	6.0	0.028	0.607	0.002	0.047	0.004	0.064	0.004	0.062	0.006	0.076
V22070.00-V22071.00	4961	179.0	6.0	0.065	0.925	0.005	0.053	0.009	0.071	0.009	0.072	0.013	0.086
V22071.00-V22072.00	1106	277.0	6.0	0.118	1.246	0.007	0.088	0.014	0.128	0.014	0.117	0.020	0.149
V22072.00-V22074.00	4803	304.0	6.0	0.049	0.803	0.025	0.131	0.058	0.187	0.044	0.162	0.077	0.210
V22073.00-V22074.00	4822	404.0	6.0	-0.036	Adverse	0.009	0.570	0.011	0.596	0.007	0.583	0.013	0.606
V22074.00-V22075.00	4821	223.3	8.0	0.050	1.746	0.041	0.245	0.078	0.385	0.057	0.302	0.095	0.428
V22075.00-V22076.00	4820	301.0	12.0	0.018	3.089	0.451	0.282	1.134	0.458	0.690	0.350	1.374	0.732
V22076.00-V22077.00	4819	300.0	12.0	0.011	2.415	0.460	0.295	1.170	0.564	0.699	0.367	1.385	1.000
V22077.00-V22078.00	5646	261.0	12.0	0.013	2.625	0.460	0.342	1.138	0.823	0.703	0.427	1.391	1.000
V22078.00-V22095.00	6372	185.0	12.0	0.005	1.628	0.463	0.356	1.140	1.000	0.706	0.447	1.394	1.000
V22079.00-V22080.00	4486	132.0	8.0	0.055	1.832	0.000	0.005	0.002	0.031	0.000	0.009	0.002	0.032
V22080.00-V22081.00	6377	350.0	8.0	0.052	1.781	0.000	0.017	0.004	0.043	0.001	0.028	0.005	0.048
V22081.00-V22092.00	6375	361.0	8.0	0.046	1.675	0.001	0.053	0.008	0.086	0.004	0.070	0.011	0.097
V22082.00-V22083.00	6380	100.0	8.0	0.020	1.104	0.003	0.051	0.005	0.069	0.003	0.061	0.005	0.077
V22083.00-V22084.00	6379	237.0	8.0	0.006	0.605	0.004	0.057	0.008	0.079	0.006	0.071	0.010	0.090
V22084.00-V22087.00	6378	125.0	6.0	0.089	1.082	0.005	0.059	0.012	0.089	0.008	0.074	0.014	0.099
V22085.00-V22086.00	6698	332.0	6.0	0.010	0.363	0.002	0.050	0.006	0.088	0.003	0.063	0.007	0.095
V22085.A0-V22085.00	6697	114.0	6.0	0.011	0.380	0.001	0.047	0.003	0.084	0.002	0.057	0.004	0.089
V22086.00-V22087.00	4960	338.0	6.0	0.061	0.896	0.004	0.056	0.010	0.089	0.007	0.076	0.014	0.102
V22087.00-V22088.00	6170	145.0	6.0	0.081	1.032	0.009	0.095	0.024	0.147	0.016	0.122	0.031	0.166
V22088.00-V22089.00	6169	305.5	6.0	0.010	0.363	0.012	0.128	0.028	0.194	0.019	0.160	0.036	0.216
V22089.00-V22091.00	1105	225.0	6.0	0.030	0.628	0.015	0.107	0.034	0.157	0.023	0.130	0.041	0.173
V22090.00-V22091.00	6374	100.0	6.0	-0.019	Adverse	0.003	0.541	0.006	0.559	0.005	0.549	0.007	0.564
V22091.00-V22092.00	4802	235.0	6.0	0.164	1.469	0.020	0.096	0.043	0.141	0.029	0.118	0.052	0.156
V22092.00-V22093.00	4818	361.0	8.0	0.046	1.675	0.023	0.112	0.054	0.562	0.037	0.140	0.068	0.569

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V22093.00-V22094.00	5645	249.0	8.0	0.009	0.741	0.024	0.126	0.083	1.000	0.040	0.161	0.114	1.000
V22094.00-V22095.00	6644	18.5	8.0	0.003	0.428	0.025	0.288	0.200	1.000	0.046	0.369	0.210	1.000
V22095.00-V22096.00	6371	220.0	10.0	0.013	1.615	0.488	0.457	1.198	1.000	0.748	0.598	1.470	1.000
V22096.00-V22097.00	5387	399.0	10.0	0.004	0.896	0.488	0.564	1.200	1.000	0.747	0.862	1.474	1.000
V22097.00-V22098.00	5386	292.0	10.0	0.003	0.776	0.488	0.712	1.201	1.000	0.747	1.000	1.476	1.000
V22098.00-V22099.00	3063	286.0	10.0	0.003	0.776	0.488	0.535	1.203	0.687	0.747	0.645	1.478	0.709
V22099.00-V22145.00	3064	413.0	10.0	0.082	4.055	0.488	0.330	1.205	0.687	0.747	0.420	1.480	0.709
V22100.00-V22101.00	5285	226.0	8.0	0.149	3.015	0.000	0.013	0.002	0.027	0.001	0.022	0.003	0.032
V22101.00-V22102.00	6675	243.0	8.0	0.134	2.859	0.001	0.023	0.006	0.041	0.004	0.037	0.008	0.050
V22102.00-V22109.00	4857	401.0	8.0	0.056	1.848	0.003	0.046	0.009	0.077	0.008	0.071	0.014	0.094
V22103.00-V22104.00	7150	143.0	8.0	-0.413	Adverse	0.004	0.513	0.003	0.521	0.005	0.518	0.004	0.524
V22104.00-V22105.00	5284	327.0	8.0	0.061	1.929	0.002	0.027	0.006	0.044	0.004	0.039	0.009	0.051
V22105.00-V22108.00	6674	392.0	8.0	0.104	2.519	0.004	0.038	0.010	0.061	0.008	0.053	0.015	0.071
V22106.00-V22107.00	7151	121.0	8.0	-0.252	Adverse	0.001	0.512	0.003	0.521	0.003	0.515	0.004	0.522
V22107.00-V22108.00	6673	303.0	8.0	0.055	1.832	0.002	0.035	0.006	0.059	0.003	0.047	0.007	0.066
V22108.00-V22109.00	4856	253.0	8.0	0.046	1.675	0.007	0.055	0.019	0.090	0.014	0.080	0.026	0.107
V22109.00-V22112.00	4959	198.0	8.0	0.034	1.440	0.011	0.063	0.032	0.103	0.025	0.092	0.046	0.122
V22110.00-V22111.00	6671	215.0	8.0	0.037	1.502	0.001	0.022	0.003	0.035	0.003	0.033	0.005	0.042
V22111.00-V22112.00	4958	258.0	8.0	0.123	2.739	0.002	0.043	0.007	0.068	0.005	0.060	0.009	0.080
V22112.00-V22114.00	1564	350.0	8.0	0.066	2.006	0.016	0.072	0.042	0.111	0.033	0.094	0.059	0.126
V22113.00-V22114.00	6186	221.0	8.0	0.010	0.781	0.008	0.077	0.010	0.101	0.002	0.068	0.004	0.093
V22114.00-V22116.00	6292	61.0	6.0	0.037	0.698	0.025	0.112	0.055	0.167	0.036	0.135	0.067	0.183
V22115.00-V22116.00	7610	200.0	6.0	0.129	1.302	0.001	0.069	0.006	0.109	0.004	0.088	0.008	0.122
V22115.A0-V22115.00	7611	49.0	6.0	-0.009	Adverse	0.001	0.513	0.004	0.523	0.003	0.519	0.005	0.528
V22116.00-V22117.00	1104	370.0	8.0	0.053	1.798	0.027	0.100	0.064	0.148	0.040	0.117	0.077	0.159
V22117.00-V22119.00	4485	364.0	8.0	0.018	1.048	0.033	0.108	0.072	0.157	0.045	0.125	0.084	0.169
V22118.00-V22119.00	1103	194.0	6.0	0.067	0.939	0.002	0.038	0.005	0.050	0.004	0.048	0.006	0.058
V22119.00-V22123.00	5769	364.0	8.0	0.049	1.729	0.036	0.111	0.079	0.159	0.053	0.132	0.096	0.174
V22120.00-V22121.00	7149	103.0	6.0	-0.293	Adverse	0.003	0.517	0.003	0.531	0.008	0.542	0.010	0.548
V22121.00-V22122.00	6168	122.0	6.0	0.049	0.803	0.002	0.036	0.006	0.061	0.009	0.074	0.013	0.089
V22122.00-V22123.00	1102	237.0	6.0	0.123	1.272	0.003	0.037	0.009	0.061	0.011	0.065	0.017	0.081
V22123.00-V22124.00	4801	364.0	8.0	0.038	1.522	0.048	0.123	0.099	0.175	0.067	0.143	0.118	0.189
V22124.00-V22125.00	5644	334.0	8.0	0.039	1.542	0.052	0.173	0.106	0.246	0.069	0.197	0.122	0.264
V22125.00-V22131.00	5851	387.0	8.0	0.004	0.494	0.054	0.225	0.110	0.323	0.071	0.254	0.126	0.345
V22126.00-V22127.00	589	154.0	8.0	0.075	2.139	0.001	0.011	0.002	0.038	0.004	0.044	0.006	0.058
V22127.00-V22128.00	1123	165.0	8.0	0.012	0.856	0.000	0.024	0.004	0.054	0.004	0.052	0.009	0.071
V22128.00-V22129.00	5850	197.0	8.0	0.037	1.502	0.003	0.065	0.009	0.092	0.007	0.071	0.013	0.096
V22129.00-V22130.00	5849	177.0	8.0	0.004	0.494	0.010	0.100	0.018	0.145	0.009	0.097	0.017	0.153
V22130.00-V22131.00	5848	40.0	8.0	0.002	0.349	0.010	0.167	0.020	0.246	0.009	0.179	0.019	0.264
V22131.00-V22132.00	5847	403.0	8.0	0.009	0.741	0.064	0.196	0.132	0.281	0.080	0.219	0.148	0.298
V22132.00-V22133.00	5846	139.0	8.0	0.021	1.132	0.064	0.180	0.134	0.260	0.080	0.195	0.150	0.271
V22133.00-V22134.00	5845	96.2	6.0	0.017	0.473	0.072	0.305	0.146	0.450	0.080	0.332	0.154	0.472
V22133.A0-V22133.00	5998	176.3	6.0	0.002	0.162	0.000	0.133	0.002	0.231	0.000	0.140	0.002	0.237
V22134.00-V22136.00	1258	54.0	6.0	0.005	0.256	0.072	0.390	0.148	0.590	0.088	0.417	0.164	0.615
V22135.00-V22136.00	2434	124.0	6.0	0.002	0.162	0.000	0.217	0.006	0.417	0.000	0.225	0.006	0.436
V22135.A0-V22135.B0	587	102.8	6.0	0.002	0.162	0.000	0.000	0.002	0.094	0.000	0.000	0.002	0.094
V22135.B0-V22135.00	7620	178.5	6.0	0.002	0.162	0.000	0.000	0.004	0.141	0.000	0.000	0.004	0.150
V22136.00-V22144.00	1124	425.0	6.0	0.008	0.324	0.072	0.319	0.157	0.485	0.088	0.354	0.172	0.513
V22137.00-V22138.00	6382	590.0	6.0	0.015	0.444	0.005	0.086	0.007	0.103	0.010	0.118	0.012	0.131
V22138.00-V22139.00	5843	109.0	6.0	0.010	0.363	0.005	0.084	0.009	0.111	0.010	0.115	0.014	0.136
V22139.00-V22140.00	6381	180.9	6.0	0.020	0.513	0.005	0.071	0.011	0.108	0.010	0.098	0.016	0.126
V22140.00-V22144.00	1129	54.0	6.0	0.013	0.413	0.005	0.138	0.013	0.209	0.010	0.178	0.018	0.237
V22141.00-V22142.00	1127	300.0	6.0	0.020	0.513	0.000	0.000	0.002	0.055	0.000	0.078	0.002	0.106
V22142.00-V22143.00	1125	152.0	6.0	0.020	0.513	0.000	0.000	0.004	0.079	0.027	0.173	0.031	0.189
V22143.00-V22144.00	1126	500.0	6.0	0.009	0.344	0.000	0.102	0.006	0.200	0.027	0.224	0.033	0.278

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V22144.00-V22145.00	1130	303.0	10.0	0.029	2.411	0.077	0.275	0.178	0.592	0.125	0.352	0.226	0.603
V22146.00-V22147.00	6253	223.0	6.0	0.011	0.380	0.003	0.531	0.005	0.540	0.006	0.543	0.008	0.550
V22147.00-V22148.00	6635	354.8	18.0	0.005	4.801	1.636	0.392	3.448	0.603	2.841	0.536	4.665	0.744
V22148.00-V22149.00	4800	486.0	18.0	0.013	7.741	1.636	0.307	3.450	0.457	2.842	0.410	4.667	0.544
V22149.00-V22155.00	4817	405.0	18.0	0.041	13.747	1.636	0.258	3.452	0.380	2.843	0.343	4.671	0.450
V22150.00-V22151.00	6837	169.0	8.0	0.012	0.856	0.000	0.037	0.002	0.061	0.001	0.032	0.003	0.051
V22151.00-V22152.00	4799	214.0	8.0	0.016	0.988	0.011	0.079	0.015	0.093	0.002	0.075	0.006	0.093
V22152.00-V22153.00	4737	77.0	8.0	0.012	0.856	0.013	0.084	0.019	0.103	0.026	0.117	0.032	0.131
V22153.00-V22154.00	5643	300.0	8.0	0.014	0.924	0.013	0.084	0.021	0.107	0.026	0.117	0.035	0.134
V22154.00-V22155.00	5642	235.0	8.0	0.017	1.018	0.015	0.360	0.025	0.526	0.029	0.483	0.039	0.567
V22155.00-V22156.00	5640	354.0	18.0	0.019	9.358	1.655	0.347	3.482	0.531	2.873	0.472	4.712	0.749
V22156.00-V22157.C0	7691	196.0	18.0	0.005	4.801	1.655	0.437	3.483	0.692	2.873	0.606	4.714	1.000
V22157.00-V22158.00	5842	426.0	18.0	0.004	4.294	1.655	0.524	3.487	0.812	2.875	0.718	4.719	1.000
V22157.C0-V22157.00	7279	235.7	18.0	0.003	3.718	1.655	0.448	3.486	0.713	2.874	0.624	4.717	1.000
V22158.00-V22159.00	5841	430.0	18.0	0.003	3.718	1.655	0.424	3.489	0.638	2.875	0.571	4.721	0.700
V22159.00-V22161.00	2433	162.0	18.0	0.037	13.059	1.655	0.230	3.490	0.337	2.875	0.305	4.723	0.397
V22160.00-V22161.00	6838	240.0	18.0	0.002	3.036	0.000	0.114	0.006	0.184	0.000	0.151	0.012	0.234
V22161.00-V22162.00	5619	169.0	18.0	0.039	13.407	1.655	0.349	3.498	0.591	2.875	0.483	4.727	0.697
V23231.00-V22047.00	6951	210.0	12.0	0.018	3.089	0.311	0.214	0.842	0.356	0.480	0.266	1.012	0.393
V23001.00-V23002.00	6202	114.0	8.0	0.049	1.729	0.001	0.015	0.003	0.030	0.002	0.022	0.004	0.034
V23002.00-V23003.00	6203	103.0	8.0	0.047	1.693	0.001	0.021	0.005	0.042	0.002	0.028	0.006	0.045
V23003.00-V23004.00	6204	251.0	8.0	0.046	1.675	0.002	0.030	0.008	0.053	0.003	0.034	0.010	0.056
V23004.00-V23005.00	6205	190.0	8.0	0.059	1.897	0.004	0.036	0.012	0.064	0.004	0.041	0.012	0.067
V23005.00-V23007.00	6206	315.0	8.0	0.032	1.397	0.004	0.064	0.015	0.116	0.006	0.079	0.017	0.125
V23006.00-V23007.00	6207	75.0	8.0	0.003	0.428	0.000	0.055	0.002	0.107	0.000	0.066	0.002	0.113
V23007.00-V23008.00	1667	256.0	8.0	0.008	0.699	0.006	0.063	0.020	0.115	0.009	0.078	0.023	0.123
V23008.00-V23009.00	5283	342.0	8.0	0.098	2.445	0.007	0.042	0.023	0.074	0.010	0.050	0.027	0.079
V23009.00-V23025.00	6670	118.0	8.0	0.059	1.897	0.008	0.071	0.026	0.131	0.011	0.086	0.030	0.139
V23010.00-V23011.00	4576	190.0	8.0	0.089	2.330	0.001	0.019	0.003	0.031	0.006	0.036	0.008	0.044
V23011.00-V23012.00	1666	163.0	8.0	0.067	2.022	0.002	0.026	0.006	0.044	0.008	0.045	0.012	0.057
V23012.00-V23013.00	5280	152.0	8.0	0.068	2.037	0.002	0.029	0.009	0.053	0.008	0.049	0.014	0.066
V23013.00-V23014.00	6798	133.0	8.0	0.044	1.638	0.003	0.038	0.011	0.073	0.009	0.064	0.017	0.089
V23014.00-V23015.C0	6210	293.0	8.0	0.011	0.819	0.003	0.047	0.013	0.094	0.010	0.077	0.020	0.111
V23015.00-V23016.00	6797	147.0	8.0	0.010	0.781	0.005	0.056	0.024	0.117	0.013	0.089	0.032	0.135
V23015.A0-V23015.B0	6208	230.0	8.0	0.134	2.859	0.002	0.018	0.003	0.033	0.002	0.026	0.004	0.038
V23015.B0-V23015.C0	6209	60.0	8.0	0.025	1.235	0.001	0.036	0.006	0.071	0.003	0.055	0.007	0.081
V23015.C0-V23015.00	6212	293.0	8.0	0.009	0.741	0.005	0.062	0.021	0.128	0.013	0.099	0.029	0.148
V23016.00-V23021.00	2011	138.0	8.0	0.072	2.096	0.006	0.044	0.026	0.087	0.014	0.062	0.034	0.096
V23017.00-V23018.00	6796	87.0	8.0	0.020	1.104	0.001	0.023	0.003	0.040	0.001	0.023	0.003	0.039
V23018.00-V23019.00	6795	105.0	8.0	0.046	1.675	0.002	0.026	0.006	0.045	0.002	0.026	0.006	0.045
V23019.00-V23020.00	2010	197.0	8.0	0.066	2.006	0.003	0.047	0.009	0.071	0.003	0.044	0.009	0.072
V23020.00-V23021.00	6747	248.0	8.0	0.008	0.699	0.005	0.058	0.013	0.094	0.005	0.063	0.013	0.099
V23021.00-V23025.00	6293	123.9	8.0	0.070	2.066	0.011	0.073	0.042	0.138	0.019	0.092	0.050	0.149
V23022.00-V23023.00	6213	62.0	8.0	0.029	1.330	0.001	0.018	0.003	0.036	0.001	0.019	0.003	0.036
V23023.00-V23024.00	6746	110.0	8.0	0.034	1.440	0.001	0.025	0.005	0.049	0.001	0.025	0.005	0.049
V23024.00-V23025.00	6669	165.0	8.0	0.034	1.440	0.002	0.063	0.008	0.118	0.002	0.073	0.008	0.124
V23025.00-V23027.00	4143	281.1	8.0	0.020	1.104	0.021	0.098	0.079	0.186	0.033	0.121	0.091	0.199
V23026.00-V23027.00	6197	118.0	6.0	0.007	0.303	0.001	0.088	0.003	0.162	0.001	0.100	0.003	0.170
V23027.00-V23028.00	4855	270.0	8.0	0.021	1.132	0.023	0.099	0.085	0.186	0.035	0.121	0.097	0.198
V23028.00-V23039.00	6193	254.0	8.0	0.026	1.259	0.026	0.109	0.089	0.198	0.038	0.131	0.102	0.211
V23029.00-V23030.00	6839	120.0	8.0	0.067	2.022	0.000	0.015	0.002	0.034	0.001	0.024	0.003	0.038
V23030.00-V23031.00	6840	200.0	8.0	0.040	1.562	0.001	0.021	0.005	0.042	0.002	0.031	0.007	0.047
V23031.00-V23033.00	6559	143.0	8.0	0.091	2.356	0.002	0.027	0.008	0.050	0.004	0.037	0.011	0.055
V23032.00-V23033.00	6558	144.0	8.0	0.039	1.542	0.001	0.027	0.003	0.046	0.002	0.034	0.004	0.050
V23033.00-V23034.00	6560	200.0	8.0	0.081	2.223	0.004	0.032	0.014	0.058	0.007	0.042	0.018	0.063

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V23034.00-V23036.00	6564	260.0	8.0	0.035	1.461	0.006	0.047	0.023	0.082	0.011	0.059	0.027	0.089
V23034.A0-V23034.B0	6562	182.1	8.0	0.002	0.349	0.001	0.053	0.003	0.090	0.002	0.069	0.004	0.100
V23034.B0-V23034.00	6645	46.3	8.0	0.001	0.247	0.002	0.049	0.006	0.085	0.003	0.061	0.007	0.092
V23035.00-V23036.00	6561	375.0	8.0	0.051	1.764	0.002	0.045	0.005	0.072	0.003	0.053	0.005	0.077
V23036.00-V23037.00	6565	260.0	8.0	0.039	1.542	0.010	0.056	0.030	0.097	0.015	0.069	0.035	0.104
V23037.00-V23038.00	6191	97.0	8.0	0.050	1.746	0.011	0.052	0.033	0.088	0.015	0.062	0.038	0.094
V23038.00-V23039.00	6192	114.0	8.0	0.064	1.976	0.012	0.085	0.036	0.152	0.017	0.103	0.042	0.163
V23039.00-V23040.00	6194	167.0	8.0	0.026	1.259	0.038	0.125	0.128	0.221	0.056	0.147	0.147	0.234
V23040.00-V23067.00	6195	309.0	8.0	0.024	1.210	0.039	0.123	0.132	0.222	0.058	0.153	0.150	0.239
V23041.00-V23042.00	2478	217.0	8.0	0.020	1.104	0.001	0.015	0.003	0.026	0.002	0.019	0.004	0.029
V23042.00-V23043.00	401	197.0	8.0	0.061	1.929	0.002	0.024	0.006	0.041	0.003	0.030	0.007	0.045
V23043.00-V23044.00	6533	248.0	8.0	0.118	2.683	0.003	0.033	0.009	0.060	0.004	0.057	0.011	0.076
V23044.00-V23045.00	5132	223.0	8.0	0.050	1.746	0.005	0.043	0.019	0.076	0.022	0.092	0.037	0.100
V23044.A0-V23044.B0	338	3.0	8.0	0.003	0.428	0.000	0.011	0.002	0.026	0.015	0.050	0.017	0.055
V23044.B0-V23044.C0	6214	306.0	8.0	0.163	3.153	0.002	0.016	0.005	0.034	0.016	0.053	0.020	0.060
V23044.C0-V23044.00	6215	84.0	8.0	0.062	1.945	0.001	0.029	0.008	0.058	0.018	0.069	0.024	0.085
V23045.00-V23048.00	4240	295.0	8.0	0.090	2.343	0.005	0.040	0.022	0.076	0.034	0.084	0.043	0.102
V23046.00-V23047.00	234	227.0	8.0	0.100	2.470	0.002	0.502	0.004	0.503	0.003	0.503	0.005	0.504
V23047.00-V23048.00	4575	292.0	8.0	-0.490	Adverse	0.005	0.522	0.014	0.542	0.020	0.543	0.019	0.555
V23048.00-V23051.00	1665	175.0	8.0	0.074	2.125	0.008	0.054	0.030	0.100	0.032	0.098	0.054	0.128
V23049.00-V23050.00	6216	292.0	8.0	0.088	2.317	0.002	0.021	0.004	0.030	0.002	0.025	0.005	0.033
V23050.00-V23051.00	6217	131.0	8.0	0.180	3.313	0.003	0.042	0.007	0.073	0.004	0.066	0.008	0.089
V23051.00-V23052.00	5279	232.0	8.0	0.032	1.397	0.011	0.065	0.040	0.118	0.036	0.113	0.065	0.148
V23052.00-V23053.00	6794	128.0	8.0	0.033	1.419	0.012	0.066	0.043	0.120	0.038	0.113	0.068	0.150
V23053.00-V23059.00	6793	120.0	8.0	0.035	1.461	0.013	0.071	0.046	0.131	0.039	0.116	0.071	0.159
V23054.00-V23055.00	6224	150.0	8.0	0.003	0.428	0.001	0.037	0.003	0.060	0.001	0.043	0.004	0.064
V23055.00-V23056.00	1664	264.0	8.0	0.040	1.562	0.002	0.032	0.007	0.051	0.003	0.038	0.008	0.055
V23056.00-V23057.00	5278	264.0	8.0	0.042	1.601	0.004	0.035	0.010	0.057	0.005	0.041	0.011	0.060
V23057.00-V23059.00	6792	64.0	8.0	0.030	1.353	0.004	0.056	0.013	0.099	0.006	0.081	0.014	0.114
V23058.00-V23059.00	6791	114.0	8.0	0.005	0.552	0.001	0.047	0.003	0.087	0.001	0.070	0.003	0.101
V23059.00-V23060.00	6219	258.0	8.0	0.050	1.746	0.018	0.071	0.063	0.130	0.045	0.111	0.090	0.155
V23060.00-V23061.00	6220	123.0	8.0	0.059	1.897	0.018	0.075	0.066	0.138	0.046	0.117	0.093	0.163
V23061.00-V23062.00	6221	233.0	8.0	0.031	1.375	0.020	0.083	0.069	0.152	0.048	0.128	0.097	0.180
V23062.00-V23063.00	6222	146.0	8.0	0.038	1.522	0.021	0.124	0.073	0.225	0.050	0.190	0.101	0.266
V23063.00-V23065.00	6223	155.0	8.0	0.006	0.605	0.022	0.129	0.076	0.233	0.052	0.193	0.105	0.274
V23064.00-V23065.00	6198	35.0	8.0	0.008	0.699	0.001	0.061	0.003	0.107	0.001	0.081	0.003	0.119
V23065.00-V23066.00	6199	352.0	8.0	0.032	1.397	0.025	0.098	0.083	0.174	0.053	0.141	0.111	0.201
V23066.00-V23067.00	6200	247.0	8.0	0.023	1.184	0.027	0.113	0.087	0.201	0.056	0.153	0.116	0.226
V23067.00-V23068.00	6225	74.0	8.0	0.039	1.542	0.067	0.184	0.222	0.341	0.115	0.243	0.269	0.382
V23068.00-V23086.00	6227	155.0	8.0	0.004	0.494	0.067	0.246	0.224	0.464	0.116	0.323	0.272	0.519
V23069.00-V23070.00	6647	62.8	8.0	0.002	0.349	0.001	0.039	0.003	0.075	0.001	0.054	0.003	0.084
V23070.00-V23071.00	6228	99.0	8.0	0.002	0.349	0.001	0.047	0.006	0.086	0.003	0.064	0.007	0.096
V23071.00-V23072.00	6230	182.0	8.0	0.006	0.605	0.003	0.057	0.009	0.098	0.005	0.073	0.011	0.108
V23072.00-V23073.00	6231	125.0	8.0	0.003	0.428	0.004	0.068	0.012	0.117	0.006	0.084	0.014	0.127
V23073.00-V23074.00	6232	162.0	8.0	0.004	0.494	0.005	0.079	0.015	0.131	0.008	0.095	0.018	0.141
V23074.00-V23075.00	6233	175.0	8.0	0.004	0.494	0.006	0.079	0.019	0.132	0.009	0.093	0.022	0.141
V23075.00-V23076.C0	6234	170.0	8.0	0.007	0.653	0.006	0.087	0.021	0.156	0.009	0.103	0.024	0.165
V23076.00-V23077.00	6317	136.0	8.0	0.003	0.428	0.009	0.094	0.031	0.174	0.012	0.109	0.034	0.182
V23076.A0-V23076.B0	6311	140.0	8.0	0.117	2.671	0.001	0.020	0.003	0.032	0.002	0.023	0.004	0.034
V23076.B0-V23076.C0	6312	67.0	8.0	0.035	1.461	0.002	0.063	0.006	0.114	0.003	0.074	0.007	0.120
V23076.C0-V23076.00	6313	170.0	8.0	0.002	0.349	0.009	0.114	0.029	0.211	0.012	0.133	0.032	0.221
V23077.00-V23079.00	6316	177.0	8.0	0.025	1.235	0.010	0.101	0.035	0.179	0.014	0.116	0.039	0.188
V23078.00-V23079.00	6315	308.0	6.0	0.142	1.367	0.002	0.107	0.004	0.183	0.003	0.122	0.005	0.192
V23079.00-V23084.00	6318	193.0	8.0	0.005	0.552	0.013	0.106	0.042	0.184	0.018	0.122	0.047	0.194
V23080.00-V23081.00	6236	130.0	8.0	0.036	1.482	0.001	0.024	0.003	0.037	0.003	0.032	0.005	0.042

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V23081.00-V23082.00	6235	75.0	8.0	0.040	1.562	0.002	0.026	0.006	0.043	0.004	0.035	0.008	0.048
V23082.00-V23083.00	6649	293.4	8.0	0.075	2.139	0.003	0.031	0.009	0.051	0.006	0.041	0.012	0.057
V23083.00-V23084.00	6648	208.7	8.0	0.080	2.209	0.005	0.054	0.013	0.090	0.008	0.065	0.016	0.097
V23084.00-V23085.00	6650	216.1	8.0	0.049	1.729	0.019	0.099	0.058	0.172	0.027	0.117	0.066	0.183
V23085.00-V23086.00	6646	41.2	8.0	0.003	0.428	0.019	0.186	0.060	0.341	0.027	0.233	0.068	0.374
V23086.00-V23093.00	6571	160.0	8.0	0.007	0.653	0.087	0.268	0.286	0.514	0.143	0.346	0.342	0.573
V23087.00-V23088.00	6577	291.0	6.0	0.054	0.843	0.001	0.035	0.003	0.055	0.001	0.042	0.003	0.060
V23088.00-V23089.00	6576	186.0	6.0	0.051	0.819	0.004	0.062	0.008	0.091	0.006	0.080	0.010	0.103
V23089.00-V23091.00	6651	146.8	8.0	0.014	0.924	0.005	0.052	0.011	0.077	0.008	0.064	0.014	0.085
V23090.00-V23091.00	6573	310.0	8.0	0.143	2.953	0.002	0.033	0.004	0.048	0.002	0.037	0.004	0.050
V23091.00-V23092.00	6575	230.0	8.0	0.064	1.976	0.008	0.056	0.018	0.083	0.011	0.064	0.021	0.088
V23092.00-V23093.00	6574	50.0	8.0	0.010	0.781	0.010	0.178	0.022	0.331	0.013	0.225	0.025	0.368
V23093.00-V23094.00	6579	147.0	8.0	0.005	0.552	0.102	0.358	0.336	0.676	0.164	0.457	0.399	0.749
V23093.A0-V23093.B0	6240	65.0	8.0	0.005	0.552	0.001	0.034	0.003	0.061	0.002	0.047	0.004	0.069
V23093.B0-V23093.D0	6241	123.0	8.0	0.006	0.605	0.001	0.040	0.006	0.082	0.003	0.054	0.007	0.089
V23093.C0-V23093.D0	6242	64.0	8.0	0.021	1.132	0.001	0.031	0.003	0.064	0.001	0.038	0.003	0.067
V23093.D0-V23093.E0	6566	84.0	8.0	0.005	0.552	0.002	0.048	0.010	0.100	0.004	0.060	0.012	0.106
V23093.E0-V23093.F0	6567	53.9	8.0	0.004	0.494	0.003	0.053	0.013	0.111	0.004	0.066	0.015	0.117
V23093.F0-V23093.G0	6568	158.3	8.0	0.005	0.552	0.003	0.055	0.016	0.119	0.005	0.072	0.018	0.127
V23093.G0-V23093.H0	6569	40.0	8.0	0.003	0.428	0.003	0.056	0.018	0.126	0.006	0.075	0.021	0.136
V23093.H0-V23093.J0	6570	53.0	8.0	0.004	0.494	0.004	0.064	0.020	0.142	0.007	0.083	0.023	0.151
V23093.I0-V23093.J0	6238	165.5	6.0	0.005	0.256	0.001	0.070	0.003	0.140	0.001	0.082	0.003	0.146
V23093.J0-V23093.00	6239	300.0	6.0	0.006	0.281	0.005	0.241	0.026	0.478	0.008	0.309	0.029	0.529
V23094.00-V23100.00	6580	150.0	8.0	0.005	0.552	0.102	0.281	0.339	0.518	0.165	0.356	0.402	0.568
V23095.00-V23096.00	6845	200.0	6.0	0.011	0.380	0.002	0.049	0.004	0.071	0.003	0.063	0.005	0.081
V23096.00-V23097.00	6745	82.0	6.0	0.067	0.939	0.002	0.033	0.007	0.053	0.004	0.042	0.008	0.059
V23097.00-V23099.00	6846	203.0	6.0	0.236	1.762	0.004	0.056	0.010	0.092	0.006	0.067	0.012	0.099
V23098.00-V23099.00	6847	165.0	6.0	0.045	0.769	0.001	0.051	0.003	0.087	0.001	0.059	0.003	0.091
V23099.00-V23100.00	6848	75.0	8.0	0.009	0.741	0.005	0.098	0.016	0.173	0.007	0.120	0.018	0.187
V23100.00-V23101.00	6849	87.0	8.0	0.063	1.960	0.108	0.167	0.357	0.305	0.172	0.211	0.422	0.333
V23101.00-V23102.00	6941	256.0	8.0	0.027	1.283	0.109	0.198	0.360	0.365	0.174	0.250	0.425	0.399
V23102.00-V23103.00	6942	260.0	8.0	0.028	1.307	0.111	0.197	0.364	0.361	0.176	0.248	0.430	0.394
V23103.00-V23105.00	6583	261.0	8.0	0.031	1.375	0.113	0.353	0.369	0.677	0.180	0.451	0.435	0.694
V23104.00-V23105.00	6582	164.0	8.0	0.002	0.349	0.001	0.273	0.004	0.759	0.002	0.411	0.008	0.957
V23105.00-V23132.00	6585	270.0	8.0	0.002	0.349	0.115	0.377	0.375	0.728	0.182	0.477	0.442	0.749
V23106.00-V23107.00	757	125.0	8.0	0.069	2.052	0.001	0.017	0.005	0.037	0.001	0.020	0.005	0.039
V23106.A0-V23106.00	756	10.0	8.0	0.001	0.247	0.001	0.021	0.003	0.036	0.001	0.023	0.003	0.037
V23107.00-V23108.00	2477	168.0	8.0	0.121	2.717	0.001	0.021	0.008	0.042	0.002	0.026	0.008	0.044
V23108.00-V23109.00	6532	387.0	8.0	0.137	2.891	0.003	0.027	0.011	0.049	0.004	0.033	0.013	0.052
V23109.00-V23112.00	1663	64.0	8.0	0.046	1.675	0.004	0.036	0.015	0.064	0.006	0.045	0.017	0.070
V23110.00-V23111.00	4574	287.0	8.0	0.048	1.711	0.002	0.027	0.004	0.041	0.005	0.041	0.007	0.050
V23111.00-V23112.00	1661	156.0	8.0	0.043	1.620	0.002	0.036	0.007	0.061	0.006	0.049	0.010	0.069
V23112.00-V23113.00	6061	203.0	8.0	0.082	2.236	0.007	0.045	0.026	0.080	0.013	0.058	0.032	0.087
V23112.A0-V23112.00	1660	157.0	6.0	0.079	1.019	0.001	0.035	0.002	0.069	0.001	0.046	0.003	0.074
V23113.00-V23114.00	6062	247.2	8.0	0.070	2.066	0.009	0.053	0.029	0.093	0.015	0.068	0.036	0.102
V23114.00-V23116.00	6064	123.0	8.0	0.037	1.502	0.010	0.061	0.033	0.106	0.017	0.078	0.040	0.116
V23115.00-V23116.00	6844	200.0	8.0	0.060	1.913	0.002	0.044	0.004	0.071	0.002	0.052	0.004	0.076
V23116.00-V23119.00	4836	126.0	8.0	0.040	1.562	0.013	0.075	0.040	0.129	0.020	0.095	0.047	0.141
V23117.00-V23119.00	6592	289.0	8.0	0.008	0.699	0.002	0.065	0.005	0.103	0.004	0.081	0.006	0.113
V23118.00-V23119.00	4835	196.3	6.0	0.077	1.006	0.001	0.070	0.003	0.119	0.001	0.083	0.003	0.127
V23119.00-V23120.00	4837	158.8	8.0	0.021	1.132	0.016	0.084	0.049	0.142	0.025	0.102	0.058	0.153
V23120.00-V23121.00	6591	217.1	8.0	0.045	1.657	0.017	0.072	0.052	0.122	0.027	0.088	0.062	0.132
V23121.00-V23124.00	6593	349.5	8.0	0.084	2.264	0.018	0.135	0.055	0.231	0.032	0.173	0.069	0.256
V23122.00-V23123.00	6842	200.0	8.0	0.006	0.605	0.001	0.044	0.003	0.070	0.002	0.055	0.004	0.077
V23123.00-V23124.00	6595	195.0	8.0	0.003	0.428	0.002	0.131	0.007	0.222	0.004	0.166	0.008	0.244

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V23124.00-V23126.00	6594	221.8	8.0	0.003	0.428	0.022	0.150	0.066	0.253	0.037	0.190	0.080	0.278
V23125.00-V23126.00	6343	120.0	8.0	0.028	1.307	0.006	0.072	0.008	0.104	0.008	0.087	0.010	0.114
V23126.00-V23127.00	6344	369.8	8.0	0.041	1.581	0.029	0.102	0.077	0.163	0.046	0.127	0.093	0.179
V23127.00-V23128.00	6345	241.6	8.0	0.024	1.210	0.031	0.110	0.080	0.176	0.048	0.137	0.097	0.193
V23128.00-V23129.00	6346	80.8	8.0	0.020	1.104	0.032	0.113	0.083	0.180	0.050	0.140	0.101	0.198
V23129.00-V23130.00	6347	176.6	8.0	0.024	1.210	0.034	0.117	0.090	0.187	0.053	0.145	0.109	0.206
V23129.A0-V23129.00	6060	261.0	6.0	0.033	0.659	0.002	0.097	0.004	0.151	0.003	0.119	0.005	0.166
V23130.00-V23131.00	6348	138.0	8.0	0.023	1.184	0.035	0.152	0.093	0.247	0.056	0.190	0.113	0.273
V23131.00-V23132.00	6349	121.6	8.0	0.004	0.494	0.036	0.213	0.096	0.380	0.056	0.265	0.116	0.417
V23132.00-V23211.00	6586	177.0	8.0	0.026	1.259	0.152	0.236	0.474	0.426	0.241	0.298	0.562	0.469
V23133.00-V23134.00	6867	191.0	8.0	0.003	0.428	0.001	0.043	0.003	0.070	0.008	0.102	0.010	0.115
V23134.00-V23135.00	579	307.0	8.0	0.004	0.494	0.002	0.062	0.007	0.096	0.014	0.142	0.018	0.158
V23135.00-V23136.00	578	221.0	8.0	0.003	0.428	0.005	0.075	0.011	0.114	0.025	0.167	0.031	0.186
V23136.00-V23137.00	577	199.0	8.0	0.004	0.494	0.006	0.089	0.014	0.138	0.027	0.176	0.036	0.205
V23137.00-V23138.00	1122	266.0	8.0	0.005	0.552	0.007	0.077	0.017	0.120	0.028	0.153	0.039	0.178
V23138.00-V23139.00	334	269.0	8.0	0.047	1.693	0.008	0.050	0.021	0.077	0.039	0.105	0.052	0.120
V23139.00-V23140.00	337	105.0	8.0	0.058	1.881	0.009	0.062	0.024	0.096	0.041	0.124	0.056	0.144
V23140.00-V23141.00	2467	273.0	8.0	0.013	0.890	0.011	0.090	0.027	0.140	0.046	0.178	0.062	0.208
V23141.00-V23142.00	1039	282.0	8.0	0.013	0.890	0.012	0.082	0.031	0.127	0.047	0.155	0.066	0.183
V23142.00-V23143.00	1037	295.0	8.0	0.062	1.945	0.015	0.068	0.036	0.102	0.049	0.117	0.069	0.139
V23143.00-V23145.00	6835	72.8	8.0	0.024	1.210	0.016	0.077	0.039	0.117	0.050	0.131	0.073	0.157
V23144.00-V23145.00	1036	300.0	8.0	0.004	0.494	0.003	0.069	0.007	0.104	0.009	0.114	0.013	0.137
V23144.A0-V23144.00	1035	120.0	8.0	0.004	0.494	0.002	0.053	0.004	0.075	0.007	0.086	0.009	0.101
V23145.00-V23147.00	6531	247.9	8.0	0.038	1.522	0.020	0.082	0.049	0.124	0.060	0.136	0.089	0.164
V23146.00-V23147.00	5146	158.0	8.0	-0.032	Adverse	0.003	0.541	0.009	0.562	0.008	0.567	0.014	0.582
V23147.00-V23153.00	5118	382.0	8.0	0.048	1.711	0.023	0.102	0.056	0.157	0.066	0.164	0.099	0.203
V23148.00-V23149.00	1034	227.0	6.0	0.051	0.819	0.002	0.063	0.004	0.093	0.002	0.073	0.004	0.099
V23149.00-V23150.00	5131	263.0	8.0	0.004	0.494	0.003	0.054	0.007	0.083	0.004	0.066	0.008	0.090
V23150.00-V23152.00	5130	157.0	8.0	0.025	1.235	0.004	0.057	0.010	0.093	0.006	0.074	0.012	0.104
V23151.00-V23152.00	1033	160.0	6.0	0.074	0.986	0.001	0.065	0.003	0.104	0.003	0.086	0.005	0.118
V23152.00-V23153.00	5129	309.0	8.0	0.004	0.494	0.006	0.099	0.016	0.157	0.010	0.146	0.020	0.190
V23153.00-V23154.00	4239	253.0	8.0	0.040	1.562	0.030	0.096	0.076	0.149	0.077	0.150	0.122	0.188
V23154.00-V23156.00	233	111.0	8.0	0.099	2.457	0.031	0.085	0.079	0.133	0.079	0.133	0.126	0.166
V23155.00-V23156.00	232	270.0	6.0	0.018	0.487	0.001	0.084	0.003	0.134	0.002	0.128	0.004	0.163
V23156.00-V23162.00	4573	219.0	8.0	0.040	1.562	0.033	0.101	0.085	0.160	0.081	0.155	0.133	0.197
V23157.00-V23158.00	1032	208.0	6.0	0.007	0.303	0.002	0.061	0.004	0.083	0.002	0.054	0.004	0.079
V23158.00-V23159.00	6530	95.0	6.0	0.094	1.112	0.004	0.038	0.008	0.056	0.005	0.045	0.009	0.061
V23159.00-V23162.00	4238	300.0	6.0	0.184	1.556	0.004	0.087	0.010	0.137	0.006	0.124	0.013	0.163
V23160.00-V23161.00	231	200.0	8.0	0.055	1.832	0.002	0.020	0.004	0.032	0.001	0.018	0.003	0.030
V23161.00-V23162.00	4572	196.0	8.0	0.083	2.250	0.002	0.063	0.006	0.100	0.002	0.086	0.006	0.117
V23162.00-V23163.00	5277	289.0	8.0	0.055	1.832	0.040	0.105	0.104	0.167	0.090	0.156	0.154	0.203
V23163.00-V23165.00	2009	215.0	8.0	0.044	1.638	0.041	0.110	0.107	0.175	0.092	0.162	0.157	0.212
V23164.00-V23165.00	1031	325.0	8.0	0.110	2.590	0.001	0.065	0.003	0.103	0.003	0.094	0.005	0.123
V23165.00-V23169.00	6744	128.6	8.0	0.045	1.657	0.043	0.120	0.113	0.192	0.095	0.176	0.165	0.232
V23166.00-V23167.00	1659	309.4	8.0	0.002	0.349	0.001	0.046	0.003	0.069	0.004	0.070	0.006	0.087
V23167.00-V23168.00	5276	110.0	8.0	0.135	2.870	0.002	0.022	0.006	0.037	0.005	0.032	0.009	0.044
V23168.00-V23169.00	1656	80.0	8.0	0.046	1.675	0.003	0.078	0.009	0.127	0.006	0.114	0.012	0.152
V23169.00-V23170.00	6743	79.8	8.0	0.022	1.158	0.046	0.127	0.124	0.205	0.102	0.186	0.181	0.247
V23170.00-V23172.00	6668	338.0	8.0	0.045	1.657	0.047	0.115	0.127	0.187	0.104	0.169	0.184	0.225
V23171.00-V23172.00	1029	247.0	8.0	0.133	2.848	0.002	0.063	0.004	0.099	0.004	0.091	0.006	0.119
V23172.00-V23173.00	4142	121.0	8.0	0.063	1.960	0.050	0.141	0.135	0.228	0.109	0.207	0.193	0.274
V23173.00-V23179.00	4854	179.0	8.0	0.016	0.988	0.051	0.155	0.138	0.252	0.111	0.226	0.198	0.302
V23174.00-V23176.00	6074	92.0	6.0	0.118	1.246	0.001	0.024	0.002	0.053	0.001	0.035	0.003	0.059
V23175.00-V23176.00	1028	110.0	6.0	0.008	0.324	0.001	0.042	0.003	0.073	0.002	0.060	0.004	0.084
V23176.00-V23177.00	2331	97.0	6.0	0.047	0.786	0.002	0.035	0.008	0.071	0.004	0.049	0.010	0.078

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V23177.00-V23178.00	6617	208.0	6.0	0.133	1.323	0.003	0.040	0.011	0.073	0.005	0.051	0.013	0.079
V23178.00-V23179.00	6667	300.0	6.0	0.090	1.088	0.004	0.112	0.015	0.187	0.007	0.157	0.017	0.217
V23179.00-V23188.00	6713	104.0	8.0	0.033	1.419	0.057	0.143	0.156	0.234	0.119	0.206	0.218	0.279
V23180.00-V23181.00	6072	160.0	8.0	0.020	1.104	0.001	0.021	0.003	0.040	0.001	0.028	0.003	0.043
V23181.00-V23182.00	6815	123.0	8.0	0.045	1.657	0.001	0.025	0.006	0.044	0.003	0.038	0.007	0.053
V23182.00-V23185.00	6071	180.0	8.0	0.091	2.356	0.003	0.030	0.009	0.051	0.010	0.050	0.016	0.064
V23183.00-V23184.00	6068	295.0	8.0	0.044	1.638	0.001	0.020	0.003	0.036	0.003	0.036	0.005	0.047
V23184.00-V23185.00	6069	120.0	8.0	0.046	1.675	0.002	0.028	0.006	0.049	0.005	0.047	0.010	0.061
V23185.00-V23186.00	6073	239.0	8.0	0.141	2.933	0.006	0.035	0.018	0.059	0.016	0.056	0.029	0.073
V23186.00-V23187.00	1655	86.0	8.0	0.064	1.976	0.007	0.040	0.022	0.067	0.019	0.062	0.033	0.081
V23187.00-V23188.00	6666	336.0	8.0	0.097	2.432	0.009	0.097	0.025	0.160	0.020	0.143	0.037	0.192
V23188.00-V23191.00	6712	147.5	8.0	0.042	1.601	0.065	0.137	0.183	0.227	0.139	0.199	0.257	0.270
V23189.00-V23190.00	6742	160.0	8.0	0.021	1.132	0.001	0.027	0.003	0.040	0.002	0.028	0.004	0.041
V23190.00-V23191.A0	6664	225.0	8.0	0.413	5.019	0.004	0.508	0.007	0.513	0.005	0.510	0.008	0.514
V23191.00-V23192.00	6711	18.9	8.0	0.010	0.781	0.068	0.131	0.194	0.216	0.144	0.187	0.270	0.254
V23191.A0-V23191.00	6710	47.0	8.0	-0.181	Adverse	0.012	0.562	0.049	0.603	0.030	0.588	0.065	0.621
V23192.00-V23193.00	4956	415.0	12.0	0.030	3.988	0.070	0.126	0.197	0.208	0.145	0.180	0.273	0.245
V23193.00-V23199.00	6518	271.0	12.0	0.004	1.456	0.072	0.150	0.201	0.250	0.148	0.214	0.278	0.294
V23194.00-V23196.00	6341	150.0	8.0	0.081	2.223	0.001	0.019	0.003	0.037	0.001	0.023	0.003	0.040
V23195.00-V23196.00	6340	84.0	8.0	0.022	1.158	0.001	0.021	0.003	0.041	0.002	0.031	0.004	0.047
V23196.00-V23197.00	1654	45.0	8.0	0.020	1.104	0.002	0.025	0.008	0.047	0.004	0.032	0.010	0.051
V23197.00-V23198.00	6663	301.0	8.0	0.126	2.772	0.003	0.031	0.011	0.052	0.005	0.037	0.014	0.056
V23198.00-V23199.00	4955	257.0	8.0	0.094	2.394	0.006	0.124	0.016	0.206	0.008	0.171	0.018	0.238
V23199.00-V23201.00	6336	155.0	12.0	0.007	1.927	0.078	0.136	0.220	0.225	0.157	0.190	0.299	0.262
V23200.00-V23201.00	6339	193.0	8.0	0.068	2.037	0.001	0.107	0.003	0.175	0.001	0.146	0.003	0.201
V23201.00-V23202.00	6337	13.0	12.0	0.001	0.728	0.080	0.125	0.226	0.206	0.159	0.174	0.305	0.239
V23202.00-V23205.00	6338	239.0	12.0	0.022	3.415	0.081	0.105	0.229	0.175	0.161	0.147	0.309	0.202
V23203.00-V23205.00	6334	150.0	6.0	0.087	1.070	0.002	0.107	0.004	0.173	0.002	0.142	0.004	0.197
V23204.00-V23205.00	6333	210.0	6.0	0.015	0.444	0.002	0.115	0.004	0.185	0.002	0.151	0.004	0.208
V23205.00-V23206.00	6126	183.0	12.0	0.044	4.830	0.084	0.094	0.239	0.155	0.165	0.129	0.319	0.178
V23206.00-V23208.00	1557	172.0	12.0	0.038	4.489	0.086	0.098	0.242	0.161	0.166	0.134	0.323	0.186
V23207.00-V23208.00	6590	215.0	6.0	0.082	1.038	0.002	0.117	0.004	0.187	0.003	0.156	0.005	0.213
V23208.00-V23209.00	6588	242.5	12.0	0.036	4.369	0.088	0.098	0.249	0.162	0.170	0.134	0.331	0.186
V23209.00-V23211.00	6589	66.6	12.0	0.018	3.089	0.089	0.125	0.252	0.211	0.171	0.165	0.334	0.238
V23210.00-V23211.00	6587	379.0	6.0	0.115	1.230	0.003	0.171	0.005	0.287	0.004	0.220	0.006	0.319
V23211.00-V23224.00	6946	236.0	12.0	0.044	4.830	0.246	0.175	0.734	0.298	0.417	0.223	0.905	0.330
V23212.00-V23213.00	6517	106.0	8.0	0.059	1.897	0.001	0.021	0.003	0.034	0.001	0.013	0.002	0.030
V23213.00-V23214.00	6125	70.0	8.0	0.041	1.581	0.002	0.032	0.007	0.049	0.001	0.021	0.005	0.043
V23214.00-V23215.00	1556	129.0	8.0	0.038	1.522	0.004	0.045	0.010	0.065	0.002	0.029	0.008	0.056
V23215.00-V23216.00	1555	189.0	8.0	0.040	1.562	0.008	0.060	0.016	0.081	0.003	0.038	0.011	0.067
V23216.00-V23222.00	6945	297.0	8.0	0.032	1.397	0.013	0.118	0.023	0.155	0.005	0.101	0.015	0.143
V23217.00-V23218.00	6516	129.0	8.0	0.025	1.235	0.002	0.039	0.004	0.053	0.001	0.025	0.003	0.044
V23218.00-V23219.00	6515	210.0	8.0	0.027	1.283	0.005	0.046	0.009	0.061	0.002	0.029	0.006	0.049
V23219.00-V23220.00	6124	178.0	8.0	0.075	2.139	0.007	0.052	0.014	0.069	0.003	0.051	0.009	0.068
V23220.00-V23221.00	1101	145.0	8.0	0.059	1.897	0.014	0.068	0.025	0.088	0.022	0.081	0.032	0.098
V23220.A0-V23220.00	7621	165.0	8.0	0.019	1.077	0.004	0.052	0.006	0.066	0.017	0.087	0.019	0.092
V23221.00-V23222.00	6943	136.0	8.0	0.039	1.542	0.017	0.120	0.029	0.157	0.024	0.123	0.036	0.159
V23222.00-V23223.00	6947	130.0	8.0	0.019	1.077	0.034	0.121	0.058	0.158	0.030	0.115	0.055	0.153
V23223.00-V23224.00	6948	130.0	8.0	0.065	1.991	0.037	0.184	0.064	0.297	0.033	0.221	0.060	0.322
V23224.00-V23230.00	6949	193.0	12.0	0.021	3.337	0.283	0.200	0.800	0.336	0.450	0.251	0.967	0.371
V23225.00-V23226.00	6952	132.0	8.0	0.007	0.653	0.003	0.049	0.005	0.062	0.004	0.054	0.006	0.067
V23226.00-V23229.00	6954	327.0	8.0	0.083	2.250	0.011	0.062	0.015	0.073	0.012	0.063	0.016	0.074
V23227.00-V23228.00	6065	112.0	8.0	0.062	1.945	0.005	0.042	0.007	0.051	0.005	0.043	0.007	0.051
V23228.00-V23229.00	6066	146.0	8.0	0.060	1.913	0.009	0.061	0.013	0.074	0.009	0.061	0.013	0.074
V23229.00-V23230.00	6067	303.0	8.0	0.066	2.006	0.022	0.190	0.032	0.299	0.022	0.227	0.032	0.325

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V23230.00-V23231.00	6950	200.0	12.0	0.021	3.337	0.307	0.212	0.836	0.354	0.476	0.264	1.005	0.390
V12120.00-V24071.00	7143	350.7	18.0	0.014	8.033	0.191	0.124	0.397	0.177	0.206	0.131	0.413	0.199
V22145.00-V24090.00	7144	413.0	10.0	0.011	1.485	0.565	0.650	1.384	1.000	0.871	0.775	1.707	1.000
V22162.00-V24090.00	7148	12.7	18.0	0.000	0.000	1.655	0.477	3.499	0.855	2.875	0.669	4.730	1.000
V24001.00-V24004.00	7136	230.0	6.0	0.010	0.363	0.001	0.055	0.003	0.099	0.002	0.079	0.004	0.114
V24002.00-V24003.00	7544	184.3	6.0	0.201	1.626	0.004	0.045	0.014	0.081	0.007	0.056	0.017	0.087
V24002.A0-V24002.C0	7139	102.0	6.0	0.098	1.135	0.002	0.035	0.004	0.059	0.002	0.046	0.004	0.066
V24002.B0-V24002.C0	7138	17.0	6.0	0.007	0.303	0.000	0.030	0.002	0.060	0.003	0.055	0.005	0.075
V24002.C0-V24002.D0	6123	98.0	6.0	0.040	0.725	0.002	0.037	0.008	0.070	0.005	0.054	0.011	0.080
V24002.D0-V24002.00	1100	114.0	6.0	0.122	1.267	0.002	0.034	0.011	0.064	0.005	0.045	0.014	0.070
V24003.00-V24004.00	7135	100.0	6.0	0.052	0.827	0.005	0.064	0.018	0.115	0.008	0.086	0.021	0.129
V24004.00-V24005.00	7137	230.0	6.0	0.027	0.596	0.006	0.077	0.023	0.136	0.014	0.120	0.031	0.164
V24005.00-V24013.00	7133	413.9	6.0	0.034	0.669	0.009	0.108	0.027	0.175	0.026	0.172	0.044	0.220
V24006.00-V24007.00	6167	123.0	8.0	0.010	0.781	0.000	0.019	0.002	0.041	0.001	0.031	0.003	0.048
V24007.00-V24008.00	6166	87.0	8.0	0.054	1.815	0.001	0.018	0.006	0.035	0.003	0.027	0.007	0.039
V24008.00-V24009.00	1099	233.0	8.0	0.183	3.341	0.003	0.023	0.008	0.050	0.004	0.054	0.010	0.069
V24009.00-V24010.A0	5669	87.0	8.0	0.020	1.104	0.002	0.059	0.010	0.091	0.015	0.095	0.023	0.115
V24010.00-V24012.00	4736	63.0	6.0	0.005	0.256	0.016	0.164	0.031	0.222	0.024	0.197	0.038	0.247
V24010.A0-V24010.B0	5668	119.0	8.0	0.014	0.924	0.015	0.094	0.025	0.123	0.023	0.115	0.033	0.139
V24010.B0-V24010.00	4798	52.0	8.0	0.006	0.605	0.016	0.144	0.029	0.191	0.024	0.173	0.036	0.213
V24011.00-V24012.00	5138	48.7	6.0	-0.359	Adverse	0.005	0.539	0.011	0.555	0.007	0.548	0.013	0.561
V24012.00-V24013.00	5639	120.0	6.0	0.148	1.395	0.017	0.107	0.035	0.161	0.026	0.152	0.045	0.194
V24013.00-V24016.00	7131	133.5	6.0	0.034	0.669	0.027	0.162	0.066	0.258	0.064	0.271	0.103	0.341
V24014.00-V24015.00	3067	250.0	6.0	0.010	0.363	0.001	0.037	0.003	0.073	0.014	0.145	0.016	0.157
V24015.00-V24016.00	7132	717.0	6.0	0.010	0.363	0.001	0.113	0.005	0.194	0.020	0.245	0.024	0.295
V24016.00-V24017.00	7130	346.0	6.0	0.010	0.363	0.028	0.188	0.073	0.307	0.086	0.345	0.131	0.708
V24017.00-V24018.00	5618	41.0	6.0	0.006	0.281	0.028	0.206	0.076	0.343	0.100	0.396	0.151	1.000
V24018.00-V24031.00	5617	109.0	6.0	0.005	0.256	0.028	0.263	0.078	0.460	0.100	0.522	0.153	1.000
V24019.00-V24020.00	7017	125.0	6.0	0.114	1.224	0.001	0.029	0.003	0.048	0.003	0.042	0.005	0.056
V24020.00-V24021.A0	7018	255.0	6.0	0.051	0.819	0.002	0.042	0.006	0.073	0.004	0.060	0.008	0.084
V24021.00-V24025.00	7121	379.0	6.0	0.107	1.186	0.004	0.050	0.012	0.091	0.007	0.074	0.015	0.105
V24021.A0-V24021.00	7021	255.0	6.0	0.044	0.761	0.003	0.044	0.009	0.076	0.005	0.061	0.012	0.086
V24022.00-V24023.00	7122	260.0	6.0	0.011	0.380	0.000	0.023	0.002	0.056	0.003	0.063	0.005	0.080
V24023.00-V24024.00	6696	174.0	6.0	0.208	1.654	0.001	0.025	0.005	0.054	0.004	0.048	0.008	0.067
V24024.00-V24025.00	7020	179.1	6.0	0.044	0.761	0.002	0.049	0.008	0.093	0.006	0.078	0.012	0.111
V24025.00-V24026.00	7123	379.0	6.0	0.061	0.896	0.006	0.060	0.023	0.110	0.015	0.089	0.031	0.128
V24026.00-V24027.00	7129	117.0	6.0	0.083	1.045	0.007	0.064	0.026	0.112	0.016	0.089	0.035	0.128
V24027.00-V24029.00	7125	258.0	6.0	0.089	1.082	0.010	0.067	0.030	0.115	0.018	0.090	0.039	0.130
V24028.00-V24029.00	7126	81.0	6.0	0.048	0.795	0.001	0.045	0.003	0.077	0.003	0.063	0.005	0.089
V24029.00-V24030.00	7127	41.0	6.0	0.028	0.607	0.011	0.063	0.036	0.112	0.021	0.101	0.046	0.137
V24030.00-V24031.00	7128	188.0	6.0	0.147	1.390	0.011	0.182	0.038	0.328	0.040	0.363	0.066	0.574
V24031.00-V24036.00	5815	329.0	6.0	0.005	0.256	0.039	0.264	0.118	0.472	0.139	0.521	0.217	1.000
V24032.00-V24033.00	5997	179.0	6.0	0.057	0.866	0.000	0.021	0.002	0.047	0.001	0.030	0.003	0.051
V24033.00-V24034.00	1098	232.0	6.0	0.054	0.843	0.001	0.031	0.005	0.061	0.002	0.035	0.006	0.063
V24034.00-V24035.00	4797	473.0	6.0	0.070	0.959	0.002	0.039	0.008	0.072	0.002	0.038	0.009	0.071
V24035.00-V24036.00	2432	527.0	6.0	0.069	0.953	0.003	0.135	0.012	0.240	0.003	0.235	0.011	0.538
V24036.00-V24051.00	5814	313.0	6.0	0.011	0.380	0.044	0.241	0.132	0.410	0.149	0.475	0.237	1.000
V24037.00-V24038.A0	5812	526.0	6.0	0.005	0.256	0.001	0.050	0.003	0.089	0.001	0.060	0.003	0.095
V24038.00-V24039.A0	5811	623.0	6.0	0.005	0.256	0.002	0.073	0.008	0.135	0.003	0.085	0.045	1.000
V24038.A0-V24038.00	5810	526.0	6.0	0.005	0.256	0.002	0.060	0.006	0.113	0.003	0.073	0.007	0.554
V24039.00-V24050.00	5809	184.0	6.0	0.005	0.256	0.004	0.167	0.015	0.263	0.011	0.364	0.061	1.000
V24039.A0-V24039.00	5808	623.0	6.0	0.005	0.256	0.004	0.088	0.012	0.155	0.005	0.118	0.049	1.000
V24040.00-V24041.00	2466	219.0	6.0	0.025	0.573	0.001	0.039	0.003	0.077	0.006	0.099	0.008	0.119
V24041.00-V24042.00	7142	106.0	6.0	0.010	0.363	0.001	0.040	0.005	0.083	0.008	0.101	0.012	0.123
V24042.00-V24043.00	3056	225.0	6.0	0.080	1.026	0.001	0.034	0.008	0.071	0.011	0.081	0.018	0.101

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V24043.00-V24044.A0	3057	222.0	6.0	0.049	0.803	0.002	0.043	0.011	0.086	0.013	0.089	0.021	0.115
V24044.00-V24045.00	2464	195.0	6.0	0.052	0.827	0.005	0.062	0.017	0.107	0.016	0.173	0.028	0.196
V24044.A0-V24044.00	3058	222.0	6.0	0.048	0.795	0.003	0.051	0.014	0.095	0.014	0.094	0.024	0.123
V24045.00-V24046.00	2431	283.0	6.0	0.049	0.803	0.008	0.082	0.022	0.140	0.110	0.287	0.124	0.310
V24046.00-V24047.00	5807	200.4	6.0	0.018	0.487	0.009	0.095	0.030	0.170	0.112	0.339	0.133	0.373
V24046.D0-V24046.E0	3062	332.0	6.0	0.002	0.162	0.000	0.024	0.002	0.091	0.000	0.022	0.002	0.090
V24046.E0-V24046.00	3065	484.0	6.0	0.004	0.229	0.001	0.071	0.005	0.134	0.001	0.184	0.005	0.228
V24047.00-V24049.00	5806	248.7	6.0	0.018	0.487	0.010	0.115	0.032	0.179	0.113	0.326	0.136	0.359
V24048.00-V24049.00	2463	150.0	6.0	0.077	1.006	0.017	0.111	0.019	0.140	0.006	0.178	0.008	0.196
V24049.00-V24050.00	5805	252.0	6.0	0.041	0.734	0.028	0.188	0.055	0.274	0.143	0.445	0.170	0.664
V24050.00-V24051.00	5804	75.0	6.0	0.005	0.256	0.033	0.249	0.072	0.391	0.157	0.554	0.209	1.000
V24051.00-V24060.00	5803	166.9	8.0	0.015	0.957	0.077	0.191	0.207	0.657	0.311	0.389	0.438	1.000
V24052.00-V24053.00	5802	502.0	15.0	0.008	3.734	0.553	0.259	1.409	0.713	0.985	0.350	1.747	1.000
V24052.A0-V24052.B0	2447	355.0	15.0	0.009	3.961	0.534	0.248	1.367	0.405	0.940	0.332	1.724	0.461
V24052.B0-V24052.C0	2446	360.0	15.0	0.010	4.175	0.551	0.249	1.398	0.405	0.974	0.334	1.771	0.463
V24052.C0-V24052.D0	7141	367.0	15.0	0.009	3.961	0.552	0.251	1.401	0.410	0.979	0.338	1.778	0.468
V24052.D0-V24052.E0	5840	374.0	15.0	0.009	3.961	0.552	0.253	1.402	0.412	0.979	0.340	1.779	0.641
V24052.E0-V24052.F0	2430	370.0	15.0	0.009	3.961	0.553	0.253	1.405	0.412	0.985	0.340	1.743	0.909
V24052.F0-V24052.00	5801	329.0	15.0	0.009	3.961	0.553	0.257	1.407	0.418	0.984	0.347	1.745	1.000
V24053.00-V24059.00	2456	191.0	15.0	0.008	3.734	0.553	0.308	1.410	1.000	0.984	0.468	1.749	1.000
V24054.00-V24055.00	5800	346.0	8.0	0.010	0.781	0.007	0.086	0.036	0.573	0.068	0.284	0.215	1.000
V24054.A0-V24054.B0	7557	267.8	6.0	0.002	0.162	0.000	0.000	0.002	0.082	0.000	0.029	0.002	0.090
V24054.B0-V24054.G0	1221	160.2	6.0	0.006	0.281	0.000	0.023	0.004	0.098	0.002	0.066	0.006	0.113
V24054.C0-V24054.E0	2449	90.0	15.0	0.012	4.573	0.001	0.022	0.003	0.033	0.007	0.042	0.009	0.048
V24054.D0-V24054.E0	2450	152.0	6.0	0.019	0.500	0.012	0.105	0.020	0.137	0.006	0.109	0.014	0.141
V24054.DA-V24054.D0	7049	81.3	8.0	0.013	0.890	0.000	0.045	0.002	0.074	0.002	0.045	0.004	0.067
V24054.DB-V24054.DC	7881	175.5	8.0	0.061	1.929	0.001	0.040	0.003	0.052	0.002	0.030	0.004	0.043
V24054.DC-V24054.D0	7882	103.9	8.0	0.032	1.397	0.012	0.078	0.016	0.093	0.003	0.045	0.007	0.069
V24054.E0-V24054.B0	7941	219.0	8.0	0.032	1.397	0.013	0.265	0.025	0.423	0.034	0.364	0.046	0.492
V24054.G0-V24054.K0	5963	130.5	6.0	0.006	0.281	0.001	0.040	0.007	0.120	0.003	0.089	0.009	0.143
V24054.H0-V24054.I0	1747	92.0	6.0	0.002	0.162	0.000	0.009	0.002	0.093	0.005	0.124	0.007	0.153
V24054.I0-V24054.J0	5139	43.5	6.0	0.002	0.162	0.000	0.017	0.004	0.117	0.007	0.137	0.011	0.176
V24054.J0-V24054.K0	5140	21.7	8.0	0.001	0.247	0.000	0.018	0.006	0.095	0.007	0.090	0.013	0.127
V24054.K0-V24054.L0	5839	125.9	6.0	0.014	0.429	0.001	0.035	0.015	0.139	0.010	0.107	0.024	0.169
V24054.L0-V24054.M0	5838	226.0	8.0	0.008	0.699	0.001	0.034	0.017	0.110	0.010	0.091	0.026	0.136
V24054.M0-V24054.N0	2453	239.0	8.0	0.012	0.856	0.003	0.044	0.021	0.116	0.018	0.113	0.036	0.155
V24054.N0-V24054.O0	2454	130.0	8.0	0.009	0.741	0.003	0.049	0.024	0.126	0.025	0.137	0.046	0.178
V24054.O0-V24054.P0	2452	350.0	8.0	0.009	0.741	0.004	0.053	0.027	0.132	0.035	0.159	0.058	0.199
V24054.P0-V24054.Q0	2455	351.0	8.0	0.009	0.741	0.004	0.059	0.029	0.136	0.048	0.176	0.073	0.606
V24054.Q0-V24054.00	5799	168.0	8.0	0.011	0.819	0.006	0.065	0.033	0.142	0.058	0.190	0.171	1.000
V24055.00-V24056.00	5798	54.0	8.0	0.004	0.494	0.007	0.390	0.077	1.000	0.072	0.655	0.223	1.000
V24056.00-V24057.00	2459	18.0	12.0	0.000	0.000	0.251	0.401	0.646	1.000	0.488	0.559	0.867	1.000
V24057.00-V24058.00	2460	102.0	12.0	0.005	1.628	0.251	0.258	0.647	1.000	0.498	0.362	0.882	1.000
V24058.00-V24059.00	2458	149.0	12.0	0.010	2.303	0.251	0.307	0.648	1.000	0.508	0.485	0.898	1.000
V24059.00-V24060.00	2461	149.0	12.0	0.007	1.927	0.804	0.491	2.061	1.000	1.497	0.869	2.601	1.000
V24060.00-V24061.00	5797	347.0	12.0	0.006	1.784	0.885	0.492	2.272	1.000	1.819	1.000	3.030	1.000
V24061.00-V24062.00	5795	121.3	12.0	0.008	2.060	0.886	0.475	2.273	1.000	1.823	1.000	3.036	1.000
V24062.00-V24070.00	5794	15.7	12.0	0.001	0.728	0.885	0.456	2.275	1.000	1.823	1.000	3.037	1.000
V24063.00-V24064.A0	1133	536.0	6.0	0.005	0.256	0.000	0.029	0.002	0.081	0.000	0.047	0.002	0.088
V24064.00-V24066.00	5793	257.0	6.0	0.005	0.256	0.001	0.076	0.008	0.165	0.003	0.106	0.009	0.180
V24064.A0-V24064.00	5792	536.0	6.0	0.005	0.256	0.001	0.046	0.005	0.107	0.002	0.071	0.006	0.119
V24065.00-V24066.00	2462	146.3	6.0	0.002	0.162	0.001	0.080	0.003	0.155	0.001	0.098	0.003	0.165
V24066.00-V24069.00	5791	384.9	6.0	0.005	0.256	0.002	0.069	0.013	0.151	0.004	0.092	0.015	0.162
V24067.00-V24068.00	3068	191.0	6.0	0.011	0.380	0.000	0.021	0.002	0.056	0.006	0.085	0.008	0.098
V24068.00-V24096.A0	5790	10.0	6.0	0.009	0.344	0.000	0.013	0.004	0.048	0.006	0.054	0.010	0.070

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V24069.00-V24070.00	5789	96.9	6.0	0.054	0.843	0.002	0.431	0.015	0.545	0.004	0.525	0.017	0.547
V24070.00-V24072.00	5788	6.6	6.0	0.004	0.229	0.888	0.911	2.291	1.000	1.828	1.000	3.054	1.000
V24071.00-V24072.00	5787	152.1	18.0	0.004	4.294	0.191	0.253	0.399	0.393	0.217	0.328	0.426	0.458
V24072.00-V24089.00	5786	308.9	18.0	0.010	6.789	1.079	0.262	2.691	0.417	2.044	0.361	3.466	0.478
V24073.00-V24075.00	1097	175.0	6.0	0.223	1.713	0.002	0.037	0.004	0.058	0.004	0.051	0.005	0.068
V24074.00-V24075.00	3078	50.0	6.0	0.017	0.473	0.001	0.042	0.003	0.070	0.003	0.065	0.005	0.086
V24075.00-V24078.00	4796	265.0	6.0	0.034	0.669	0.003	0.062	0.009	0.097	0.007	0.085	0.013	0.113
V24076.00-V24077.00	3076	211.0	6.0	0.005	0.256	0.002	0.076	0.004	0.105	0.003	0.090	0.005	0.115
V24077.00-V24078.00	4735	70.0	6.0	0.006	0.281	0.004	0.084	0.008	0.118	0.006	0.103	0.010	0.132
V24078.00-V24081.00	4734	210.0	6.0	0.051	0.819	0.009	0.078	0.022	0.118	0.017	0.102	0.029	0.135
V24079.00-V24080.00	3079	120.0	6.0	0.062	0.903	0.002	0.036	0.004	0.049	0.003	0.042	0.005	0.053
V24080.00-V24081.00	3080	35.0	6.0	0.047	0.786	0.004	0.056	0.008	0.084	0.005	0.070	0.009	0.094
V24081.00-V24082.00	5701	316.0	6.0	0.070	0.959	0.013	0.123	0.032	0.185	0.023	0.155	0.041	0.208
V24082.00-V24083.00	5785	212.0	6.0	0.006	0.281	0.016	0.168	0.037	0.251	0.026	0.211	0.046	0.283
V24083.00-V24084.00	5784	226.0	6.0	0.006	0.281	0.018	0.175	0.041	0.263	0.029	0.221	0.052	0.297
V24084.00-V24085.00	5783	224.0	6.0	0.006	0.281	0.019	0.207	0.044	0.313	0.031	0.264	0.056	0.355
V24085.00-V24086.00	3074	221.0	6.0	0.006	0.281	0.020	0.181	0.047	0.274	0.033	0.231	0.060	0.311
V24086.00-V24088.00	3075	254.0	6.0	0.017	0.473	0.021	0.165	0.050	0.254	0.035	0.208	0.064	0.285
V24087.00-V24088.00	3073	178.8	6.0	0.002	0.162	0.000	0.119	0.002	0.201	0.000	0.128	0.002	0.217
V24088.00-V24089.00	5782	125.0	6.0	0.006	0.281	0.022	0.192	0.055	0.303	0.036	0.243	0.069	0.339
V24090.00-V24091.00	7147	300.0	18.0	0.005	4.801	2.219	0.485	4.879	0.862	3.742	0.677	6.436	1.000
V24091.00-V24092.00	5780	328.0	18.0	0.005	4.801	2.219	0.483	4.881	0.856	3.742	0.673	6.437	1.000
V24092.00-V24093.00	5779	196.0	18.0	0.005	4.801	2.219	0.498	4.882	0.863	3.742	0.690	6.439	1.000
V24093.00-V24094.00	5778	311.0	18.0	0.005	4.801	2.221	0.470	4.885	0.785	3.742	0.645	6.441	0.966
V24094.00-V24095.00	5777	143.0	18.0	0.008	6.072	2.221	0.438	4.887	0.708	3.742	0.593	6.443	0.913
V24095.00-V24096.A0	5776	219.0	18.0	0.003	3.718	2.221	0.434	4.889	0.692	3.746	0.585	6.448	0.851
V24096.A0-V24100.00	7789	219.0	18.0	0.010	6.789	2.221	0.382	4.894	0.592	3.752	0.508	6.459	0.705
V24100.00-V24101.00	7231	37.8	27.0	0.007	16.747	2.221	0.233	4.896	0.349	3.751	0.304	6.461	0.405
V25078.00-V24052.A0	6956	29.3	8.0	0.024	1.210	0.144	0.311	0.346	0.503	0.185	0.399	0.387	0.562
V26242.00-V24052.A0	5141	6.5	8.0	0.002	0.349	0.391	0.425	1.020	0.737	0.756	0.594	1.337	0.875
V28167.00-V24056.00	6959	31.0	8.0	0.009	0.741	0.243	0.479	0.610	1.000	0.416	0.659	0.733	1.000
V25001.00-V25003.00	6455	170.0	8.0	0.062	1.945	0.001	0.024	0.003	0.038	0.002	0.029	0.004	0.040
V25002.00-V25003.00	6456	106.0	8.0	0.016	0.988	0.001	0.028	0.003	0.043	0.002	0.034	0.004	0.046
V25003.00-V25004.00	6662	270.0	8.0	0.129	2.805	0.004	0.032	0.010	0.050	0.005	0.037	0.011	0.053
V25004.00-V25006.00	4954	273.0	8.0	0.074	2.125	0.005	0.058	0.014	0.093	0.007	0.065	0.015	0.098
V25005.00-V25006.00	6454	332.0	8.0	0.002	0.349	0.001	0.057	0.003	0.097	0.001	0.064	0.003	0.102
V25006.00-V25026.00	6514	332.0	8.0	0.005	0.552	0.007	0.111	0.019	0.188	0.009	0.142	0.021	0.208
V25007.00-V25008.00	6451	195.0	8.0	0.016	0.988	0.001	0.025	0.003	0.043	0.008	0.063	0.010	0.070
V25008.00-V25009.00	230	152.0	8.0	0.034	1.440	0.001	0.037	0.006	0.068	0.008	0.078	0.012	0.095
V25009.00-V25010.00	229	91.0	8.0	0.004	0.494	0.002	0.064	0.009	0.112	0.011	0.120	0.017	0.150
V25010.00-V25011.00	228	230.0	8.0	0.006	0.605	0.004	0.057	0.012	0.097	0.013	0.101	0.021	0.127
V25011.00-V25014.00	4571	296.0	8.0	0.077	2.167	0.005	0.057	0.015	0.092	0.017	0.090	0.027	0.115
V25012.00-V25013.00	226	165.0	8.0	0.005	0.552	0.002	0.041	0.004	0.059	0.002	0.045	0.004	0.062
V25013.00-V25014.00	225	245.0	8.0	0.052	1.781	0.004	0.056	0.008	0.086	0.004	0.076	0.008	0.100
V25014.00-V25015.00	224	206.0	8.0	0.025	1.235	0.010	0.063	0.026	0.101	0.023	0.094	0.039	0.122
V25015.00-V25016.00	6616	164.0	8.0	0.092	2.369	0.010	0.050	0.029	0.083	0.024	0.075	0.043	0.099
V25016.00-V25018.00	1653	159.0	8.0	0.061	1.929	0.011	0.057	0.031	0.093	0.025	0.084	0.045	0.112
V25017.00-V25018.00	6452	145.0	8.0	0.115	2.648	0.001	0.039	0.003	0.063	0.003	0.056	0.005	0.074
V25018.00-V25019.00	6741	51.0	8.0	0.022	1.158	0.013	0.059	0.038	0.099	0.030	0.088	0.055	0.118
V25019.00-V25020.00	6740	139.0	8.0	0.060	1.913	0.013	0.529	0.040	0.550	0.030	0.544	0.057	0.559
V25020.00-V25022.00	6739	65.0	6.0	-0.009	Adverse	0.013	0.537	0.042	0.564	0.031	0.554	0.060	0.575
V25021.00-V25022.00	6453	211.0	6.0	0.006	0.281	0.002	0.065	0.004	0.105	0.003	0.090	0.005	0.121
V25022.00-V25023.00	6738	68.0	8.0	0.035	1.461	0.015	0.056	0.048	0.098	0.034	0.082	0.067	0.114
V25023.00-V25024.00	6661	182.0	8.0	0.095	2.407	0.015	0.073	0.050	0.128	0.034	0.106	0.069	0.149
V25024.00-V25025.00	4853	244.0	8.0	0.033	1.419	0.017	0.077	0.054	0.134	0.037	0.111	0.074	0.155

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V25025.00-V25026.00	4953	194.0	8.0	0.079	2.195	0.018	0.103	0.058	0.178	0.039	0.143	0.078	0.204
V25026.00-V25030.00	6513	217.0	8.0	0.010	0.781	0.026	0.125	0.080	0.215	0.049	0.168	0.102	0.243
V25027.00-V25028.00	6458	70.0	6.0	0.014	0.429	0.002	0.047	0.004	0.067	0.002	0.052	0.004	0.071
V25028.00-V25029.00	4952	330.0	6.0	0.074	0.986	0.003	0.045	0.007	0.068	0.004	0.048	0.008	0.070
V25029.00-V25030.00	6512	79.0	6.0	0.045	0.769	0.004	0.097	0.010	0.161	0.005	0.121	0.011	0.176
V25030.00-V25031.00	6121	320.0	8.0	0.026	1.259	0.031	0.117	0.093	0.197	0.055	0.152	0.117	0.220
V25031.00-V25033.00	6182	161.0	8.0	0.017	1.018	0.034	0.180	0.098	0.299	0.058	0.231	0.122	0.333
V25032.00-V25033.00	4951	353.0	6.0	0.101	1.152	0.002	0.173	0.005	0.281	0.003	0.220	0.005	0.312
V25033.00-V25034.00	6181	164.0	8.0	0.006	0.605	0.037	0.165	0.105	0.273	0.062	0.211	0.130	0.303
V25034.00-V25040.00	5739	302.0	8.0	0.066	2.006	0.038	0.110	0.108	0.183	0.063	0.140	0.133	0.202
V25035.00-V25036.00	6459	127.0	8.0	0.064	1.976	0.002	0.028	0.004	0.042	0.001	0.023	0.004	0.039
V25036.00-V25037.00	4852	98.0	8.0	0.033	1.419	0.002	0.030	0.007	0.047	0.002	0.025	0.006	0.044
V25037.00-V25040.00	4950	360.0	8.0	0.143	2.953	0.003	0.075	0.009	0.124	0.003	0.091	0.009	0.135
V25038.00-V25039.00	6120	182.0	8.0	0.071	2.081	0.003	0.028	0.005	0.038	0.003	0.030	0.006	0.040
V25039.00-V25040.00	5738	141.0	8.0	0.096	2.420	0.004	0.077	0.008	0.124	0.004	0.094	0.008	0.135
V25040.00-V25042.A0	5768	280.0	8.0	0.054	1.815	0.045	0.109	0.128	0.180	0.073	0.137	0.156	0.198
V25041.00-V25042.00	6460	314.0	8.0	0.105	2.531	0.002	0.085	0.004	0.138	0.003	0.107	0.005	0.153
V25042.00-V25047.00	4795	331.0	8.0	0.018	1.048	0.049	0.149	0.138	0.247	0.079	0.188	0.168	0.272
V25042.A0-V25042.00	4794	331.0	8.0	0.004	0.494	0.047	0.120	0.131	0.199	0.075	0.151	0.159	0.220
V25043.00-V25045.00	5996	10.0	8.0	0.017	1.018	0.000	0.022	0.002	0.039	0.001	0.025	0.003	0.040
V25044.00-V25045.00	6866	232.0	8.0	0.010	0.781	0.003	0.047	0.005	0.059	0.005	0.054	0.007	0.065
V25045.00-V25046.00	5737	163.0	8.0	0.101	2.482	0.005	0.036	0.011	0.053	0.006	0.041	0.012	0.056
V25046.00-V25047.00	5767	261.0	8.0	0.076	2.153	0.007	0.095	0.015	0.153	0.009	0.118	0.017	0.168
V25047.00-V25048.00	5667	331.0	8.0	0.022	1.158	0.057	0.166	0.156	0.271	0.090	0.200	0.189	0.294
V25048.00-V25055.00	4793	216.0	8.0	0.018	1.048	0.075	0.184	0.196	0.294	0.101	0.212	0.222	0.314
V25048.A0-V25048.B0	7683	104.8	8.0	0.031	1.375	0.003	0.039	0.005	0.051	0.003	0.034	0.005	0.047
V25048.B0-V25048.C0	7684	143.6	8.0	0.032	1.397	0.005	0.044	0.009	0.058	0.003	0.034	0.007	0.051
V25048.C0-V25048.D0	7685	205.4	8.0	0.064	1.976	0.007	0.043	0.013	0.058	0.004	0.033	0.010	0.052
V25048.D0-V25048.H0	7686	95.2	8.0	0.065	1.991	0.008	0.047	0.016	0.067	0.005	0.038	0.014	0.061
V25048.E0-V25048.F0	7681	130.1	8.0	0.039	1.542	0.002	0.031	0.003	0.042	0.001	0.019	0.002	0.034
V25048.E0-V25070.FA	7679	328.0	8.0	0.011	0.819	0.001	0.022	0.001	0.030	0.000	0.012	0.001	0.025
V25048.F0-V25048.H0	7682	197.5	8.0	0.036	1.482	0.004	0.044	0.007	0.063	0.001	0.032	0.005	0.055
V25048.G0-V25048.H0	7677	145.5	8.0	0.043	1.620	0.001	0.036	0.003	0.055	0.001	0.027	0.003	0.050
V25048.H0-V25048.I0	7687	103.3	8.0	0.066	2.006	0.013	0.054	0.029	0.079	0.007	0.041	0.023	0.071
V25048.I0-V25048.J0	7048	318.0	8.0	0.090	2.343	0.014	0.075	0.032	0.110	0.008	0.058	0.026	0.099
V25048.J0-V25048.00	7880	24.6	8.0	0.004	0.494	0.017	0.138	0.037	0.217	0.010	0.142	0.030	0.220
V25049.00-V25051.00	5736	306.0	8.0	0.007	0.653	0.004	0.059	0.006	0.071	0.003	0.046	0.005	0.061
V25050.00-V25051.00	6462	246.0	8.0	0.011	0.819	0.001	0.039	0.003	0.055	0.002	0.039	0.004	0.055
V25051.00-V25052.00	5766	321.0	8.0	0.043	1.620	0.007	0.049	0.013	0.068	0.006	0.051	0.012	0.070
V25052.00-V25054.00	5666	278.0	8.0	0.036	1.482	0.008	0.059	0.016	0.081	0.010	0.065	0.019	0.085
V25053.00-V25054.00	6461	378.5	8.0	0.007	0.653	0.003	0.056	0.005	0.075	0.003	0.058	0.005	0.076
V25054.00-V25055.00	4792	359.0	8.0	0.046	1.675	0.015	0.126	0.027	0.191	0.016	0.141	0.029	0.201
V25055.00-V25056.00	4733	359.0	8.0	0.018	1.048	0.092	0.246	0.227	0.392	0.120	0.281	0.255	0.418
V25056.00-V25057.00	4732	375.0	8.0	0.006	0.605	0.092	0.259	0.229	0.417	0.120	0.297	0.257	0.445
V25057.00-V25078.00	5638	306.0	8.0	0.026	1.259	0.092	0.184	0.231	0.291	0.121	0.210	0.260	0.309
V25058.00-V25059.00	5913	239.0	8.0	0.196	3.458	0.002	0.020	0.003	0.030	0.005	0.034	0.007	0.041
V25059.00-V25060.00	4851	150.0	8.0	0.112	2.614	0.003	0.025	0.007	0.038	0.009	0.043	0.014	0.051
V25060.00-V25061.00	5683	190.0	8.0	0.179	3.304	0.004	0.051	0.010	0.083	0.013	0.090	0.019	0.110
V25061.00-V25063.00	6119	111.0	8.0	0.010	0.781	0.005	0.055	0.013	0.088	0.015	0.093	0.023	0.115
V25062.00-V25063.00	5914	150.0	6.0	0.189	1.577	0.001	0.030	0.003	0.048	0.002	0.047	0.004	0.059
V25063.00-V25064.00	5735	25.0	6.0	0.047	0.786	0.009	0.058	0.022	0.088	0.022	0.088	0.034	0.110
V25064.00-V25065.00	6479	170.0	6.0	0.072	0.973	0.009	0.072	0.024	0.114	0.023	0.109	0.037	0.140
V25065.00-V25066.00	4237	128.0	8.0	0.040	1.562	0.009	0.071	0.026	0.118	0.023	0.110	0.039	0.144
V25066.00-V25067.A0	5911	335.0	8.0	0.010	0.781	0.010	0.078	0.028	0.129	0.023	0.118	0.042	0.156
V25067.00-V25068.00	5889	350.0	8.0	0.030	1.353	0.014	0.074	0.036	0.120	0.028	0.104	0.050	0.140

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V25067.A0-V25067.00	5912	335.0	8.0	0.024	1.210	0.011	0.069	0.032	0.112	0.025	0.099	0.046	0.133
V25068.00-V25071.00	4791	347.0	8.0	0.019	1.077	0.014	0.103	0.038	0.160	0.028	0.125	0.052	0.175
V25070.00-V25071.00	5410	174.0	8.0	0.007	0.653	0.024	0.131	0.045	0.185	0.017	0.126	0.038	0.183
V25070.A0-V25070.B0	6660	305.0	8.0	0.158	3.104	0.002	0.026	0.006	0.041	0.004	0.031	0.008	0.044
V25070.AA-V25070.A0	5909	52.0	8.0	0.002	0.349	0.001	0.039	0.003	0.064	0.002	0.052	0.004	0.072
V25070.B0-V25070.C0	5682	99.0	8.0	0.063	1.960	0.005	0.064	0.011	0.096	0.006	0.071	0.012	0.100
V25070.C0-V25070.D0	5908	105.0	8.0	0.008	0.699	0.006	0.063	0.014	0.096	0.007	0.072	0.016	0.102
V25070.D0-V25070.E0	5907	249.0	8.0	0.210	3.579	0.006	0.043	0.017	0.063	0.010	0.050	0.021	0.068
V25070.E0-V25070.F0	5906	200.0	8.0	0.068	2.037	0.012	0.062	0.025	0.089	0.015	0.065	0.027	0.092
V25070.F0-V25070.00	4790	220.0	8.0	0.019	1.077	0.015	0.101	0.034	0.140	0.016	0.091	0.035	0.134
V25070.FA-V25070.FB	7680	171.4	8.0	0.181	3.323	0.002	0.024	0.004	0.038	0.001	0.018	0.003	0.035
V25070.FB-V25070.F0	7678	220.0	8.0	0.039	1.542	0.003	0.050	0.008	0.075	0.002	0.048	0.007	0.075
V25071.00-V25072.00	4828	347.0	8.0	0.019	1.077	0.038	0.132	0.086	0.197	0.046	0.144	0.094	0.206
V25072.00-V25077.00	4731	376.0	8.0	0.016	0.988	0.039	0.145	0.089	0.215	0.047	0.159	0.097	0.225
V25073.00-V25074.00	6955	119.0	8.0	0.017	1.018	0.003	0.050	0.006	0.063	0.001	0.042	0.003	0.059
V25074.00-V25076.00	5904	350.0	8.0	0.012	0.856	0.005	0.060	0.010	0.079	0.007	0.069	0.011	0.085
V25075.00-V25076.00	4730	86.0	8.0	0.018	1.048	0.004	0.051	0.006	0.066	0.002	0.052	0.004	0.067
V25076.00-V25077.00	5982	239.0	8.0	0.030	1.353	0.011	0.109	0.019	0.155	0.015	0.122	0.023	0.165
V25077.00-V25078.00	5637	375.0	8.0	0.016	0.988	0.051	0.155	0.111	0.233	0.063	0.173	0.123	0.246
V26001.00-V26002.00	6659	333.0	8.0	0.019	1.077	0.012	0.075	0.059	0.161	0.126	0.233	0.173	0.274
V26002.00-V26003.00	4141	170.0	8.0	0.019	1.077	0.012	0.075	0.062	0.163	0.129	0.234	0.178	0.276
V26003.00-V26009.00	1049	187.0	8.0	0.021	1.132	0.012	0.078	0.064	0.178	0.132	0.252	0.184	0.300
V26004.00-V26007.00	6615	267.0	8.0	0.129	2.805	0.001	0.012	0.002	0.033	0.010	0.049	0.012	0.057
V26005.00-V26006.00	1048	60.4	8.0	0.050	1.746	0.000	0.004	0.002	0.024	0.002	0.021	0.004	0.030
V26006.00-V26007.00	1046	305.0	8.0	0.206	3.545	0.002	0.011	0.004	0.035	0.004	0.040	0.008	0.051
V26007.00-V26008.00	8203	302.0	8.0	0.119	2.694	0.002	0.020	0.009	0.060	0.016	0.073	0.024	0.091
V26008.00-V26009.00	1050	177.0	8.0	0.015	0.957	0.001	0.055	0.011	0.136	0.016	0.182	0.027	0.220
V26009.00-V26010.00	1051	318.0	8.0	0.014	0.924	0.013	0.084	0.077	0.195	0.150	0.271	0.214	0.326
V26010.00-V26017.B0	4850	233.0	8.0	0.015	0.957	0.014	0.085	0.080	0.199	0.152	0.274	0.218	0.330
V26011.00-V26013.00	4849	252.1	8.0	0.033	1.419	0.002	0.046	0.008	0.086	0.013	0.097	0.019	0.121
V26011.A0-V26011.B0	6075	208.2	8.0	0.065	1.991	0.001	0.016	0.003	0.033	0.008	0.049	0.010	0.056
V26011.B0-V26011.00	4140	163.7	8.0	0.069	2.052	0.001	0.023	0.005	0.046	0.010	0.059	0.014	0.070
V26012.00-V26013.00	6709	80.0	8.0	0.033	1.419	0.000	0.036	0.002	0.073	0.001	0.074	0.003	0.096
V26013.00-V26014.00	6708	54.0	8.0	0.005	0.552	0.003	0.049	0.013	0.097	0.015	0.101	0.025	0.130
V26014.00-V26016.00	6707	161.4	8.0	0.027	1.283	0.003	0.046	0.016	0.100	0.015	0.092	0.027	0.127
V26016.00-V26017.00	6706	169.6	8.0	0.007	0.653	0.004	0.080	0.020	0.184	0.016	0.212	0.032	0.272
V26016.A0-V26016.00	1421	150.0	8.0	0.008	0.699	0.001	0.040	0.003	0.084	0.001	0.067	0.003	0.100
V26017.00-V26018.00	6705	176.0	8.0	0.011	0.819	0.018	0.103	0.107	0.242	0.176	0.311	0.264	0.386
V26017.A0-V26017.B0	4848	180.0	8.0	0.089	2.330	0.001	0.050	0.003	0.114	0.005	0.156	0.007	0.188
V26017.B0-V26017.00	6704	233.0	8.0	0.015	0.957	0.015	0.095	0.085	0.224	0.160	0.296	0.230	0.363
V26018.00-V26026.00	5681	270.0	8.0	0.013	0.890	0.019	0.109	0.109	0.251	0.181	0.320	0.271	0.398
V26019.00-V26020.00	6077	158.0	8.0	0.009	0.741	0.001	0.028	0.003	0.046	0.001	0.031	0.003	0.048
V26020.00-V26021.00	6703	183.0	8.0	0.075	2.139	0.001	0.021	0.005	0.043	0.001	0.023	0.005	0.044
V26021.00-V26022.00	5680	155.0	8.0	0.047	1.693	0.002	0.043	0.008	0.078	0.002	0.045	0.009	0.079
V26022.00-V26026.00	6511	250.0	8.0	0.004	0.494	0.004	0.089	0.012	0.185	0.004	0.198	0.012	0.261
V26023.00-V26024.00	6076	173.0	8.0	0.071	2.081	0.001	0.025	0.003	0.040	0.011	0.067	0.013	0.073
V26024.00-V26025.00	4847	464.0	8.0	0.042	1.601	0.003	0.031	0.007	0.047	0.016	0.070	0.020	0.079
V26025.00-V26026.00	5679	85.0	8.0	0.062	1.945	0.004	0.074	0.010	0.154	0.018	0.196	0.025	0.241
V26026.00-V26029.00	5678	362.0	8.0	0.016	0.988	0.027	0.114	0.134	0.250	0.203	0.309	0.310	0.386
V26027.00-V26028.00	5074	239.7	8.0	0.118	2.683	0.001	0.020	0.003	0.038	0.001	0.023	0.003	0.039
V26028.00-V26029.00	5073	232.0	8.0	0.020	1.104	0.001	0.069	0.006	0.143	0.002	0.158	0.006	0.205
V26029.00-V26030.00	5677	58.0	8.0	0.010	0.781	0.030	0.113	0.143	0.236	0.208	0.284	0.321	0.356
V26030.00-V26070.00	6118	242.0	8.0	0.004	0.494	0.030	0.216	0.146	0.456	0.208	0.502	0.324	0.705
V26031.00-V26032.00	6814	123.0	8.0	0.032	1.397	0.000	0.020	0.002	0.040	0.000	0.022	0.002	0.041
V26032.00-V26033.00	227	298.0	8.0	0.027	1.283	0.002	0.030	0.006	0.049	0.002	0.034	0.006	0.052

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V26033.00-V26034.00	6614	454.0	8.0	0.071	2.081	0.004	0.038	0.010	0.058	0.005	0.043	0.011	0.061
V26034.00-V26035.00	6790	140.0	8.0	0.044	1.638	0.006	0.047	0.014	0.070	0.008	0.053	0.016	0.074
V26035.00-V26042.00	1651	319.9	8.0	0.044	1.638	0.008	0.154	0.018	0.224	0.010	0.174	0.020	0.236
V26036.00-V26037.00	5128	364.0	6.0	0.007	0.303	0.001	0.049	0.003	0.074	0.003	0.070	0.005	0.089
V26037.00-V26038.00	6813	168.0	8.0	0.073	2.110	0.003	0.030	0.007	0.045	0.004	0.036	0.009	0.049
V26038.00-V26040.00	4569	226.0	8.0	0.085	2.277	0.004	0.036	0.010	0.055	0.006	0.043	0.012	0.059
V26039.00-V26040.00	223	148.1	8.0	0.002	0.349	0.002	0.051	0.004	0.073	0.004	0.072	0.006	0.088
V26040.00-V26041.00	6613	145.0	8.0	0.087	2.304	0.007	0.041	0.017	0.063	0.010	0.049	0.021	0.069
V26041.00-V26042.00	1650	159.0	8.0	0.089	2.330	0.008	0.150	0.020	0.219	0.011	0.171	0.024	0.233
V26042.00-V26043.00	6737	84.3	8.0	0.000	0.000	0.017	0.170	0.041	0.250	0.023	0.192	0.047	0.265
V26043.00-V26044.00	6736	191.0	8.0	0.027	1.283	0.017	0.120	0.044	0.189	0.023	0.140	0.050	0.202
V26044.00-V26048.00	6735	208.0	8.0	0.004	0.494	0.019	0.133	0.048	0.209	0.026	0.156	0.055	0.224
V26045.00-V26046.00	6612	125.0	8.0	0.037	1.502	0.001	0.026	0.003	0.039	0.002	0.028	0.004	0.040
V26046.00-V26047.00	1649	208.0	8.0	0.079	2.195	0.003	0.031	0.007	0.045	0.004	0.034	0.008	0.047
V26047.00-V26048.00	6733	123.0	8.0	0.083	2.250	0.005	0.070	0.011	0.108	0.006	0.080	0.012	0.114
V26048.00-V26049.00	6658	297.0	8.0	0.016	0.988	0.024	0.127	0.062	0.195	0.033	0.143	0.070	0.206
V26049.00-V26057.00	5072	267.0	8.0	0.013	0.890	0.026	0.116	0.065	0.181	0.035	0.133	0.074	0.192
V26050.00-V26051.00	6051	141.0	8.0	0.003	0.428	0.001	0.040	0.003	0.068	0.002	0.054	0.004	0.077
V26051.00-V26052.00	6812	250.0	8.0	0.004	0.494	0.002	0.055	0.006	0.097	0.004	0.076	0.008	0.110
V26052.00-V26053.00	5127	277.0	8.0	0.005	0.552	0.002	0.049	0.009	0.088	0.004	0.065	0.011	0.098
V26053.00-V26054.00	6811	117.0	8.0	0.053	1.798	0.003	0.030	0.011	0.056	0.005	0.039	0.013	0.061
V26054.00-V26055.00	4568	192.0	8.0	0.113	2.625	0.004	0.028	0.014	0.054	0.008	0.042	0.018	0.062
V26055.00-V26056.00	6611	322.0	8.0	0.110	2.590	0.004	0.033	0.016	0.062	0.010	0.049	0.022	0.072
V26056.00-V26057.00	6657	89.0	8.0	0.041	1.581	0.005	0.061	0.019	0.103	0.012	0.080	0.026	0.115
V26057.00-V26058.00	4846	187.0	8.0	0.075	2.139	0.032	0.087	0.088	0.140	0.050	0.107	0.106	0.154
V26058.00-V26059.00	6702	235.0	8.0	0.071	2.081	0.033	0.094	0.091	0.151	0.052	0.116	0.110	0.166
V26059.00-V26060.00	6079	230.0	8.0	0.047	1.693	0.035	0.179	0.095	0.286	0.054	0.215	0.114	0.311
V26060.00-V26069.00	6080	139.0	8.0	0.004	0.494	0.036	0.178	0.098	0.290	0.055	0.220	0.117	0.318
V26061.00-V26062.00	6081	145.0	6.0	0.126	1.287	0.001	0.039	0.003	0.070	0.002	0.041	0.004	0.071
V26062.00-V26064.00	6082	287.0	6.0	0.013	0.413	0.001	0.043	0.006	0.082	0.002	0.052	0.006	0.086
V26063.00-V26064.00	6610	40.0	8.0	0.016	0.988	0.001	0.019	0.003	0.037	0.006	0.040	0.008	0.050
V26064.00-V26065.00	6789	151.0	8.0	0.114	2.637	0.002	0.023	0.011	0.045	0.008	0.044	0.017	0.058
V26065.00-V26066.00	1648	85.0	8.0	0.076	2.153	0.003	0.026	0.013	0.052	0.015	0.053	0.025	0.069
V26066.00-V26067.00	6655	225.0	8.0	0.094	2.394	0.004	0.030	0.016	0.060	0.015	0.061	0.027	0.080
V26067.00-V26068.00	6083	217.0	8.0	0.092	2.369	0.004	0.038	0.018	0.079	0.020	0.080	0.035	0.104
V26068.00-V26069.C0	6046	167.1	8.0	0.021	1.132	0.005	0.051	0.021	0.103	0.020	0.097	0.037	0.131
V26069.00-V26070.00	6117	77.0	8.0	0.038	1.522	0.043	0.181	0.130	0.352	0.079	0.340	0.166	0.501
V26069.A0-V26069.B0	6047	151.0	8.0	0.114	2.637	0.001	0.023	0.003	0.037	0.002	0.024	0.004	0.038
V26069.B0-V26069.C0	6048	76.0	8.0	0.024	1.210	0.002	0.042	0.006	0.079	0.002	0.065	0.006	0.093
V26069.C0-V26069.00	6049	142.2	8.0	0.021	1.132	0.007	0.077	0.029	0.139	0.024	0.116	0.046	0.164
V26070.00-V26071.00	6153	232.0	8.0	0.004	0.494	0.075	0.265	0.279	0.542	0.289	0.554	0.493	0.828
V26071.00-V26072.00	6152	232.0	8.0	0.004	0.494	0.077	0.268	0.283	0.546	0.294	0.559	0.500	0.856
V26072.00-V26073.00	6180	240.0	8.0	0.004	0.494	0.078	0.299	0.286	0.611	0.296	0.633	0.504	0.934
V26073.00-V26087.00	6179	244.0	8.0	0.004	0.494	0.078	0.265	0.288	0.528	0.302	0.541	0.512	0.756
V26074.00-V26075.00	1680	73.0	8.0	0.002	0.349	0.002	0.056	0.004	0.084	0.005	0.087	0.007	0.107
V26075.00-V26076.00	6609	221.5	8.0	0.002	0.349	0.002	0.077	0.007	0.119	0.006	0.117	0.010	0.148
V26076.00-V26078.00	6788	71.5	8.0	0.002	0.349	0.003	0.065	0.009	0.107	0.008	0.096	0.014	0.127
V26077.00-V26078.00	6353	28.0	8.0	0.008	0.699	0.000	0.025	0.002	0.052	0.000	0.032	0.003	0.054
V26078.00-V26081.00	6654	367.0	8.0	0.097	2.432	0.006	0.036	0.022	0.067	0.012	0.052	0.028	0.076
V26078.A0-V26078.B0	6787	155.0	8.0	0.018	1.048	0.002	0.031	0.004	0.044	0.002	0.035	0.004	0.048
V26078.B0-V26078.C0	6786	24.0	8.0	0.009	0.741	0.002	0.027	0.006	0.051	0.003	0.036	0.007	0.056
V26078.C0-V26078.00	6784	45.0	8.0	0.011	0.819	0.002	0.033	0.008	0.064	0.003	0.044	0.009	0.069
V26079.00-V26080.00	6350	93.0	8.0	0.004	0.494	0.001	0.029	0.003	0.055	0.005	0.075	0.007	0.087
V26080.00-V26081.00	6352	350.0	8.0	0.035	1.461	0.001	0.029	0.006	0.054	0.009	0.056	0.013	0.072
V26081.00-V26082.00	4844	78.0	8.0	0.095	2.407	0.009	0.055	0.031	0.100	0.023	0.089	0.046	0.122

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V26082.00-V26084.00	5676	187.0	8.0	0.017	1.018	0.009	0.065	0.033	0.124	0.025	0.108	0.050	0.151
V26083.00-V26084.00	6084	77.4	8.0	0.002	0.349	0.000	0.028	0.002	0.084	0.000	0.046	0.002	0.094
V26084.00-V26085.00	6510	374.7	8.0	0.032	1.397	0.009	0.059	0.037	0.116	0.025	0.095	0.054	0.137
V26085.00-V26086.00	6507	189.5	8.0	0.032	1.397	0.011	0.072	0.042	0.133	0.027	0.107	0.058	0.154
V26086.00-V26087.00	6177	184.7	8.0	0.019	1.077	0.015	0.141	0.050	0.264	0.031	0.246	0.066	0.340
V26086.A0-V26086.00	6506	311.0	8.0	0.020	1.104	0.003	0.061	0.005	0.098	0.003	0.076	0.005	0.107
V26087.00-V26175.00	6176	379.0	8.0	0.020	1.104	0.098	0.255	0.345	0.491	0.335	0.455	0.582	0.756
V26088.00-V26089.00	5136	10.0	6.0	0.005	0.256	0.001	0.025	0.003	0.042	0.003	0.042	0.005	0.053
V26089.00-V26090.00	6036	130.0	6.0	0.085	1.057	0.002	0.032	0.006	0.056	0.006	0.056	0.010	0.072
V26090.00-V26091.00	6035	85.0	6.0	0.077	1.006	0.002	0.034	0.009	0.060	0.008	0.057	0.014	0.075
V26091.00-V26095.00	1679	75.0	8.0	0.058	1.881	0.003	0.033	0.011	0.063	0.009	0.060	0.018	0.080
V26092.00-V26093.00	6037	145.0	8.0	0.011	0.819	0.002	0.035	0.004	0.049	0.009	0.074	0.011	0.082
V26093.00-V26094.00	6038	190.0	8.0	0.147	2.994	0.002	0.023	0.007	0.041	0.011	0.046	0.015	0.056
V26094.00-V26095.00	1677	38.0	8.0	0.015	0.957	0.003	0.032	0.011	0.062	0.011	0.062	0.019	0.082
V26094.A0-V26094.00	1218	3.2	8.0	0.006	0.605	0.000	0.012	0.002	0.030	0.000	0.024	0.002	0.038
V26095.00-V26097.00	4567	244.0	8.0	0.066	2.006	0.006	0.039	0.024	0.077	0.021	0.072	0.040	0.098
V26096.00-V26097.00	222	60.0	8.0	0.003	0.428	0.001	0.033	0.003	0.063	0.001	0.047	0.003	0.072
V26097.00-V26101.00	6557	129.0	8.0	0.088	2.317	0.007	0.045	0.030	0.086	0.023	0.075	0.046	0.104
V26098.00-V26099.00	5117	142.0	8.0	0.067	2.022	0.001	0.020	0.003	0.032	0.002	0.026	0.004	0.036
V26099.00-V26100.00	6810	228.0	8.0	0.132	2.838	0.002	0.024	0.006	0.040	0.004	0.032	0.008	0.044
V26100.00-V26101.00	6556	150.0	8.0	0.096	2.420	0.003	0.039	0.009	0.071	0.006	0.059	0.012	0.083
V26101.00-V26105.00	1647	217.0	8.0	0.077	2.167	0.011	0.060	0.042	0.117	0.031	0.104	0.062	0.145
V26102.00-V26103.00	6034	188.0	8.0	0.161	3.134	0.002	0.012	0.003	0.026	0.002	0.023	0.004	0.031
V26103.00-V26104.00	6032	85.0	8.0	0.078	2.181	0.001	0.017	0.005	0.038	0.005	0.033	0.009	0.047
V26104.00-V26105.00	6031	345.0	8.0	0.046	1.675	0.001	0.045	0.007	0.093	0.005	0.081	0.011	0.115
V26105.00-V26106.00	6732	283.0	8.0	0.028	1.307	0.013	0.070	0.052	0.136	0.039	0.118	0.078	0.165
V26106.00-V26107.00	6653	302.0	8.0	0.041	1.581	0.014	0.067	0.055	0.128	0.042	0.113	0.083	0.155
V26107.00-V26108.00	4843	375.0	8.0	0.053	1.798	0.014	0.086	0.057	0.159	0.049	0.145	0.092	0.197
V26108.00-V26160.00	6701	62.0	8.0	0.008	0.699	0.019	0.143	0.065	0.248	0.053	0.215	0.098	0.296
V26109.00-V26110.00	6834	112.0	8.0	0.007	0.653	0.004	0.057	0.012	0.104	0.023	0.139	0.031	0.163
V26109.A0-V26109.B0	6833	33.0	8.0	0.005	0.552	0.001	0.027	0.003	0.051	0.009	0.082	0.011	0.092
V26109.B0-V26109.C0	6832	194.0	8.0	0.008	0.699	0.001	0.038	0.006	0.070	0.014	0.109	0.018	0.123
V26109.C0-V26109.00	6831	192.0	8.0	0.008	0.699	0.002	0.048	0.009	0.086	0.023	0.126	0.029	0.144
V26110.00-V26113.00	6830	82.0	8.0	0.004	0.494	0.004	0.070	0.014	0.131	0.024	0.164	0.034	0.197
V26111.00-V26112.00	5152	115.0	8.0	0.095	2.407	0.001	0.021	0.003	0.033	0.004	0.031	0.006	0.040
V26112.00-V26113.00	2476	182.0	8.0	0.065	1.991	0.002	0.053	0.007	0.094	0.005	0.109	0.009	0.133
V26113.00-V26114.00	6829	249.0	8.0	0.004	0.494	0.006	0.122	0.023	0.187	0.035	0.207	0.052	0.250
V26114.00-V26115.00	6828	181.0	8.0	0.005	0.552	0.019	0.127	0.037	0.177	0.039	0.179	0.057	0.217
V26115.00-V26116.00	6043	295.0	8.0	0.036	1.482	0.020	0.082	0.041	0.114	0.040	0.113	0.060	0.138
V26116.00-V26117.00	6044	277.0	8.0	0.068	2.037	0.022	0.098	0.045	0.136	0.043	0.136	0.066	0.165
V26117.00-V26122.00	6045	89.0	8.0	0.013	0.890	0.024	0.109	0.049	0.154	0.046	0.150	0.071	0.184
V26118.00-V26119.00	755	46.0	8.0	0.001	0.247	0.001	0.035	0.003	0.062	0.001	0.046	0.003	0.068
V26119.00-V26121.00	2475	160.0	8.0	0.006	0.605	0.002	0.044	0.006	0.072	0.004	0.055	0.008	0.080
V26120.00-V26121.00	2474	280.0	8.0	-0.038	Adverse	0.003	0.517	0.005	0.525	0.003	0.519	0.005	0.526
V26121.00-V26122.00	6529	336.0	8.0	0.159	3.114	0.006	0.065	0.015	0.094	0.008	0.083	0.016	0.107
V26122.00-V26123.00	6554	187.0	8.0	0.041	1.581	0.031	0.105	0.066	0.151	0.055	0.137	0.090	0.175
V26123.00-V26125.00	6553	142.0	8.0	0.025	1.235	0.033	0.174	0.070	0.250	0.058	0.228	0.095	0.291
V26124.00-V26125.00	1676	68.2	8.0	0.003	0.428	0.004	0.151	0.010	0.221	0.008	0.199	0.014	0.257
V26124.A0-V26124.B0	6528	137.0	8.0	0.103	2.507	0.001	0.023	0.003	0.034	0.003	0.033	0.005	0.041
V26124.B0-V26124.00	6809	273.0	8.0	0.090	2.343	0.004	0.049	0.008	0.073	0.007	0.065	0.011	0.085
V26125.00-V26130.00	1675	164.0	8.0	0.004	0.494	0.038	0.182	0.083	0.269	0.066	0.239	0.111	0.311
V26126.00-V26128.00	6042	40.0	8.0	0.043	1.620	0.001	0.026	0.003	0.047	0.001	0.022	0.003	0.045
V26127.00-V26128.00	6041	10.0	8.0	0.002	0.349	0.001	0.037	0.003	0.067	0.001	0.035	0.003	0.066
V26128.00-V26129.00	5116	152.0	8.0	0.055	1.832	0.003	0.031	0.011	0.056	0.002	0.028	0.011	0.055
V26128.A0-V26128.00	6039	70.0	8.0	0.031	1.375	0.001	0.029	0.003	0.051	0.001	0.025	0.003	0.049

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V26129.00-V26130.00	6808	82.0	8.0	0.084	2.264	0.004	0.077	0.014	0.122	0.004	0.097	0.014	0.136
V26130.00-V26133.00	1674	366.0	8.0	0.030	1.353	0.042	0.120	0.100	0.183	0.070	0.154	0.128	0.207
V26131.00-V26132.00	2473	214.0	8.0	0.124	2.750	0.003	0.030	0.005	0.038	0.004	0.031	0.006	0.039
V26132.00-V26133.00	6527	350.0	8.0	0.141	2.933	0.006	0.072	0.010	0.105	0.007	0.087	0.011	0.115
V26133.00-V26134.00	4566	250.9	8.0	0.057	1.865	0.049	0.111	0.113	0.167	0.078	0.139	0.142	0.186
V26134.00-V26146.00	6552	192.0	8.0	0.060	1.913	0.051	0.115	0.116	0.175	0.080	0.143	0.146	0.194
V26135.00-V26136.00	6053	148.0	8.0	0.014	0.924	0.001	0.026	0.003	0.042	0.002	0.032	0.004	0.045
V26136.00-V26138.00	2482	70.0	8.0	0.049	1.729	0.003	0.032	0.007	0.049	0.005	0.040	0.009	0.054
V26137.00-V26138.00	2480	280.0	8.0	0.014	0.924	0.002	0.036	0.004	0.054	0.002	0.041	0.004	0.057
V26138.00-V26143.00	6526	399.0	8.0	0.062	1.945	0.006	0.040	0.014	0.060	0.008	0.047	0.017	0.065
V26139.00-V26140.00	6056	75.0	8.0	0.067	2.022	0.001	0.033	0.003	0.053	0.002	0.039	0.004	0.056
V26140.00-V26142.00	6055	189.0	8.0	0.005	0.552	0.002	0.055	0.007	0.092	0.003	0.068	0.008	0.100
V26141.00-V26142.00	6054	45.0	8.0	0.002	0.349	0.001	0.047	0.003	0.084	0.002	0.067	0.004	0.097
V26142.00-V26143.00	5125	190.0	8.0	0.004	0.494	0.004	0.112	0.012	0.182	0.006	0.137	0.014	0.198
V26143.00-V26144.00	5124	126.0	8.0	0.003	0.428	0.011	0.106	0.030	0.168	0.017	0.128	0.035	0.183
V26144.00-V26145.00	6807	217.0	8.0	0.104	2.519	0.012	0.050	0.032	0.081	0.018	0.061	0.039	0.088
V26145.00-V26146.00	6551	192.0	8.0	0.100	2.470	0.012	0.085	0.035	0.133	0.019	0.104	0.041	0.146
V26146.00-V26147.F0	6783	114.0	8.0	0.022	1.158	0.063	0.123	0.154	0.190	0.099	0.153	0.189	0.210
V26147.00-V26148.00	6782	112.0	8.0	0.058	1.881	0.071	0.127	0.177	0.197	0.110	0.157	0.215	0.218
V26147.A0-V26147.B0	6806	350.0	8.0	0.110	2.590	0.003	0.042	0.005	0.055	0.004	0.047	0.006	0.058
V26147.B0-V26147.C0	4565	282.0	8.0	0.010	0.781	0.005	0.068	0.009	0.092	0.006	0.073	0.010	0.096
V26147.C0-V26147.D0	221	300.0	8.0	0.010	0.781	0.006	0.062	0.012	0.087	0.007	0.069	0.014	0.091
V26147.D0-V26147.E0	6550	285.0	8.0	0.053	1.798	0.007	0.060	0.016	0.089	0.010	0.069	0.018	0.095
V26147.E0-V26147.F0	6781	153.0	8.0	0.008	0.699	0.008	0.101	0.018	0.155	0.010	0.122	0.021	0.169
V26147.F0-V26147.00	6780	70.7	8.0	0.035	1.461	0.071	0.129	0.174	0.200	0.110	0.158	0.213	0.219
V26148.00-V26149.00	1646	282.0	8.0	0.080	2.209	0.071	0.135	0.179	0.212	0.118	0.172	0.225	0.238
V26149.00-V26150.00	6652	203.0	8.0	0.038	1.522	0.071	0.169	0.181	0.265	0.118	0.221	0.227	0.302
V26150.00-V26159.00	5071	258.0	8.0	0.019	1.077	0.071	0.175	0.183	0.279	0.129	0.234	0.240	0.321
V26151.00-V26152.00	6027	96.0	8.0	0.054	1.815	0.001	0.018	0.003	0.031	0.002	0.027	0.004	0.037
V26152.00-V26153.00	6028	280.0	8.0	0.140	2.922	0.002	0.023	0.006	0.038	0.004	0.031	0.008	0.044
V26153.00-V26156.00	6549	94.0	8.0	0.060	1.913	0.003	0.025	0.009	0.046	0.006	0.037	0.012	0.053
V26154.00-V26155.00	220	97.0	8.0	0.054	1.815	0.001	0.010	0.002	0.032	0.002	0.025	0.004	0.038
V26155.00-V26156.00	6548	224.0	8.0	0.043	1.620	0.000	0.018	0.004	0.044	0.002	0.033	0.006	0.051
V26156.00-V26157.00	1645	83.0	8.0	0.082	2.236	0.004	0.025	0.016	0.051	0.009	0.038	0.022	0.058
V26157.00-V26158.00	6029	40.0	8.0	0.018	1.048	0.004	0.027	0.018	0.056	0.009	0.040	0.024	0.063
V26158.00-V26159.00	6030	118.0	8.0	0.118	2.683	0.004	0.094	0.021	0.160	0.010	0.128	0.026	0.182
V26159.00-V26160.00	4842	223.0	8.0	0.031	1.375	0.076	0.169	0.206	0.280	0.139	0.233	0.269	0.326
V26160.00-V26161.00	5675	216.0	8.0	0.034	1.440	0.096	0.175	0.274	0.295	0.194	0.248	0.371	0.346
V26161.00-V26162.00	6509	299.0	8.0	0.036	1.482	0.096	0.185	0.276	0.312	0.194	0.260	0.373	0.365
V26162.00-V26163.00	6505	290.0	8.0	0.023	1.184	0.102	0.202	0.283	0.339	0.197	0.281	0.379	0.396
V26163.00-V26173.00	6026	263.4	8.0	0.021	1.132	0.103	0.206	0.286	0.349	0.199	0.288	0.382	0.408
V26164.00-V26165.00	6547	112.0	8.0	0.084	2.264	0.001	0.019	0.003	0.031	0.001	0.018	0.003	0.031
V26165.00-V26166.00	1644	125.0	8.0	0.075	2.139	0.002	0.081	0.006	0.127	0.002	0.085	0.006	0.129
V26166.00-V26168.00	6626	107.0	8.0	0.000	0.000	0.003	0.084	0.009	0.134	0.003	0.089	0.009	0.137
V26167.00-V26168.00	5070	130.0	8.0	0.010	0.781	0.001	0.026	0.003	0.048	0.001	0.028	0.003	0.049
V26168.00-V26169.00	4841	135.0	8.0	0.096	2.420	0.004	0.131	0.014	0.211	0.005	0.147	0.015	0.220
V26169.00-V26170.00	4840	105.0	8.0	0.000	0.000	0.007	0.139	0.024	0.223	0.010	0.160	0.027	0.235
V26169.A0-V26169.B0	6450	307.0	8.0	0.133	2.848	0.002	0.023	0.003	0.035	0.003	0.031	0.005	0.040
V26169.B0-V26169.00	6625	210.0	8.0	0.061	1.929	0.003	0.131	0.007	0.207	0.005	0.151	0.009	0.218
V26170.00-V26171.00	5673	112.0	8.0	0.085	2.277	0.010	0.049	0.032	0.088	0.017	0.065	0.040	0.098
V26170.A0-V26170.B0	4839	168.0	8.0	0.067	2.022	0.001	0.028	0.003	0.049	0.003	0.056	0.005	0.066
V26170.B0-V26170.00	4838	162.0	8.0	0.006	0.605	0.002	0.041	0.006	0.072	0.006	0.070	0.010	0.090
V26171.00-V26172.00	6508	179.0	8.0	0.044	1.638	0.010	0.058	0.034	0.104	0.018	0.079	0.043	0.116
V26172.00-V26173.00	6022	205.0	6.0	0.060	0.888	0.012	0.180	0.039	0.307	0.024	0.249	0.050	0.356
V26173.00-V26174.00	6024	101.8	8.0	0.025	1.235	0.116	0.223	0.328	0.382	0.224	0.312	0.436	0.460

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V26174.00-V26175.00	6025	82.1	8.0	0.014	0.924	0.117	0.274	0.331	0.505	0.226	0.434	0.440	0.754
V26175.00-V26176.00	6175	321.0	8.0	0.018	1.048	0.215	0.309	0.678	0.589	0.562	0.524	1.032	1.000
V26176.00-V26177.00	5942	30.7	8.0	0.001	0.247	0.002	0.261	0.002	0.531	0.001	0.466	0.030	1.000
V26177.00-V26182.00	6174	321.0	8.0	0.025	1.235	0.217	0.285	0.685	0.532	0.563	0.475	1.029	1.000
V26178.00-V26179.00	6700	70.0	8.0	0.009	0.741	0.001	0.032	0.003	0.052	0.005	0.060	0.007	0.073
V26179.00-V26180.00	5672	128.0	8.0	0.027	1.283	0.001	0.025	0.006	0.047	0.007	0.052	0.011	0.065
V26180.00-V26181.00	6190	82.0	8.0	0.066	2.006	0.002	0.020	0.008	0.042	0.009	0.044	0.015	0.057
V26181.00-V26182.00	6504	206.0	8.0	0.111	2.602	0.002	0.141	0.010	0.266	0.011	0.242	0.019	0.531
V26182.00-V26183.00	6354	291.0	8.0	0.019	1.077	0.219	0.431	0.697	0.744	0.575	0.718	1.051	1.000
V26183.00-V26185.00	6355	291.0	8.0	0.006	0.605	0.219	0.403	0.699	0.686	0.577	0.668	1.054	0.734
V26184.00-V26185.00	5137	57.7	8.0	0.000	0.000	0.002	0.205	0.005	0.373	0.004	0.335	0.010	0.467
V26184.A0-V26184.00	6435	292.1	8.0	0.018	1.048	0.001	0.111	0.003	0.205	0.001	0.177	0.003	0.253
V26185.00-V26186.00	4491	178.0	8.0	0.074	2.125	0.220	0.252	0.706	0.473	0.578	0.424	1.060	0.734
V26186.00-V26187.00	5765	379.0	8.0	0.021	1.132	0.221	0.302	0.709	0.572	0.584	0.508	1.069	1.000
V26187.00-V26189.00	5888	387.0	8.0	0.022	1.158	0.235	0.315	0.725	0.596	0.589	0.523	1.075	1.000
V26188.00-V26189.00	5062	212.0	6.0	0.004	0.229	0.003	0.256	0.005	0.463	0.003	0.404	0.060	1.000
V26189.00-V26190.00	5061	387.0	8.0	0.020	1.104	0.237	0.314	0.732	0.592	0.593	0.520	1.081	1.000
V26190.00-V26191.00	4789	365.0	8.0	0.024	1.210	0.239	0.323	0.736	0.612	0.596	0.534	1.085	1.000
V26191.00-V26236.00	5409	363.0	8.0	0.015	0.957	0.244	0.407	0.742	0.824	0.599	0.665	1.090	1.000
V26192.00-V26193.00	6052	226.0	8.0	0.054	1.815	0.001	0.025	0.003	0.038	0.004	0.040	0.006	0.049
V26193.00-V26194.00	2472	154.0	8.0	0.062	1.945	0.003	0.030	0.007	0.047	0.007	0.046	0.011	0.058
V26194.00-V26195.00	6525	177.0	8.0	0.064	1.976	0.004	0.034	0.010	0.055	0.009	0.051	0.015	0.066
V26195.00-V26196.00	5135	214.0	8.0	0.057	1.865	0.005	0.037	0.013	0.060	0.011	0.054	0.019	0.071
V26196.00-V26197.00	5115	66.0	8.0	0.036	1.482	0.005	0.038	0.016	0.063	0.012	0.057	0.022	0.076
V26197.00-V26198.00	5123	81.0	8.0	0.043	1.620	0.006	0.047	0.018	0.083	0.015	0.075	0.027	0.101
V26198.00-V26199.00	6805	195.0	8.0	0.031	1.375	0.006	0.046	0.020	0.085	0.015	0.074	0.030	0.101
V26199.00-V26200.00	1673	148.0	8.0	0.099	2.457	0.007	0.043	0.023	0.076	0.016	0.064	0.033	0.090
V26200.00-V26202.00	4564	241.0	8.0	0.049	1.729	0.007	0.051	0.026	0.090	0.018	0.077	0.037	0.106
V26201.00-V26202.00	6449	215.0	8.0	0.131	2.827	0.002	0.036	0.003	0.061	0.004	0.055	0.006	0.073
V26202.00-V26203.00	6448	255.0	8.0	0.051	1.764	0.010	0.079	0.033	0.136	0.024	0.117	0.047	0.161
V26203.00-V26204.00	6447	337.0	8.0	0.005	0.552	0.012	0.110	0.036	0.187	0.027	0.164	0.051	0.223
V26204.00-V26205.00	6779	227.0	8.0	0.004	0.494	0.014	0.120	0.041	0.201	0.032	0.176	0.058	0.239
V26205.00-V26206.00	6778	181.0	8.0	0.004	0.494	0.016	0.124	0.044	0.207	0.033	0.178	0.062	0.243
V26206.00-V26207.00	6777	268.0	8.0	0.004	0.494	0.017	0.146	0.048	0.242	0.034	0.207	0.065	0.283
V26207.00-V26208.00	6776	130.0	8.0	0.007	0.653	0.017	0.112	0.050	0.185	0.036	0.158	0.069	0.215
V26208.00-V26209.00	1643	177.0	8.0	0.136	2.880	0.018	0.064	0.053	0.106	0.037	0.089	0.072	0.122
V26209.00-V26210.00	6624	58.0	8.0	0.035	1.461	0.019	0.063	0.056	0.106	0.037	0.088	0.074	0.122
V26210.00-V26213.00	6291	117.0	8.0	0.103	2.507	0.019	0.109	0.058	0.185	0.039	0.150	0.078	0.211
V26211.00-V26212.00	6446	120.0	8.0	0.044	1.638	0.001	0.023	0.003	0.035	0.001	0.024	0.003	0.035
V26212.00-V26213.00	6623	164.0	8.0	0.124	2.750	0.003	0.093	0.007	0.156	0.003	0.124	0.007	0.176
V26213.00-V26214.00	6695	126.0	8.0	0.013	0.890	0.022	0.109	0.068	0.185	0.043	0.148	0.088	0.210
V26214.00-V26215.00	6442	135.0	8.0	0.158	3.104	0.023	0.068	0.071	0.117	0.044	0.092	0.091	0.132
V26215.00-V26216.00	6445	58.0	8.0	0.029	1.330	0.026	0.086	0.086	0.151	0.050	0.116	0.110	0.170
V26215.A0-V26215.B0	6694	5.0	8.0	0.003	0.428	0.001	0.014	0.003	0.027	0.001	0.015	0.003	0.028
V26215.B0-V26215.C0	5671	207.0	8.0	0.149	3.015	0.001	0.018	0.005	0.038	0.002	0.029	0.006	0.043
V26215.C0-V26215.D0	6503	94.0	8.0	0.062	1.945	0.002	0.027	0.008	0.056	0.005	0.046	0.011	0.067
V26215.D0-V26215.E0	5995	119.0	8.0	0.026	1.259	0.002	0.031	0.010	0.064	0.006	0.050	0.014	0.075
V26215.E0-V26215.00	6444	75.0	8.0	0.027	1.283	0.003	0.055	0.013	0.102	0.007	0.077	0.017	0.114
V26216.00-V26217.00	4484	239.0	8.0	0.040	1.562	0.027	0.104	0.089	0.183	0.051	0.138	0.113	0.204
V26217.00-V26227.00	4483	45.0	8.0	0.010	0.781	0.027	0.104	0.091	0.188	0.051	0.142	0.115	0.211
V26218.00-V26219.00	6441	151.0	8.0	0.008	0.699	0.001	0.032	0.003	0.052	0.010	0.083	0.012	0.092
V26219.00-V26220.00	6622	331.0	8.0	0.025	1.235	0.002	0.033	0.007	0.052	0.013	0.072	0.017	0.082
V26220.00-V26221.00	6290	98.0	8.0	0.051	1.764	0.004	0.043	0.010	0.070	0.014	0.083	0.021	0.099
V26221.00-V26223.00	6685	243.0	8.0	0.021	1.132	0.004	0.041	0.012	0.072	0.015	0.081	0.023	0.099
V26222.00-V26223.00	6440	30.0	8.0	0.024	1.210	0.000	0.018	0.002	0.039	0.000	0.028	0.002	0.047

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V26223.00-V26225.00	5670	125.0	8.0	0.102	2.494	0.004	0.027	0.016	0.053	0.015	0.051	0.028	0.068
V26224.00-V26225.00	6439	120.0	8.0	0.047	1.693	0.001	0.023	0.003	0.042	0.001	0.030	0.003	0.046
V26225.00-V26226.00	6502	102.0	8.0	0.109	2.578	0.005	0.030	0.021	0.060	0.016	0.052	0.033	0.073
V26226.00-V26227.00	5734	74.0	8.0	0.055	1.832	0.005	0.062	0.024	0.118	0.017	0.094	0.035	0.138
V26227.00-V26228.00	4482	135.0	8.0	0.055	1.832	0.032	0.101	0.116	0.181	0.068	0.137	0.152	0.204
V26228.00-V26229.00	5764	127.0	8.0	0.041	1.581	0.040	0.128	0.127	0.212	0.070	0.152	0.156	0.227
V26229.00-V26231.A0	5665	155.0	8.0	0.028	1.307	0.054	0.133	0.143	0.214	0.073	0.154	0.161	0.227
V26230.00-V26231.00	6636	143.7	8.0	0.002	0.349	0.016	0.152	0.018	0.196	0.015	0.161	0.017	0.202
V26231.00-V26233.00	5664	221.0	8.0	0.030	1.353	0.074	0.185	0.168	0.275	0.098	0.208	0.193	0.470
V26231.A0-V26231.00	8278	155.0	8.0	0.025	1.235	0.054	0.140	0.145	0.217	0.081	0.165	0.172	0.234
V26232.00-V26233.A0	4773	95.0	8.0	0.017	1.018	0.000	0.043	0.002	0.066	0.000	0.030	0.002	0.056
V26233.00-V26234.00	4788	261.0	8.0	0.014	0.924	0.091	0.228	0.196	0.338	0.112	0.253	0.241	0.847
V26233.A0-V26233.00	5060	202.0	8.0	0.022	1.158	0.018	0.148	0.026	0.207	0.008	0.146	0.016	0.387
V26233.AA-V26233.AB	7942	73.0	8.0	0.002	0.349	0.017	0.180	0.019	0.192	0.008	0.128	0.010	0.145
V26233.AB-V26233.A0	7943	340.0	8.0	0.002	0.349	0.017	0.146	0.021	0.163	0.008	0.104	0.012	0.126
V26234.00-V26235.00	5981	364.0	8.0	0.008	0.699	0.092	0.268	0.199	0.531	0.113	0.360	0.298	1.000
V26235.00-V26236.00	5980	53.0	8.0	0.003	0.428	0.093	0.381	0.202	0.842	0.115	0.603	0.305	1.000
V26236.00-V26237.00	5979	339.0	8.0	0.014	0.924	0.340	0.419	0.949	0.827	0.714	0.655	1.278	1.000
V26237.00-V26241.00	6437	375.0	8.0	0.025	1.235	0.352	0.600	0.963	0.833	0.722	0.775	1.288	1.000
V26238.00-V26239.00	5837	106.8	8.0	0.012	0.856	0.035	0.160	0.044	0.165	0.027	0.144	0.035	0.153
V26238.A0-V26238.B0	5978	283.0	8.0	0.018	1.048	0.020	0.109	0.022	0.115	0.013	0.090	0.016	0.097
V26238.B0-V26238.C0	5636	250.0	8.0	0.019	1.077	0.034	0.130	0.038	0.139	0.023	0.111	0.027	0.121
V26238.C0-V26238.00	5836	121.0	8.0	0.012	0.856	0.035	0.139	0.042	0.152	0.027	0.121	0.033	0.136
V26239.00-V26240.00	5835	263.0	8.0	0.008	0.699	0.037	0.156	0.048	0.486	0.035	0.198	0.043	0.584
V26240.00-V26241.00	6438	87.0	8.0	0.007	0.653	0.037	0.483	0.056	0.898	0.033	0.625	0.056	1.000
V26241.00-V26242.00	5944	49.7	8.0	0.001	0.247	0.391	0.608	1.018	0.853	0.756	0.782	1.335	0.940
V26241.A0-V26241.00	5943	74.3	8.0	0.000	0.000	0.003	0.833	0.009	1.000	0.003	1.000	0.016	1.000
V27011.00-V26001.00	1041	204.0	8.0	0.025	1.235	0.011	0.070	0.056	0.152	0.120	0.220	0.165	0.258
V27001.00-V27002.00	219	175.0	8.0	0.010	0.781	0.002	0.035	0.004	0.050	0.002	0.041	0.005	0.055
V27002.00-V27004.00	6546	257.0	8.0	0.085	2.277	0.002	0.053	0.007	0.095	0.003	0.123	0.007	0.146
V27003.00-V27004.00	6545	196.8	8.0	0.018	1.048	0.002	0.058	0.015	0.117	0.040	0.176	0.053	0.202
V27003.A0-V27003.B0	1045	131.0	8.0	0.124	2.750	0.002	0.024	0.003	0.042	0.002	0.030	0.004	0.046
V27003.B0-V27003.00	1044	146.0	8.0	0.011	0.819	0.002	0.035	0.006	0.072	0.003	0.089	0.007	0.109
V27003.C0-V27003.00	7985	196.5	8.0	0.044	1.638	0.000	0.024	0.007	0.065	0.037	0.119	0.044	0.132
V27003.CA-V27003.CB	7986	48.0	8.0	0.043	1.620	0.001	0.014	0.002	0.040	0.007	0.055	0.009	0.064
V27003.CB-V27003.C0	7483	126.0	8.0	0.011	0.819	0.000	0.016	0.004	0.053	0.009	0.089	0.013	0.100
V27004.00-V27005.00	6775	339.0	8.0	0.010	0.781	0.006	0.064	0.025	0.122	0.052	0.173	0.070	0.201
V27005.00-V27006.00	6774	311.2	8.0	0.036	1.482	0.006	0.068	0.027	0.134	0.053	0.183	0.073	0.216
V27006.00-V27007.00	1642	327.0	8.0	0.015	0.957	0.007	0.061	0.030	0.120	0.056	0.162	0.078	0.192
V27007.00-V27008.00	6731	75.7	8.0	0.079	2.195	0.007	0.096	0.032	0.177	0.057	0.218	0.081	0.258
V27008.00-V27011.00	1043	35.0	8.0	0.000	0.000	0.008	0.113	0.035	0.216	0.057	0.280	0.084	0.330
V27009.00-V27010.00	6621	310.0	8.0	0.026	1.259	0.000	0.000	0.002	0.047	0.000	0.000	0.002	0.047
V27010.00-V27011.00	1042	160.0	8.0	0.004	0.494	0.000	0.033	0.004	0.105	0.000	0.105	0.004	0.156
V27011.A0-V27011.B0	6773	30.0	8.0	0.014	0.924	0.000	0.000	0.002	0.036	0.004	0.091	0.006	0.098
V27011.B0-V27011.C0	6772	149.0	8.0	0.015	0.957	0.000	0.000	0.004	0.061	0.044	0.171	0.049	0.181
V27011.C0-V27011.D0	6771	312.6	8.0	0.005	0.552	0.000	0.025	0.006	0.101	0.047	0.258	0.053	0.275
V27011.D0-V27011.E0	1641	342.0	8.0	0.005	0.552	0.001	0.038	0.010	0.093	0.060	0.222	0.068	0.237
V27011.E0-V27011.F0	6730	360.0	8.0	0.059	1.897	0.002	0.034	0.012	0.077	0.060	0.156	0.071	0.169
V27011.F0-V27011.00	1040	120.0	8.0	0.011	0.819	0.003	0.054	0.015	0.120	0.063	0.200	0.075	0.227
V28001.00-V28002.00	6524	223.0	8.0	0.182	3.332	0.002	0.025	0.004	0.034	0.004	0.035	0.006	0.042
V28002.00-V28003.00	6804	170.0	8.0	0.125	2.761	0.005	0.031	0.009	0.044	0.010	0.045	0.014	0.055
V28003.00-V28004.00	1672	64.0	8.0	0.043	1.620	0.005	0.035	0.011	0.052	0.011	0.049	0.017	0.063
V28004.00-V28005.00	8322	12.5	8.0	0.009	0.741	0.006	0.038	0.014	0.059	0.011	0.053	0.020	0.069
V28005.00-V28006.00	6665	167.6	8.0	0.076	2.153	0.006	0.038	0.016	0.063	0.012	0.054	0.022	0.073
V28006.00-V28008.00	6544	150.0	8.0	0.087	2.304	0.006	0.047	0.019	0.081	0.014	0.069	0.026	0.095

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V28007.00-V28008.00	6770	32.0	8.0	-0.003	Adverse	0.001	0.198	0.003	0.242	0.002	0.225	0.004	0.258
V28008.00-V28010.00	6769	22.9	8.0	0.006	0.605	0.007	0.056	0.024	0.097	0.015	0.079	0.032	0.111
V28009.00-V28010.00	5918	180.0	8.0	0.049	1.729	0.002	0.042	0.004	0.066	0.003	0.053	0.005	0.073
V28010.00-V28020.00	1640	326.0	8.0	0.043	1.620	0.010	0.113	0.031	0.196	0.019	0.165	0.039	0.229
V28012.00-V28013.00	5916	284.0	8.0	0.096	2.420	0.002	0.023	0.004	0.034	0.008	0.043	0.010	0.049
V28013.00-V28015.00	1639	116.0	8.0	0.082	2.236	0.003	0.046	0.007	0.083	0.009	0.091	0.013	0.114
V28014.00-V28015.00	5922	206.0	8.0	0.005	0.552	0.001	0.047	0.009	0.109	0.012	0.122	0.021	0.155
V28014.A0-V28014.B0	5920	100.9	8.0	0.002	0.349	0.000	0.024	0.004	0.088	0.010	0.125	0.014	0.148
V28014.AA-V28014.A0	7192	73.7	8.0	0.002	0.349	0.000	0.012	0.002	0.067	0.005	0.100	0.007	0.118
V28014.B0-V28014.00	5921	32.1	8.0	0.001	0.247	0.000	0.026	0.007	0.094	0.012	0.120	0.018	0.148
V28015.00-V28017.00	6729	114.0	8.0	0.005	0.552	0.005	0.072	0.019	0.139	0.023	0.146	0.038	0.188
V28016.00-V28017.00	6726	114.0	8.0	0.002	0.349	0.001	0.048	0.003	0.093	0.001	0.086	0.003	0.118
V28017.00-V28019.00	6728	259.0	8.0	0.004	0.494	0.006	0.082	0.025	0.153	0.024	0.149	0.043	0.198
V28018.00-V28019.00	5915	162.0	6.0	-0.036	Adverse	0.002	0.557	0.008	0.604	0.005	0.597	0.011	0.630
V28019.00-V28020.00	2020	158.0	8.0	0.006	0.605	0.009	0.128	0.032	0.226	0.028	0.200	0.050	0.273
V28020.00-V28021.00	6727	99.0	8.0	0.004	0.494	0.021	0.136	0.066	0.238	0.048	0.204	0.093	0.282
V28021.00-V28023.00	6725	226.0	8.0	0.016	0.988	0.021	0.117	0.069	0.205	0.050	0.176	0.097	0.244
V28022.00-V28023.00	5919	298.0	8.0	0.027	1.283	0.002	0.080	0.004	0.135	0.005	0.123	0.008	0.165
V28023.00-V28037.00	6021	287.0	8.0	0.007	0.653	0.024	0.167	0.076	0.292	0.057	0.243	0.108	0.344
V28024.00-V28025.00	5925	260.0	8.0	0.035	1.461	0.002	0.033	0.004	0.046	0.002	0.034	0.004	0.046
V28025.00-V28026.00	1638	216.0	8.0	0.037	1.502	0.005	0.047	0.009	0.066	0.004	0.053	0.008	0.070
V28026.00-V28027.00	1637	163.4	8.0	0.014	0.924	0.005	0.056	0.012	0.082	0.009	0.077	0.015	0.097
V28027.00-V28028.00	6767	7.4	8.0	0.001	0.247	0.006	0.058	0.014	0.089	0.014	0.087	0.023	0.110
V28028.00-V28029.00	6766	55.1	8.0	0.009	0.741	0.006	0.059	0.017	0.095	0.015	0.087	0.025	0.115
V28029.00-V28030.00	6765	249.6	8.0	0.014	0.924	0.006	0.060	0.019	0.101	0.015	0.088	0.027	0.119
V28030.00-V28034.00	6764	85.1	8.0	0.014	0.924	0.007	0.298	0.021	0.366	0.015	0.330	0.030	0.391
V28031.00-V28032.00	5923	121.0	8.0	0.015	0.957	0.002	0.041	0.004	0.058	0.003	0.043	0.005	0.060
V28032.00-V28033.00	6763	197.0	8.0	0.011	0.819	0.004	0.052	0.008	0.075	0.004	0.052	0.008	0.075
V28033.00-V28034.00	6762	217.0	8.0	0.012	0.856	0.005	0.296	0.012	0.355	0.005	0.314	0.011	0.371
V28034.00-V28035.00	1636	113.0	8.0	-0.002	Adverse	0.013	0.282	0.036	0.337	0.022	0.304	0.045	0.356
V28035.00-V28036.00	6020	134.0	8.0	0.030	1.353	0.014	0.514	0.039	0.523	0.023	0.518	0.047	0.525
V28036.00-V28037.00	6019	199.0	8.0	-0.053	Adverse	0.015	0.601	0.042	0.677	0.024	0.643	0.050	0.707
V28037.00-V28038.00	6018	345.0	8.0	0.004	0.494	0.040	0.194	0.121	0.337	0.082	0.275	0.162	0.394
V28038.00-V28039.00	6017	249.0	8.0	0.005	0.552	0.043	0.208	0.125	0.354	0.086	0.290	0.168	0.411
V28039.00-V28041.00	6016	115.0	8.0	0.007	0.653	0.043	0.172	0.127	0.292	0.087	0.243	0.172	0.339
V28040.00-V28041.00	6014	168.0	8.0	0.013	0.890	0.001	0.070	0.003	0.119	0.013	0.127	0.015	0.161
V28041.00-V28042.00	6620	200.0	8.0	0.057	1.865	0.044	0.106	0.133	0.181	0.101	0.158	0.189	0.215
V28042.00-V28043.00	6289	192.0	8.0	0.084	2.264	0.045	0.104	0.136	0.177	0.105	0.156	0.195	0.212
V28043.00-V28044.00	5616	186.0	8.0	0.052	1.781	0.046	0.121	0.138	0.206	0.106	0.179	0.198	0.245
V28044.00-V28048.00	5615	165.0	8.0	0.028	1.307	0.049	0.141	0.144	0.240	0.108	0.206	0.203	0.285
V28045.00-V28046.00	5926	113.0	8.0	0.068	2.037	0.000	0.007	0.002	0.025	0.000	0.006	0.002	0.025
V28046.00-V28047.00	5927	134.0	8.0	0.090	2.343	0.001	0.016	0.005	0.035	0.001	0.018	0.005	0.036
V28047.00-V28048.00	6288	199.0	8.0	0.191	3.413	0.003	0.084	0.008	0.146	0.003	0.121	0.009	0.171
V28048.00-V28049.00	5614	223.0	8.0	0.019	1.077	0.052	0.163	0.155	0.281	0.112	0.238	0.215	0.333
V28049.00-V28050.00	6185	223.0	8.0	0.017	1.018	0.052	0.154	0.158	0.264	0.114	0.225	0.219	0.313
V28050.00-V28054.00	6501	175.0	8.0	0.035	1.461	0.053	0.135	0.160	0.233	0.117	0.199	0.224	0.276
V28051.00-V28053.00	5928	119.0	8.0	0.110	2.590	0.001	0.016	0.003	0.030	0.001	0.017	0.003	0.031
V28052.00-V28053.00	5929	116.0	8.0	0.042	1.601	0.000	0.015	0.002	0.033	0.001	0.018	0.003	0.034
V28053.00-V28054.00	5613	196.0	8.0	0.140	2.922	0.002	0.080	0.008	0.141	0.003	0.115	0.009	0.164
V28054.00-V28072.00	5994	225.0	8.0	0.035	1.461	0.056	0.134	0.171	0.231	0.121	0.194	0.236	0.271
V28055.00-V28056.00	6013	377.0	8.0	0.015	0.957	0.004	0.070	0.006	0.083	0.005	0.082	0.007	0.093
V28056.00-V28058.00	5932	366.0	8.0	0.003	0.428	0.006	0.086	0.010	0.110	0.009	0.101	0.013	0.123
V28057.00-V28058.00	5931	110.0	8.0	0.005	0.552	0.001	0.055	0.003	0.082	0.001	0.059	0.003	0.085
V28058.00-V28059.00	5930	234.0	8.0	0.006	0.605	0.008	0.084	0.016	0.117	0.010	0.105	0.019	0.133
V28059.00-V28062.00	6012	224.0	8.0	0.007	0.653	0.011	0.128	0.021	0.177	0.020	0.168	0.030	0.207

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V28060.00-V28061.00	6543	358.0	8.0	0.036	1.482	0.001	0.028	0.003	0.041	0.002	0.033	0.004	0.044
V28061.00-V28062.00	1634	359.0	8.0	0.064	1.976	0.005	0.101	0.009	0.139	0.005	0.126	0.009	0.158
V28062.00-V28063.00	6011	284.0	8.0	0.006	0.605	0.017	0.116	0.033	0.161	0.029	0.149	0.045	0.186
V28063.00-V28064.00	6010	38.0	8.0	0.020	1.104	0.018	0.065	0.036	0.093	0.030	0.084	0.049	0.107
V28064.00-V28065.00	6619	70.4	8.0	0.036	1.482	0.018	0.066	0.038	0.096	0.030	0.085	0.051	0.109
V28065.00-V28066.00	6287	100.0	8.0	0.052	1.781	0.018	0.066	0.041	0.098	0.031	0.085	0.054	0.111
V28066.00-V28067.00	5612	426.0	8.0	0.072	2.096	0.019	0.067	0.043	0.101	0.031	0.085	0.056	0.113
V28067.00-V28070.00	6184	5.3	8.0	0.003	0.428	0.019	0.068	0.046	0.106	0.031	0.086	0.058	0.118
V28068.00-V28069.00	6693	108.3	8.0	0.002	0.349	0.000	0.024	0.002	0.069	0.001	0.037	0.003	0.074
V28069.00-V28070.00	5611	118.5	8.0	0.002	0.349	0.000	0.046	0.004	0.094	0.001	0.062	0.005	0.102
V28070.00-V28071.00	6183	41.0	8.0	0.021	1.132	0.019	0.068	0.052	0.110	0.032	0.087	0.065	0.122
V28071.00-V28072.00	6500	223.9	8.0	0.072	2.096	0.019	0.098	0.054	0.165	0.033	0.134	0.068	0.189
V28072.00-V28076.00	5732	196.0	8.0	0.077	2.167	0.076	0.129	0.228	0.223	0.155	0.184	0.308	0.259
V28073.00-V28074.00	2445	118.0	8.0	0.031	1.375	0.001	0.023	0.003	0.038	0.004	0.041	0.006	0.050
V28074.00-V28075.00	2444	121.0	8.0	0.052	1.781	0.002	0.024	0.006	0.045	0.005	0.039	0.009	0.054
V28075.00-V28076.00	5731	454.0	8.0	0.053	1.798	0.002	0.077	0.008	0.137	0.005	0.113	0.011	0.160
V28076.00-V28085.00	4481	454.0	8.0	0.031	1.375	0.078	0.136	0.238	0.233	0.161	0.193	0.321	0.272
V28077.00-V28078.00	5934	70.0	8.0	0.032	1.397	0.001	0.018	0.003	0.031	0.005	0.038	0.007	0.046
V28078.00-V28079.00	6499	118.0	8.0	0.096	2.420	0.001	0.027	0.006	0.046	0.009	0.052	0.013	0.064
V28079.00-V28081.00	5730	291.0	8.0	0.033	1.419	0.003	0.049	0.010	0.070	0.011	0.071	0.017	0.086
V28080.00-V28081.00	6957	24.4	8.0	0.001	0.247	0.004	0.072	0.006	0.089	0.007	0.095	0.010	0.108
V28081.00-V28082.00	4480	115.0	8.0	0.045	1.657	0.013	0.081	0.023	0.110	0.021	0.103	0.031	0.127
V28082.00-V28083.00	4478	140.0	8.0	0.006	0.605	0.013	0.101	0.025	0.142	0.021	0.127	0.033	0.162
V28083.00-V28084.00	4477	236.0	8.0	0.006	0.605	0.013	0.101	0.027	0.147	0.021	0.132	0.035	0.170
V28084.00-V28085.00	4476	246.0	8.0	0.006	0.605	0.013	0.121	0.029	0.195	0.024	0.168	0.041	0.227
V28085.00-V28089.00	4475	82.0	8.0	0.012	0.856	0.090	0.180	0.270	0.311	0.185	0.256	0.364	0.363
V28086.00-V28087.00	5729	148.0	8.0	0.138	2.901	0.002	0.023	0.003	0.038	0.002	0.030	0.004	0.042
V28087.00-V28088.00	4474	252.0	6.0	0.035	0.678	0.002	0.043	0.006	0.069	0.004	0.052	0.008	0.075
V28088.00-V28089.00	4473	234.0	8.0	0.022	1.158	0.005	0.127	0.013	0.218	0.006	0.176	0.015	0.251
V28088.A0-V28088.00	5728	234.0	8.0	0.114	2.637	0.002	0.028	0.004	0.041	0.002	0.030	0.004	0.043
V28089.00-V28090.00	5763	190.0	8.0	0.023	1.184	0.096	0.192	0.285	0.333	0.191	0.271	0.381	0.388
V28090.00-V28092.00	4787	305.0	6.0	0.071	0.966	0.101	0.241	0.292	0.415	0.195	0.335	0.387	0.486
V28091.00-V28092.00	5876	333.0	6.0	0.002	0.162	0.004	0.189	0.006	0.294	0.004	0.235	0.006	0.331
V28092.00-V28127.00	5635	505.0	6.0	0.040	0.725	0.112	0.368	0.307	0.643	0.207	0.501	0.403	0.766
V28093.00-V28094.00	2443	133.0	8.0	0.062	1.945	0.002	0.029	0.004	0.040	0.003	0.033	0.005	0.043
V28094.00-V28095.00	6497	134.0	8.0	0.074	2.125	0.004	0.041	0.008	0.056	0.006	0.047	0.010	0.061
V28095.00-V28097.00	5992	383.0	8.0	0.030	1.353	0.006	0.074	0.013	0.103	0.009	0.085	0.015	0.111
V28096.00-V28097.00	6642	100.0	6.0	0.009	0.344	0.001	0.089	0.003	0.128	0.002	0.104	0.004	0.139
V28097.00-V28101.00	5991	259.0	8.0	0.004	0.494	0.010	0.106	0.020	0.156	0.013	0.118	0.024	0.164
V28098.00-V28100.00	6332	122.9	8.0	0.002	0.349	0.001	0.046	0.003	0.085	0.001	0.043	0.003	0.084
V28099.00-V28100.00	5990	37.9	8.0	0.001	0.247	0.000	0.038	0.002	0.082	0.000	0.023	0.002	0.078
V28100.00-V28101.00	5989	234.0	8.0	0.002	0.349	0.002	0.082	0.008	0.138	0.001	0.084	0.008	0.141
V28101.00-V28104.00	5988	333.0	8.0	0.004	0.494	0.013	0.146	0.032	0.217	0.016	0.157	0.034	0.225
V28102.00-V28103.00	6637	187.0	6.0	0.121	1.261	0.002	0.029	0.003	0.045	0.003	0.039	0.005	0.051
V28103.00-V28104.00	6496	233.0	8.0	0.098	2.445	0.002	0.102	0.007	0.150	0.005	0.112	0.009	0.157
V28104.00-V28108.00	5987	241.0	8.0	0.004	0.494	0.019	0.133	0.044	0.199	0.023	0.147	0.048	0.208
V28105.00-V28108.00	6638	250.0	8.0	0.136	2.880	0.002	0.050	0.003	0.080	0.002	0.062	0.004	0.087
V28106.00-V28107.00	6639	137.0	6.0	0.123	1.272	0.001	0.023	0.003	0.044	0.004	0.042	0.006	0.055
V28107.00-V28108.00	6640	228.0	8.0	0.058	1.881	0.001	0.053	0.005	0.087	0.004	0.068	0.008	0.097
V28108.00-V28119.00	5727	110.0	8.0	0.031	1.375	0.022	0.091	0.055	0.143	0.030	0.114	0.063	0.158
V28109.00-V28110.00	6327	198.0	8.0	0.020	1.104	0.001	0.036	0.003	0.054	0.004	0.061	0.006	0.073
V28110.00-V28111.00	5986	136.0	8.0	0.011	0.819	0.003	0.055	0.007	0.082	0.010	0.095	0.015	0.112
V28111.00-V28112.00	6495	399.0	8.0	0.005	0.552	0.005	0.068	0.011	0.104	0.015	0.121	0.021	0.144
V28112.00-V28113.00	6494	109.0	8.0	0.004	0.494	0.005	0.084	0.014	0.131	0.019	0.152	0.027	0.182
V28113.00-V28114.00	6165	238.0	8.0	0.005	0.552	0.007	0.079	0.017	0.123	0.022	0.137	0.032	0.166

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V28114.00-V28115.00	6164	275.0	8.0	0.021	1.132	0.009	0.063	0.021	0.096	0.025	0.103	0.037	0.126
V28115.00-V28119.00	5726	221.0	8.0	0.023	1.184	0.010	0.079	0.024	0.124	0.027	0.115	0.042	0.149
V28116.00-V28117.00	6328	78.0	6.0	0.042	0.743	0.002	0.037	0.004	0.053	0.003	0.045	0.005	0.059
V28117.00-V28118.00	5725	138.0	6.0	0.102	1.158	0.003	0.052	0.007	0.081	0.005	0.061	0.009	0.087
V28118.00-V28119.00	4472	40.0	6.0	0.007	0.303	0.004	0.096	0.010	0.152	0.005	0.122	0.011	0.170
V28119.00-V28120.00	4471	138.0	8.0	0.058	1.881	0.035	0.097	0.091	0.153	0.063	0.129	0.119	0.175
V28120.00-V28121.00	4470	104.0	8.0	0.041	1.581	0.035	0.101	0.093	0.160	0.065	0.134	0.123	0.183
V28121.00-V28122.00	6329	399.0	8.0	0.053	1.798	0.036	0.098	0.096	0.157	0.066	0.131	0.126	0.179
V28122.00-V28123.F0	7939	99.0	8.0	0.055	1.832	0.037	0.194	0.099	0.300	0.067	0.254	0.129	0.337
V28123.00-V28124.00	6331	82.0	8.0	0.023	1.184	0.040	0.117	0.116	0.198	0.076	0.161	0.152	0.226
V28123.A0-V28123.B0	7934	164.4	8.0	0.076	2.153	0.001	0.017	0.002	0.038	0.001	0.033	0.004	0.047
V28123.B0-V28123.C0	7935	79.5	8.0	0.028	1.307	0.001	0.017	0.005	0.041	0.004	0.037	0.008	0.052
V28123.C0-V28123.D0	7936	132.3	8.0	0.163	3.153	0.002	0.013	0.007	0.042	0.006	0.037	0.012	0.054
V28123.D0-V28123.E0	7937	87.0	8.0	0.032	1.397	0.001	0.024	0.009	0.064	0.006	0.052	0.014	0.078
V28123.E0-V28123.F0	7938	106.0	8.0	0.020	1.104	0.002	0.163	0.012	0.262	0.008	0.221	0.018	0.296
V28123.F0-V28123.00	7940	99.0	8.0	0.000	0.000	0.040	0.208	0.114	0.329	0.076	0.276	0.150	0.371
V28124.00-V28126.00	5634	187.0	8.0	0.041	1.581	0.043	0.133	0.121	0.216	0.080	0.170	0.158	0.241
V28125.00-V28126.00	5962	7.7	6.0	0.000	0.000	0.001	0.188	0.003	0.310	0.001	0.235	0.003	0.344
V28126.00-V28127.00	5834	273.2	6.0	0.027	0.596	0.053	0.337	0.136	0.579	0.081	0.443	0.163	0.680
V28127.00-V28139.00	5833	344.0	8.0	0.007	0.653	0.169	0.378	0.450	0.681	0.292	0.508	0.574	1.000
V28128.00-V28129.00	4834	210.0	6.0	0.024	0.562	0.014	0.110	0.016	0.117	0.013	0.105	0.015	0.113
V28129.00-V28132.00	5938	431.0	6.0	0.046	0.778	0.017	0.138	0.021	0.154	0.016	0.130	0.020	0.147
V28130.00-V28131.00	5935	183.0	8.0	0.069	2.052	0.009	0.052	0.011	0.058	0.009	0.049	0.011	0.055
V28131.00-V28132.00	5936	255.0	8.0	0.118	2.683	0.016	0.093	0.021	0.104	0.013	0.085	0.017	0.097
V28132.00-V28133.00	5937	431.0	6.0	0.028	0.607	0.040	0.174	0.050	0.196	0.034	0.161	0.044	0.185
V28133.00-V28134.00	5977	138.0	6.0	0.029	0.618	0.040	0.184	0.053	0.212	0.035	0.171	0.047	0.200
V28134.00-V28135.00	5633	373.0	6.0	0.020	0.513	0.043	0.277	0.057	0.322	0.036	0.256	0.051	0.605
V28135.00-V28137.00	5832	200.0	6.0	0.005	0.256	0.043	0.274	0.060	0.323	0.038	0.258	0.088	1.000
V28136.00-V28137.00	5830	229.7	6.0	0.002	0.162	0.002	0.134	0.004	0.168	0.002	0.130	0.071	1.000
V28137.00-V28138.00	5961	31.0	6.0	0.009	0.344	0.045	0.189	0.066	0.544	0.042	0.335	0.137	1.000
V28138.00-V28139.00	5960	6.5	6.0	0.002	0.162	0.045	0.363	0.218	0.866	0.118	0.577	0.203	1.000
V28139.00-V28140.00	5829	470.0	8.0	0.007	0.653	0.215	0.399	0.544	0.707	0.346	0.523	0.631	1.000
V28140.00-V28141.00	5828	483.0	8.0	0.007	0.653	0.215	0.396	0.529	0.682	0.340	0.514	0.617	1.000
V28141.00-V28142.00	5700	438.0	8.0	0.007	0.653	0.216	0.447	0.527	0.768	0.345	0.580	0.625	1.000
V28142.00-V28166.00	5775	330.0	8.0	0.007	0.653	0.216	0.390	0.528	0.660	0.345	0.506	0.646	1.000
V28143.00-V28145.00	6325	205.0	8.0	-0.022	Adverse	0.002	0.520	0.003	0.530	0.004	0.530	0.006	0.537
V28144.00-V28145.00	6326	305.0	6.0	0.057	0.866	0.003	0.048	0.005	0.067	0.004	0.065	0.006	0.079
V28145.00-V28146.00	6493	246.0	8.0	0.042	1.601	0.005	0.045	0.011	0.064	0.011	0.064	0.017	0.079
V28146.00-V28148.00	5724	212.0	8.0	0.043	1.620	0.007	0.063	0.016	0.091	0.015	0.088	0.024	0.109
V28147.00-V28148.00	1322	189.0	8.0	0.002	0.349	0.002	0.064	0.004	0.093	0.004	0.094	0.007	0.114
V28148.00-V28150.00	4469	175.0	8.0	0.028	1.307	0.010	0.063	0.023	0.091	0.022	0.091	0.035	0.112
V28149.00-V28150.00	5723	224.0	8.0	0.095	2.407	0.002	0.036	0.004	0.051	0.007	0.057	0.009	0.067
V28150.00-V28152.00	4984	235.0	8.0	0.146	2.984	0.014	0.053	0.030	0.077	0.033	0.079	0.049	0.096
V28151.00-V28152.00	5941	79.0	8.0	0.037	1.502	0.002	0.039	0.004	0.057	0.004	0.057	0.006	0.070
V28152.00-V28161.00	5976	62.0	8.0	0.043	1.620	0.017	0.066	0.037	0.099	0.037	0.094	0.058	0.120
V28153.00-V28154.00	5940	167.0	8.0	0.064	1.976	0.001	0.021	0.003	0.034	0.003	0.029	0.005	0.039
V28154.00-V28158.00	4983	110.0	8.0	0.073	2.110	0.002	0.035	0.007	0.054	0.005	0.045	0.009	0.061
V28155.00-V28156.00	5663	80.0	6.0	0.065	0.925	0.001	0.057	0.003	0.083	0.003	0.070	0.005	0.093
V28156.00-V28157.00	5662	114.0	6.0	0.006	0.281	0.003	0.073	0.007	0.110	0.005	0.095	0.009	0.125
V28157.00-V28158.00	4982	169.0	8.0	0.024	1.210	0.003	0.042	0.010	0.067	0.009	0.060	0.015	0.079
V28158.00-V28160.00	5975	123.0	8.0	0.057	1.865	0.008	0.053	0.020	0.084	0.013	0.068	0.025	0.094
V28159.00-V28160.00	4981	125.0	8.0	0.100	2.470	0.001	0.040	0.004	0.063	0.001	0.048	0.004	0.068
V28160.00-V28161.00	5973	105.0	8.0	0.029	1.330	0.010	0.068	0.026	0.106	0.016	0.091	0.033	0.122
V28161.00-V28164.00	5632	284.0	8.0	0.088	2.317	0.026	0.076	0.066	0.120	0.053	0.105	0.093	0.140
V28162.00-V28163.00	6322	51.0	8.0	0.004	0.494	0.001	0.024	0.007	0.082	0.001	0.027	0.007	0.083

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V28162.A0-V28162.B0	6320	60.0	8.0	0.036	1.482	0.001	0.020	0.003	0.047	0.000	0.014	0.002	0.046
V28162.B0-V28162.00	6321	182.0	8.0	0.006	0.605	0.001	0.024	0.005	0.068	0.001	0.027	0.005	0.069
V28163.00-V28164.00	6323	33.0	8.0	0.002	0.349	0.001	0.051	0.009	0.108	0.001	0.067	0.009	0.118
V28164.00-V28165.00	5699	284.0	8.0	0.075	2.139	0.027	0.084	0.077	0.139	0.055	0.118	0.105	0.359
V28165.00-V28166.00	5774	100.0	8.0	0.034	1.440	0.027	0.188	0.079	0.309	0.055	0.249	0.107	0.790
V28166.00-V28167.00	6958	165.9	8.0	0.032	1.397	0.243	0.283	0.609	0.732	0.403	0.372	0.718	1.000
V29001.00-V29002.00	6404	92.0	8.0	0.031	1.375	0.000	0.013	0.002	0.034	0.000	0.016	0.002	0.035
V29002.00-V29005.00	4468	258.0	8.0	0.048	1.711	0.001	0.041	0.005	0.083	0.001	0.051	0.005	0.088
V29003.00-V29004.00	6492	178.0	8.0	0.056	1.848	0.001	0.024	0.003	0.036	0.001	0.025	0.003	0.037
V29004.00-V29005.00	5722	293.0	8.0	0.090	2.343	0.003	0.046	0.007	0.083	0.004	0.056	0.008	0.089
V29005.00-V29006.00	5762	377.0	8.0	0.006	0.605	0.005	0.062	0.015	0.108	0.007	0.073	0.017	0.115
V29006.00-V29010.00	6393	350.0	8.0	0.025	1.235	0.008	0.060	0.021	0.090	0.010	0.069	0.022	0.096
V29007.00-V29009.00	6390	104.0	8.0	0.053	1.798	0.001	0.029	0.003	0.041	0.002	0.036	0.004	0.046
V29008.00-V29009.00	6389	274.0	8.0	0.076	2.153	0.002	0.032	0.005	0.043	0.007	0.046	0.009	0.054
V29009.00-V29010.00	6391	88.0	8.0	0.023	1.184	0.006	0.049	0.013	0.071	0.012	0.062	0.018	0.080
V29010.00-V29011.00	6392	88.0	8.0	0.027	1.283	0.015	0.060	0.036	0.090	0.023	0.072	0.043	0.099
V29011.00-V29020.00	4980	344.0	8.0	0.083	2.250	0.015	0.068	0.038	0.105	0.024	0.085	0.046	0.116
V29012.00-V29013.00	6395	212.0	8.0	0.051	1.764	0.002	0.046	0.004	0.064	0.002	0.059	0.004	0.074
V29013.00-V29014.00	6396	140.0	8.0	0.008	0.699	0.004	0.057	0.008	0.078	0.008	0.076	0.012	0.092
V29014.00-V29015.00	6399	113.0	8.0	0.053	1.798	0.005	0.040	0.012	0.057	0.009	0.050	0.015	0.065
V29015.00-V29016.00	6398	100.0	8.0	0.056	1.848	0.005	0.517	0.014	0.526	0.009	0.522	0.017	0.529
V29016.00-V29019.00	6400	275.0	8.0	-0.046	Adverse	0.006	0.526	0.016	0.540	0.011	0.535	0.021	0.546
V29017.00-V29018.00	6397	180.0	8.0	0.034	1.440	0.000	0.022	0.002	0.037	0.001	0.031	0.003	0.043
V29018.00-V29019.00	6402	180.0	8.0	0.084	2.264	0.004	0.042	0.008	0.062	0.006	0.054	0.011	0.070
V29019.00-V29020.00	6401	275.0	8.0	0.078	2.181	0.012	0.065	0.028	0.099	0.021	0.084	0.038	0.113
V29020.00-V29021.00	5698	146.0	8.0	0.085	2.277	0.028	0.086	0.069	0.133	0.047	0.110	0.088	0.149
V29021.00-V29023.00	5773	292.0	8.0	0.025	1.235	0.028	0.098	0.072	0.152	0.048	0.127	0.091	0.171
V29022.00-V29023.00	6405	210.0	6.0	0.053	0.835	0.004	0.094	0.006	0.135	0.007	0.121	0.009	0.155
V29023.00-V29024.00	5772	292.0	8.0	0.039	1.542	0.034	0.107	0.081	0.162	0.058	0.137	0.105	0.183
V29024.00-V29031.00	1274	250.0	8.0	0.032	1.397	0.036	0.177	0.086	0.272	0.061	0.237	0.110	0.315
V29031.00-V29032.00	4721	310.0	8.0	0.005	0.552	0.037	0.174	0.088	0.268	0.068	0.236	0.120	0.313
V29032.00-V29134.00	7765	87.0	8.0	0.033	1.419	0.037	0.114	0.090	0.178	0.069	0.160	0.122	0.211
V29038.00-V29039.00	6410	266.0	8.0	0.043	1.620	0.002	0.029	0.004	0.042	0.002	0.029	0.004	0.042
V29039.00-V29040.00	4979	403.0	8.0	0.052	1.781	0.004	0.037	0.008	0.053	0.004	0.040	0.008	0.055
V29040.00-V29041.00	5972	309.0	8.0	0.044	1.638	0.005	0.041	0.011	0.061	0.006	0.046	0.013	0.065
V29041.00-V29046.00	5631	310.0	8.0	0.052	1.781	0.006	0.062	0.014	0.100	0.008	0.069	0.016	0.105
V29042.00-V29043.00	5761	200.0	8.0	0.051	1.764	0.001	0.037	0.006	0.064	0.003	0.043	0.007	0.068
V29042.A0-V29042.00	6416	55.0	6.0	0.039	0.716	0.001	0.025	0.003	0.047	0.002	0.038	0.004	0.055
V29043.00-V29044.00	4977	242.0	8.0	0.050	1.746	0.009	0.051	0.027	0.087	0.011	0.057	0.029	0.091
V29043.A0-V29043.B0	2442	109.0	8.0	0.022	1.158	0.001	0.024	0.003	0.039	0.001	0.025	0.003	0.039
V29043.B0-V29043.C0	5721	302.0	8.0	0.088	2.317	0.002	0.033	0.007	0.054	0.003	0.035	0.007	0.055
V29043.C0-V29043.E0	6417	74.0	8.0	0.013	0.890	0.003	0.061	0.009	0.107	0.004	0.064	0.010	0.109
V29043.D0-V29043.E0	4467	130.0	8.0	0.019	1.077	0.001	0.052	0.003	0.093	0.001	0.053	0.003	0.093
V29043.E0-V29043.F0	4466	156.0	8.0	0.007	0.653	0.004	0.058	0.015	0.104	0.005	0.061	0.015	0.105
V29043.F0-V29043.00	5759	204.0	8.0	0.096	2.420	0.006	0.044	0.018	0.075	0.006	0.047	0.019	0.076
V29044.00-V29045.C0	6415	421.0	8.0	0.060	1.913	0.010	0.054	0.030	0.093	0.012	0.061	0.033	0.096
V29045.00-V29046.00	5827	104.0	8.0	0.031	1.375	0.013	0.075	0.042	0.127	0.017	0.083	0.046	0.132
V29045.A0-V29045.B0	6412	238.0	8.0	0.100	2.470	0.002	0.032	0.004	0.047	0.002	0.033	0.004	0.047
V29045.B0-V29045.C0	6413	149.0	8.0	0.013	0.890	0.003	0.051	0.007	0.081	0.003	0.054	0.007	0.083
V29045.C0-V29045.00	6414	45.0	8.0	0.022	1.158	0.013	0.063	0.040	0.108	0.016	0.070	0.043	0.112
V29046.00-V29047.C0	6419	140.7	8.0	0.036	1.482	0.020	0.082	0.059	0.140	0.025	0.091	0.064	0.145
V29047.00-V29048.00	6859	461.9	8.0	0.030	1.353	0.024	0.101	0.071	0.172	0.046	0.139	0.094	0.197
V29047.A0-V29047.B0	5771	54.0	8.0	0.017	1.018	0.001	0.018	0.003	0.039	0.001	0.020	0.003	0.040
V29047.B0-V29047.C0	6420	80.0	8.0	0.019	1.077	0.001	0.051	0.005	0.095	0.001	0.056	0.005	0.097
V29047.C0-V29047.00	6857	226.1	8.0	0.036	1.482	0.021	0.087	0.066	0.149	0.026	0.109	0.071	0.163

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V29048.00-V29049.00	6860	202.0	8.0	0.017	1.018	0.024	0.105	0.073	0.180	0.046	0.144	0.096	0.206
V29051.00-V29052.00	6618	402.0	8.0	0.021	1.132	0.002	0.034	0.006	0.057	0.003	0.042	0.007	0.062
V29051.A0-V29051.00	6009	147.0	8.0	-0.397	Adverse	0.004	0.516	0.003	0.527	0.004	0.518	0.003	0.528
V29052.00-V29053.00	5069	233.0	8.0	0.040	1.562	0.004	0.037	0.010	0.057	0.006	0.046	0.013	0.063
V29053.00-V29054.00	6286	300.0	8.0	0.125	2.761	0.007	0.071	0.015	0.103	0.011	0.087	0.019	0.114
V29054.00-V29055.00	5610	284.0	8.0	0.007	0.653	0.008	0.078	0.018	0.115	0.012	0.095	0.022	0.127
V29055.00-V29056.00	6163	282.0	8.0	0.045	1.657	0.008	0.087	0.021	0.136	0.012	0.101	0.025	0.145
V29056.00-V29063.00	6162	330.0	8.0	0.005	0.552	0.009	0.088	0.023	0.140	0.012	0.103	0.027	0.149
V29057.00-V29058.00	6421	272.0	8.0	0.090	2.343	0.001	0.023	0.003	0.035	0.004	0.036	0.006	0.044
V29058.00-V29059.00	6422	170.0	8.0	0.090	2.343	0.003	0.031	0.007	0.048	0.007	0.044	0.011	0.057
V29059.00-V29060.00	5720	106.0	8.0	0.044	1.638	0.004	0.040	0.010	0.065	0.008	0.057	0.014	0.076
V29060.00-V29062.00	4465	140.0	8.0	0.019	1.077	0.004	0.059	0.013	0.095	0.009	0.082	0.017	0.110
V29061.00-V29062.00	5719	150.0	8.0	0.101	2.482	0.002	0.046	0.003	0.072	0.002	0.059	0.004	0.080
V29062.00-V29063.00	5718	272.0	8.0	0.014	0.924	0.007	0.061	0.019	0.100	0.012	0.080	0.024	0.112
V29063.00-V29064.00	6423	329.0	8.0	0.147	2.994	0.016	0.064	0.045	0.103	0.025	0.079	0.054	0.112
V29064.00-V29065.00	6424	221.0	8.0	0.045	1.657	0.020	0.134	0.051	0.213	0.030	0.164	0.061	0.233
V29065.00-V29067.00	5826	309.0	8.0	0.003	0.428	0.020	0.140	0.053	0.225	0.030	0.172	0.063	0.246
V29066.00-V29067.00	5630	260.0	8.0	0.051	1.764	0.001	0.052	0.003	0.086	0.002	0.067	0.004	0.096
V29067.00-V29068.00	5697	308.0	8.0	0.029	1.330	0.022	0.176	0.059	0.302	0.034	0.221	0.071	0.337
V29068.00-V29127.00	4729	210.0	8.0	0.000	0.000	0.022	0.266	0.061	0.477	0.035	0.338	0.074	0.532
V29069.00-V29071.00	6008	12.0	8.0	0.010	0.781	0.001	0.036	0.003	0.058	0.001	0.040	0.003	0.061
V29070.00-V29071.00	6007	345.0	8.0	0.053	1.798	0.002	0.044	0.004	0.068	0.003	0.049	0.005	0.071
V29071.00-V29074.00	6006	248.0	8.0	0.004	0.494	0.004	0.063	0.010	0.107	0.004	0.072	0.011	0.112
V29072.00-V29073.00	6429	272.0	6.0	0.016	0.459	0.001	0.030	0.003	0.056	0.002	0.048	0.004	0.067
V29073.00-V29074.00	6005	156.0	6.0	0.090	1.088	0.001	0.056	0.006	0.101	0.003	0.069	0.007	0.109
V29074.00-V29075.00	6004	54.7	8.0	0.005	0.552	0.005	0.075	0.018	0.139	0.008	0.089	0.020	0.146
V29075.00-V29077.00	6003	273.0	8.0	0.002	0.349	0.005	0.089	0.020	0.162	0.008	0.105	0.022	0.170
V29076.00-V29077.00	6002	275.0	8.0	0.056	1.848	0.002	0.058	0.004	0.097	0.003	0.069	0.005	0.104
V29077.00-V29078.00	6243	102.4	8.0	0.008	0.699	0.008	0.075	0.026	0.133	0.011	0.088	0.030	0.141
V29078.00-V29079.00	5068	313.0	8.0	0.024	1.210	0.008	0.061	0.029	0.109	0.012	0.072	0.032	0.115
V29079.00-V29080.00	5067	304.0	8.0	0.025	1.235	0.010	0.081	0.033	0.145	0.014	0.097	0.037	0.155
V29080.00-V29081.00	5066	194.0	8.0	0.004	0.494	0.010	0.102	0.035	0.185	0.015	0.123	0.040	0.198
V29081.00-V29082.00	5065	143.0	8.0	0.004	0.494	0.011	0.126	0.038	0.231	0.016	0.152	0.043	0.246
V29082.00-V29083.00	6285	364.0	8.0	0.004	0.494	0.012	0.106	0.041	0.192	0.017	0.127	0.046	0.204
V29083.00-V29084.00	6430	241.0	8.0	0.041	1.581	0.013	0.076	0.044	0.136	0.019	0.091	0.050	0.144
V29084.00-V29085.00	6431	160.0	8.0	0.013	0.890	0.014	0.097	0.047	0.173	0.021	0.119	0.054	0.186
V29085.00-V29086.00	2491	288.0	8.0	0.013	0.890	0.015	0.090	0.050	0.160	0.023	0.110	0.058	0.172
V29086.00-V29087.C0	7981	214.0	8.0	0.037	1.502	0.016	0.073	0.053	0.129	0.024	0.090	0.061	0.139
V29087.00-V29092.00	2493	298.0	8.0	0.004	0.494	0.019	0.132	0.064	0.239	0.032	0.171	0.077	0.262
V29087.A0-V29087.B0	7983	138.6	8.0	0.084	2.264	0.001	0.019	0.003	0.032	0.004	0.035	0.006	0.044
V29087.B0-V29087.C0	7984	322.0	8.0	0.085	2.277	0.002	0.046	0.006	0.082	0.007	0.066	0.011	0.095
V29087.C0-V29087.00	7982	214.0	8.0	0.006	0.605	0.018	0.133	0.061	0.241	0.031	0.170	0.074	0.264
V29088.00-V29089.00	2166	163.0	6.0	0.006	0.281	0.002	0.057	0.004	0.083	0.003	0.068	0.005	0.090
V29089.00-V29092.00	2167	157.0	6.0	0.098	1.135	0.003	0.065	0.007	0.110	0.004	0.084	0.009	0.122
V29090.00-V29091.00	2495	245.0	8.0	0.005	0.552	0.001	0.029	0.003	0.053	0.005	0.065	0.007	0.077
V29091.00-V29092.00	2165	304.0	8.0	0.015	0.957	0.002	0.051	0.006	0.090	0.007	0.076	0.011	0.106
V29092.00-V29093.00	2168	254.0	8.0	0.099	2.457	0.024	0.085	0.080	0.150	0.044	0.112	0.099	0.167
V29093.00-V29094.00	4464	156.0	8.0	0.052	1.781	0.025	0.083	0.083	0.147	0.045	0.110	0.103	0.163
V29094.00-V29095.00	5758	162.0	8.0	0.130	2.816	0.026	0.076	0.086	0.135	0.046	0.100	0.106	0.150
V29095.00-V29096.00	2170	176.0	8.0	0.050	1.746	0.027	0.087	0.088	0.155	0.048	0.115	0.110	0.172
V29096.00-V29102.00	2175	127.0	8.0	0.048	1.711	0.027	0.120	0.091	0.215	0.049	0.156	0.113	0.238
V29097.00-V29098.00	2181	205.0	8.0	0.013	0.890	0.001	0.026	0.003	0.043	0.001	0.023	0.003	0.041
V29098.00-V29099.00	2178	236.0	8.0	0.135	2.870	0.002	0.023	0.006	0.038	0.002	0.024	0.006	0.038
V29099.00-V29100.00	2179	117.0	8.0	0.096	2.420	0.004	0.029	0.010	0.047	0.004	0.030	0.010	0.048
V29100.00-V29101.00	2180	191.0	8.0	0.077	2.167	0.004	0.034	0.012	0.058	0.004	0.037	0.012	0.060

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V29101.00-V29102.00	2177	111.0	8.0	0.052	1.781	0.005	0.094	0.015	0.169	0.006	0.119	0.016	0.184
V29102.00-V29103.00	2176	79.0	8.0	0.010	0.781	0.032	0.136	0.108	0.247	0.055	0.177	0.131	0.272
V29103.00-V29104.00	2174	390.0	8.0	0.023	1.184	0.033	0.115	0.112	0.207	0.057	0.148	0.135	0.227
V29104.00-V29105.00	2173	227.0	8.0	0.036	1.482	0.035	0.106	0.115	0.189	0.059	0.136	0.140	0.207
V29105.00-V29112.00	2172	147.0	8.0	0.042	1.601	0.036	0.241	0.118	0.411	0.061	0.302	0.143	0.449
V29106.00-V29109.00	5971	358.0	8.0	0.004	0.494	0.001	0.029	0.003	0.057	0.001	0.037	0.003	0.061
V29107.00-V29108.00	6428	150.0	8.0	0.100	2.470	0.001	0.018	0.003	0.032	0.002	0.026	0.004	0.037
V29108.00-V29109.00	4976	200.0	8.0	0.064	1.976	0.001	0.026	0.006	0.050	0.003	0.037	0.007	0.056
V29109.00-V29110.00	5970	22.0	8.0	0.007	0.653	0.002	0.032	0.011	0.062	0.005	0.044	0.014	0.069
V29110.00-V29111.00	5629	350.0	8.0	0.047	1.693	0.004	0.040	0.014	0.070	0.006	0.050	0.017	0.076
V29111.00-V29112.00	5696	392.0	8.0	0.040	1.562	0.006	0.212	0.018	0.357	0.009	0.263	0.022	0.389
V29112.00-V29116.00	4728	310.0	8.0	0.000	0.000	0.042	0.279	0.139	0.481	0.070	0.350	0.167	0.526
V29113.00-V29114.00	5825	163.0	6.0	0.010	0.363	0.001	0.046	0.003	0.070	0.002	0.058	0.004	0.078
V29114.00-V29115.00	5824	146.0	6.0	0.109	1.197	0.003	0.054	0.007	0.083	0.004	0.066	0.008	0.091
V29115.00-V29116.00	5694	272.7	6.0	0.012	0.397	0.004	0.155	0.010	0.271	0.007	0.197	0.013	0.299
V29116.00-V29117.00	6427	194.5	8.0	0.007	0.653	0.046	0.191	0.151	0.347	0.077	0.244	0.182	0.383
V29117.00-V29121.00	6425	301.0	8.0	0.005	0.552	0.048	0.211	0.155	0.387	0.078	0.269	0.185	0.426
V29118.00-V29119.00	5660	50.0	8.0	0.015	0.957	0.002	0.017	0.004	0.027	0.002	0.018	0.004	0.027
V29119.00-V29120.00	4975	222.0	8.0	0.126	2.772	0.002	0.029	0.007	0.046	0.003	0.033	0.007	0.048
V29120.00-V29121.00	5693	329.0	8.0	0.075	2.139	0.005	0.127	0.013	0.229	0.006	0.159	0.015	0.251
V29120.A0-V29120.00	5628	73.0	6.0	0.035	0.678	0.001	0.036	0.003	0.059	0.002	0.045	0.004	0.065
V29121.00-V29122.00	4727	178.9	8.0	0.004	0.494	0.053	0.218	0.170	0.399	0.085	0.277	0.202	0.440
V29122.00-V29126.00	5692	310.0	8.0	0.005	0.552	0.054	0.219	0.174	0.399	0.088	0.278	0.207	0.440
V29126.00-V29127.00	5691	299.0	8.0	0.004	0.494	0.056	0.245	0.177	0.447	0.089	0.311	0.210	0.495
V29127.00-V29128.00	5690	274.0	8.0	0.004	0.494	0.078	0.332	0.240	0.602	0.124	0.425	0.286	0.670
V29128.00-V29129.00	5823	265.0	8.0	0.004	0.494	0.078	0.262	0.242	0.469	0.129	0.337	0.293	0.521
V30001.00-V30002.00	6097	192.0	8.0	0.041	1.581	0.001	0.029	0.003	0.042	0.012	0.063	0.014	0.070
V30002.00-V30004.00	5757	377.0	8.0	0.042	1.601	0.004	0.050	0.008	0.079	0.013	0.104	0.018	0.122
V30003.00-V30004.00	6098	215.0	8.0	0.022	1.158	0.000	0.039	0.002	0.071	0.002	0.086	0.004	0.106
V30004.00-V30008.00	5659	219.0	8.0	0.004	0.494	0.004	0.071	0.013	0.109	0.016	0.122	0.024	0.150
V30005.00-V30006.00	6095	124.0	8.0	0.002	0.349	0.001	0.070	0.003	0.092	0.004	0.082	0.006	0.100
V30006.00-V30007.00	6096	190.0	8.0	0.004	0.494	0.009	0.103	0.013	0.122	0.008	0.092	0.012	0.114
V30007.00-V30008.00	5658	119.0	8.0	0.004	0.494	0.009	0.094	0.015	0.121	0.010	0.099	0.016	0.126
V30008.00-V30010.00	4974	333.0	8.0	0.024	1.210	0.014	0.100	0.031	0.147	0.026	0.135	0.043	0.173
V30009.00-V30010.00	6094	290.0	8.0	0.004	0.494	0.001	0.076	0.003	0.119	0.002	0.109	0.004	0.142
V30010.00-V30012.00	4973	243.0	8.0	0.004	0.494	0.016	0.129	0.037	0.193	0.031	0.176	0.051	0.227
V30011.00-V30012.00	6093	298.0	8.0	0.090	2.343	0.002	0.078	0.004	0.116	0.004	0.107	0.006	0.137
V30012.00-V30015.00	5657	318.0	8.0	0.004	0.494	0.019	0.160	0.044	0.242	0.036	0.222	0.061	0.288
V30013.00-V30014.00	6091	90.0	8.0	0.035	1.461	0.000	0.013	0.002	0.031	0.001	0.022	0.003	0.035
V30014.00-V30015.00	6252	355.0	8.0	0.109	2.578	0.001	0.100	0.005	0.158	0.002	0.142	0.007	0.188
V30015.00-V30017.00	4972	243.0	8.0	0.003	0.428	0.022	0.150	0.053	0.232	0.042	0.208	0.073	0.273
V30016.00-V30017.00	4971	300.0	8.0	0.095	2.407	0.002	0.070	0.005	0.106	0.002	0.088	0.004	0.118
V30017.00-V30018.00	5969	27.8	8.0	0.004	0.494	0.024	0.137	0.059	0.211	0.044	0.182	0.079	0.243
V30018.00-V30021.00	5968	424.0	8.0	0.004	0.494	0.027	0.163	0.064	0.252	0.047	0.225	0.084	0.298
V30019.00-V30020.00	6090	100.0	8.0	0.004	0.494	0.001	0.034	0.003	0.055	0.001	0.034	0.003	0.056
V30020.00-V30021.00	4463	825.0	8.0	0.103	2.507	0.002	0.096	0.007	0.150	0.003	0.133	0.007	0.177
V30021.00-V30022.00	5967	186.0	8.0	0.004	0.494	0.030	0.166	0.073	0.259	0.062	0.239	0.105	0.313
V30022.00-V30023.00	6999	437.0	8.0	0.004	0.494	0.030	0.358	0.076	0.623	0.063	0.468	0.109	0.655
V30023.00-V30043.00	7000	295.0	10.0	0.003	0.776	0.191	0.323	0.562	0.574	0.303	0.409	0.674	0.640
V30024.00-V30025.00	6089	196.4	8.0	0.093	2.382	0.000	0.000	0.002	0.025	0.001	0.018	0.003	0.030
V30025.00-V30026.00	6491	113.9	8.0	0.105	2.531	0.000	0.000	0.004	0.050	0.002	0.032	0.006	0.058
V30026.00-V30027.00	6161	357.0	8.0	0.006	0.605	0.000	0.016	0.006	0.086	0.002	0.059	0.009	0.101
V30027.00-V30030.00	6160	122.8	8.0	0.005	0.552	0.001	0.046	0.011	0.114	0.006	0.082	0.016	0.132
V30027.A0-V30027.00	6490	401.3	6.0	0.002	0.162	0.001	0.048	0.003	0.112	0.002	0.090	0.004	0.135
V30028.00-V30029.00	2441	54.0	8.0	0.019	1.077	0.001	0.023	0.003	0.035	0.002	0.029	0.004	0.040

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V30029.00-V30030.00	6489	190.0	8.0	0.107	2.555	0.002	0.039	0.006	0.082	0.004	0.060	0.008	0.093
V30030.00-V30032.00	6159	268.6	8.0	0.006	0.605	0.004	0.081	0.020	0.161	0.010	0.114	0.027	0.180
V30031.00-V30032.00	6158	80.0	8.0	0.010	0.781	0.002	0.071	0.004	0.123	0.002	0.087	0.004	0.132
V30032.00-V30040.00	6157	372.8	8.0	0.005	0.552	0.008	0.083	0.028	0.154	0.014	0.110	0.035	0.170
V30033.00-V30034.00	5385	155.0	8.0	0.117	2.671	0.002	0.018	0.003	0.032	0.002	0.025	0.004	0.035
V30034.00-V30036.00	6488	242.0	8.0	0.079	2.195	0.002	0.039	0.006	0.068	0.004	0.052	0.008	0.076
V30035.00-V30036.00	6487	132.0	8.0	0.134	2.859	0.001	0.034	0.003	0.060	0.002	0.046	0.004	0.067
V30036.00-V30037.00	6086	156.0	8.0	0.006	0.605	0.004	0.057	0.012	0.103	0.007	0.075	0.015	0.114
V30037.00-V30038.00	6087	47.0	8.0	0.004	0.494	0.004	0.060	0.014	0.112	0.007	0.079	0.017	0.123
V30038.00-V30039.00	6088	308.0	8.0	0.006	0.605	0.004	0.068	0.017	0.128	0.008	0.090	0.020	0.140
V30039.00-V30040.00	6155	208.0	8.0	0.006	0.605	0.006	0.069	0.020	0.127	0.010	0.091	0.025	0.140
V30040.00-V30041.00	5717	172.0	8.0	0.100	2.470	0.015	0.055	0.052	0.100	0.026	0.073	0.063	0.110
V30041.00-V30042.00	4462	159.0	8.0	0.165	3.172	0.016	0.060	0.055	0.109	0.028	0.079	0.068	0.120
V30042.00-V30043.00	5966	84.0	8.0	0.029	1.330	0.016	0.163	0.057	0.288	0.030	0.209	0.071	0.319
V30043.00-V30044.B0	7006	358.0	10.0	0.026	2.283	0.208	0.255	0.621	0.453	0.333	0.326	0.747	0.503
V30044.00-V30050.00	5822	363.0	10.0	0.028	2.369	0.210	0.213	0.627	0.360	0.346	0.270	0.764	0.401
V30044.B0-V30044.00	7008	213.7	10.0	0.010	1.416	0.209	0.254	0.624	0.450	0.341	0.326	0.757	0.501
V30045.00-V30048.00	7004	168.7	8.0	0.054	1.815	0.001	0.026	0.003	0.046	0.001	0.036	0.002	0.053
V30046.00-V30047.00	7005	277.0	8.0	0.041	1.581	0.001	0.021	0.003	0.038	0.002	0.041	0.004	0.051
V30047.00-V30048.00	5965	284.2	8.0	0.041	1.581	0.002	0.030	0.006	0.053	0.010	0.059	0.014	0.073
V30048.00-V30049.00	5627	310.4	8.0	0.038	1.522	0.003	0.037	0.011	0.069	0.011	0.080	0.019	0.098
V30049.00-V30050.D0	7953	142.4	8.0	0.021	1.132	0.003	0.039	0.014	0.079	0.022	0.098	0.033	0.118
V30050.00-V30051.C0	6851	333.0	10.0	0.029	2.411	0.267	0.226	0.705	0.371	0.423	0.285	0.862	0.415
V30050.A0-V30050.B0	5821	302.0	8.0	0.004	0.494	0.039	0.202	0.041	0.208	0.022	0.164	0.024	0.172
V30050.B0-V30050.C0	5820	346.0	8.0	0.004	0.494	0.053	0.217	0.057	0.227	0.039	0.200	0.043	0.211
V30050.C0-V30050.00	5819	346.0	8.0	0.005	0.552	0.054	0.249	0.061	0.346	0.053	0.284	0.059	0.371
V30050.D0-V30050.00	7954	99.0	8.0	0.023	1.184	0.003	0.160	0.016	0.272	0.022	0.225	0.035	0.318
V30051.00-V30052.00	1271	506.0	10.0	0.020	2.003	0.285	0.256	0.731	0.420	0.445	0.322	0.892	0.470
V30051.A0-V30051.B0	6854	223.2	8.0	0.015	0.957	0.000	0.027	0.002	0.052	0.010	0.077	0.012	0.086
V30051.B0-V30051.C0	6853	225.0	8.0	0.016	0.988	0.005	0.168	0.009	0.267	0.014	0.221	0.018	0.307
V30051.C0-V30051.00	6852	173.1	10.0	0.030	2.453	0.273	0.253	0.717	0.417	0.437	0.320	0.882	0.467
V30052.00-V30055.00	4719	11.3	10.0	0.003	0.776	0.285	0.244	0.733	0.401	0.445	0.318	0.894	0.457
V30053.00-V30054.00	4726	314.0	10.0	0.002	0.633	0.000	0.000	0.002	0.050	0.000	0.099	0.002	0.123
V30054.00-V30055.00	1270	392.7	10.0	0.002	0.633	0.000	0.129	0.004	0.241	0.054	0.272	0.058	0.349
V30055.00-V30056.A0	4718	151.7	10.0	0.020	2.003	0.286	0.257	0.740	0.424	0.507	0.345	0.962	0.492
V30056.00-V30057.C0	4717	454.0	10.0	0.008	1.267	0.287	0.319	0.744	0.540	0.511	0.435	0.969	0.640
V30056.A0-V30056.00	4786	291.3	10.0	0.003	0.776	0.287	0.401	0.742	0.700	0.511	0.552	0.967	0.822
V30057.00-V30058.00	7375	462.0	10.0	0.005	1.001	0.312	0.377	0.783	0.648	0.545	0.515	1.026	0.919
V30057.B0-V30057.CD	926	366.0	8.0	0.072	2.096	0.003	0.051	0.005	0.063	0.005	0.065	0.007	0.075
V30057.C0-V30057.00	5501	352.7	10.0	0.010	1.416	0.307	0.355	0.776	0.604	0.544	0.485	1.015	0.733
V30057.CA-V30057.CB	923	179.9	8.0	0.005	0.552	0.010	0.098	0.012	0.110	0.013	0.109	0.015	0.120
V30057.CB-V30057.CC	924	337.6	8.0	0.005	0.552	0.011	0.115	0.016	0.133	0.014	0.136	0.019	0.151
V30057.CC-V30057.CD	925	49.8	8.0	0.005	0.552	0.015	0.103	0.021	0.121	0.024	0.129	0.030	0.143
V30057.CD-V30057.C0	928	258.8	8.0	0.048	1.711	0.020	0.238	0.031	0.381	0.034	0.321	0.044	0.452
V30058.00-V30059.00	7374	147.0	10.0	0.006	1.097	0.313	0.379	0.785	0.658	0.546	0.519	1.020	1.000
V30059.00-V30060.00	7373	162.0	10.0	0.005	1.001	0.313	0.427	0.787	0.690	0.548	0.563	1.026	1.000
V30060.00-V30061.00	7371	24.0	10.0	0.001	0.448	0.313	0.310	0.789	0.470	0.548	0.397	1.036	1.000
V30062.A0-V30062.00	7625	5.0	8.0	0.000	0.000	0.001	0.088	0.002	0.097	0.006	0.081	0.008	0.094
V31139.00-V30023.00	7001	91.2	10.0	0.005	1.001	0.157	0.357	0.481	0.644	0.240	0.449	0.564	0.716
V31001.00-V31002.00	2440	150.0	8.0	0.003	0.428	0.001	0.044	0.003	0.072	0.000	0.023	0.002	0.061
V31002.00-V31003.00	2439	274.0	8.0	0.005	0.552	0.002	0.042	0.006	0.073	0.001	0.028	0.005	0.066
V31003.00-V31008.00	2438	277.0	8.0	0.017	1.018	0.002	0.049	0.009	0.087	0.002	0.042	0.008	0.083
V31004.00-V31005.00	6692	155.0	8.0	0.006	0.605	0.001	0.031	0.003	0.053	0.001	0.033	0.003	0.054
V31005.00-V31006.00	6691	186.0	8.0	0.017	1.018	0.002	0.039	0.006	0.066	0.002	0.045	0.006	0.070
V31006.00-V31007.00	6690	251.0	8.0	0.017	1.018	0.003	0.039	0.009	0.066	0.004	0.045	0.010	0.070

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V31007.00-V31008.A0	5384	330.0	8.0	0.066	2.006	0.004	0.035	0.012	0.061	0.004	0.037	0.013	0.062
V31008.00-V31009.00	6388	323.0	8.0	0.030	1.353	0.008	0.054	0.026	0.097	0.007	0.051	0.025	0.095
V31008.A0-V31008.00	2437	82.7	8.0	0.032	1.397	0.005	0.050	0.015	0.087	0.005	0.047	0.015	0.086
V31009.00-V31010.00	6386	333.0	8.0	0.062	1.945	0.009	0.050	0.029	0.090	0.009	0.049	0.029	0.090
V31010.00-V31011.00	6478	179.0	8.0	0.046	1.675	0.009	0.055	0.032	0.100	0.009	0.053	0.031	0.099
V31011.00-V31014.00	5756	327.0	8.0	0.042	1.601	0.011	0.070	0.037	0.122	0.010	0.069	0.037	0.122
V31011.A0-V31011.00	6476	111.8	8.0	0.002	0.349	0.001	0.046	0.003	0.084	0.000	0.041	0.003	0.082
V31012.00-V31013.00	6385	267.0	8.0	0.050	1.746	0.002	0.031	0.006	0.048	0.005	0.039	0.009	0.053
V31012.A0-V31012.00	6384	169.0	8.0	0.087	2.304	0.001	0.022	0.003	0.036	0.002	0.031	0.004	0.041
V31013.00-V31014.00	5755	313.0	8.0	0.075	2.139	0.005	0.059	0.011	0.095	0.007	0.062	0.013	0.098
V31014.00-V31015.00	4461	329.0	8.0	0.026	1.259	0.017	0.086	0.052	0.148	0.018	0.088	0.053	0.149
V31015.00-V31116.00	5964	335.0	8.0	0.017	1.018	0.018	0.264	0.055	0.467	0.018	0.324	0.055	0.510
V31016.00-V31017.00	6963	276.0	8.0	0.005	0.552	0.001	0.041	0.003	0.061	0.014	0.111	0.016	0.119
V31017.00-V31018.00	217	193.0	8.0	0.014	0.924	0.004	0.065	0.008	0.092	0.019	0.136	0.023	0.150
V31018.00-V31022.C0	6542	131.0	8.0	0.010	0.781	0.006	0.060	0.012	0.085	0.024	0.118	0.030	0.132
V31019.00-V31021.00	6960	75.0	8.0	0.073	2.110	0.001	0.044	0.003	0.066	0.001	0.051	0.003	0.072
V31020.00-V31021.00	6961	375.0	8.0	0.002	0.349	0.003	0.071	0.005	0.098	0.006	0.093	0.008	0.115
V31021.00-V31022.B0	6761	225.0	8.0	0.003	0.428	0.005	0.077	0.011	0.116	0.007	0.095	0.014	0.128
V31022.00-V31024.00	6760	166.0	8.0	0.006	0.605	0.013	0.122	0.034	0.192	0.036	0.191	0.056	0.242
V31022.A0-V31022.B0	6759	316.0	8.0	0.028	1.307	0.002	0.054	0.004	0.081	0.003	0.068	0.005	0.091
V31022.B0-V31022.00	6758	111.6	8.0	0.005	0.552	0.007	0.092	0.017	0.142	0.011	0.133	0.021	0.172
V31022.C0-V31022.00	6757	85.0	8.0	0.069	2.052	0.006	0.069	0.015	0.106	0.025	0.115	0.033	0.141
V31023.00-V31024.00	6962	188.3	6.0	0.002	0.162	0.001	0.127	0.003	0.198	0.001	0.178	0.004	0.235
V31024.00-V31025.00	1633	294.0	8.0	0.008	0.699	0.015	0.103	0.040	0.162	0.038	0.158	0.063	0.202
V31025.00-V31036.00	6151	419.0	8.0	0.074	2.125	0.018	0.080	0.047	0.131	0.044	0.128	0.073	0.165
V31025.A0-V31025.00	6964	100.0	6.0	0.075	0.993	0.002	0.054	0.004	0.083	0.004	0.081	0.006	0.102
V31026.00-V31027.00	6966	100.0	8.0	0.035	1.461	0.000	0.008	0.002	0.040	0.000	0.015	0.002	0.042
V31027.00-V31028.00	6150	162.0	8.0	0.010	0.781	0.000	0.023	0.004	0.059	0.000	0.027	0.005	0.061
V31028.00-V31030.00	5064	213.0	8.0	0.015	0.957	0.001	0.031	0.008	0.064	0.002	0.044	0.008	0.071
V31029.00-V31030.00	6965	250.0	8.0	0.121	2.717	0.002	0.026	0.003	0.045	0.006	0.044	0.008	0.058
V31030.00-V31036.00	5063	103.0	8.0	0.040	1.562	0.004	0.064	0.014	0.111	0.009	0.104	0.019	0.138
V31031.00-V31032.00	6968	222.0	8.0	0.022	1.158	0.001	0.033	0.003	0.057	0.002	0.046	0.004	0.064
V31032.00-V31034.00	6001	208.0	8.0	0.004	0.494	0.002	0.053	0.006	0.098	0.003	0.107	0.008	0.135
V31033.00-V31034.00	6969	290.0	8.0	0.049	1.729	0.001	0.040	0.003	0.076	0.013	0.109	0.015	0.125
V31034.00-V31035.00	6148	90.0	8.0	0.004	0.494	0.003	0.055	0.011	0.104	0.017	0.127	0.025	0.153
V31035.00-V31036.B0	6627	415.0	8.0	0.013	0.890	0.004	0.051	0.014	0.092	0.018	0.102	0.028	0.127
V31036.00-V31037.00	6284	206.0	8.0	0.051	1.764	0.029	0.089	0.085	0.149	0.080	0.145	0.136	0.188
V31036.A0-V31036.B0	6970	134.0	6.0	0.189	1.577	0.003	0.053	0.005	0.085	0.006	0.092	0.008	0.113
V31036.B0-V31036.00	6719	191.7	8.0	0.018	1.048	0.007	0.076	0.021	0.129	0.025	0.131	0.039	0.167
V31037.00-V31049.00	5383	303.0	8.0	0.075	2.139	0.031	0.111	0.089	0.187	0.083	0.176	0.140	0.232
V31038.00-V31040.00	6972	240.0	8.0	0.008	0.699	0.001	0.041	0.003	0.071	0.002	0.050	0.004	0.075
V31039.00-V31040.00	6971	100.0	8.0	0.004	0.494	0.001	0.043	0.003	0.075	0.001	0.050	0.003	0.078
V31040.00-V31041.00	6000	262.0	8.0	0.005	0.552	0.003	0.053	0.009	0.090	0.004	0.066	0.010	0.097
V31041.00-V31042.00	5999	266.0	8.0	0.042	1.601	0.005	0.039	0.013	0.063	0.008	0.051	0.016	0.071
V31042.00-V31043.00	6147	230.0	8.0	0.402	4.952	0.006	0.513	0.017	0.520	0.012	0.517	0.022	0.523
V31043.00-V31044.00	6718	42.0	8.0	-0.188	Adverse	0.007	0.522	0.019	0.538	0.016	0.530	0.025	0.543
V31044.00-V31045.00	6717	173.0	8.0	0.054	1.815	0.006	0.051	0.021	0.088	0.013	0.075	0.027	0.100
V31045.00-V31047.00	6283	178.0	8.0	0.079	2.195	0.007	0.042	0.024	0.073	0.016	0.060	0.031	0.083
V31046.00-V31047.00	6861	277.0	8.0	-0.208	Adverse	0.003	0.513	0.009	0.523	0.007	0.518	0.010	0.526
V31047.00-V31048.00	6689	115.0	8.0	0.260	3.982	0.008	0.513	0.029	0.523	0.016	0.518	0.037	0.526
V31048.00-V31049.00	5382	235.0	8.0	-0.308	Adverse	0.009	0.569	0.032	0.618	0.021	0.608	0.042	0.645
V31049.00-V31051.00	6974	287.0	8.0	0.017	1.018	0.041	0.182	0.123	0.311	0.105	0.285	0.187	0.382
V31050.00-V31051.00	6975	250.0	8.0	0.107	2.555	0.001	0.123	0.003	0.207	0.003	0.190	0.005	0.253
V31051.00-V31052.00	6976	113.0	8.0	0.007	0.653	0.044	0.176	0.130	0.299	0.109	0.274	0.196	0.367
V31052.00-V31054.00	6977	437.0	8.0	0.030	1.353	0.045	0.126	0.133	0.215	0.112	0.196	0.200	0.263

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V31053.00-V31054.00	6978	206.0	8.0	0.145	2.974	0.002	0.072	0.003	0.122	0.002	0.108	0.004	0.146
V31054.00-V31056.00	6154	279.1	8.0	0.030	1.353	0.047	0.128	0.139	0.219	0.115	0.200	0.208	0.268
V31055.00-V31056.00	6979	335.0	6.0	0.163	1.464	0.002	0.098	0.003	0.165	0.002	0.149	0.004	0.200
V31056.00-V31064.00	5275	17.0	8.0	0.005	0.552	0.049	0.130	0.146	0.221	0.118	0.198	0.215	0.268
V31057.00-V31058.00	6981	125.0	8.0	0.075	2.139	0.001	0.023	0.003	0.041	0.003	0.040	0.005	0.051
V31058.00-V31059.00	6146	218.0	8.0	0.019	1.077	0.002	0.053	0.006	0.090	0.005	0.078	0.009	0.106
V31059.00-V31060.00	6715	291.0	8.0	0.005	0.552	0.003	0.055	0.009	0.091	0.007	0.077	0.013	0.106
V31060.00-V31062.00	6714	154.0	8.0	0.069	2.052	0.005	0.039	0.013	0.063	0.009	0.052	0.017	0.071
V31061.00-V31062.00	6980	130.0	6.0	0.035	0.678	0.001	0.043	0.003	0.070	0.002	0.055	0.004	0.078
V31062.00-V31063.00	6281	149.0	8.0	0.087	2.304	0.007	0.040	0.019	0.065	0.012	0.051	0.024	0.072
V31063.00-V31064.00	5381	203.0	8.0	0.169	3.211	0.009	0.084	0.023	0.140	0.014	0.120	0.028	0.165
V31064.00-V31074.00	5274	248.0	8.0	0.042	1.601	0.058	0.145	0.171	0.251	0.132	0.214	0.245	0.298
V31065.00-V31067.00	6992	19.3	8.0	0.005	0.552	0.000	0.020	0.002	0.052	0.001	0.035	0.003	0.058
V31066.00-V31067.00	6991	155.0	8.0	0.017	1.018	0.001	0.034	0.003	0.059	0.002	0.043	0.004	0.064
V31067.00-V31068.00	6988	281.0	8.0	0.023	1.184	0.002	0.029	0.008	0.059	0.003	0.038	0.009	0.063
V31068.00-V31070.00	6983	107.0	8.0	0.088	2.317	0.002	0.023	0.010	0.047	0.003	0.029	0.011	0.050
V31069.00-V31070.00	6990	275.0	8.0	0.057	1.865	0.002	0.026	0.004	0.044	0.003	0.032	0.005	0.047
V31070.00-V31071.00	6984	182.0	8.0	0.155	3.075	0.004	0.045	0.016	0.088	0.006	0.054	0.019	0.093
V31071.00-V31072.00	6985	77.0	8.0	0.005	0.552	0.005	0.080	0.019	0.152	0.007	0.095	0.021	0.160
V31072.00-V31073.00	6986	157.0	8.0	0.009	0.741	0.006	0.062	0.022	0.117	0.008	0.074	0.025	0.123
V31073.00-V31074.00	6987	100.0	8.0	0.050	1.746	0.006	0.094	0.024	0.168	0.008	0.134	0.027	0.195
V31074.00-V31079.00	5715	294.0	8.0	0.024	1.210	0.068	0.172	0.210	0.304	0.145	0.249	0.288	0.356
V31074.A0-V31074.B0	5379	142.0	8.0	0.117	2.671	0.001	0.017	0.003	0.028	0.001	0.018	0.003	0.029
V31074.B0-V31074.C0	2436	105.0	8.0	0.101	2.482	0.002	0.050	0.006	0.082	0.002	0.051	0.006	0.082
V31074.C0-V31074.D0	5714	86.0	8.0	0.006	0.605	0.003	0.052	0.009	0.087	0.003	0.053	0.010	0.088
V31074.D0-V31074.00	5713	118.0	8.0	0.103	2.507	0.004	0.093	0.012	0.162	0.004	0.130	0.012	0.187
V31075.00-V31076.00	5378	223.0	8.0	0.055	1.832	0.001	0.018	0.003	0.033	0.001	0.015	0.003	0.031
V31076.00-V31077.00	6486	228.0	8.0	0.101	2.482	0.002	0.021	0.006	0.039	0.001	0.017	0.005	0.038
V31077.00-V31079.00	5712	252.0	8.0	0.085	2.277	0.002	0.103	0.008	0.184	0.001	0.141	0.007	0.211
V31078.00-V31079.00	6475	97.0	8.0	0.070	2.066	0.002	0.104	0.005	0.178	0.003	0.145	0.005	0.206
V31079.00-V31080.00	6474	293.0	8.0	0.016	0.988	0.073	0.220	0.225	0.393	0.150	0.319	0.303	0.463
V31080.00-V31085.00	6473	299.0	8.0	0.008	0.699	0.074	0.220	0.229	0.391	0.151	0.315	0.306	0.459
V31081.00-V31082.00	5711	304.0	8.0	0.042	1.601	0.002	0.029	0.005	0.039	0.002	0.028	0.004	0.038
V31082.00-V31085.00	6472	88.0	8.0	0.075	2.139	0.003	0.104	0.007	0.179	0.003	0.140	0.007	0.204
V31083.00-V31084.00	6471	222.0	8.0	0.011	0.819	0.001	0.022	0.003	0.042	0.001	0.022	0.003	0.042
V31084.00-V31085.00	6470	25.0	8.0	0.029	1.330	0.002	0.100	0.006	0.176	0.001	0.135	0.005	0.201
V31085.00-V31091.00	5754	388.0	8.0	0.019	1.077	0.079	0.194	0.244	0.345	0.156	0.276	0.321	0.402
V31086.00-V31087.00	5273	330.0	8.0	0.010	0.781	0.001	0.035	0.003	0.053	0.001	0.028	0.003	0.049
V31087.00-V31089.00	5272	336.0	8.0	0.019	1.077	0.004	0.066	0.008	0.098	0.002	0.067	0.006	0.099
V31088.00-V31089.00	5271	116.0	8.0	0.010	0.781	0.001	0.059	0.003	0.090	0.005	0.080	0.007	0.106
V31089.00-V31090.00	5270	134.0	8.0	0.010	0.781	0.006	0.061	0.014	0.092	0.008	0.069	0.016	0.098
V31090.00-V31091.00	5710	121.0	8.0	0.134	2.859	0.007	0.119	0.017	0.208	0.009	0.167	0.019	0.242
V31091.00-V31109.00	6251	381.0	8.0	0.015	0.957	0.087	0.204	0.264	0.359	0.165	0.281	0.342	0.414
V31092.00-V31093.00	6993	160.0	8.0	0.041	1.581	0.001	0.018	0.003	0.035	0.000	0.016	0.002	0.034
V31093.00-V31094.00	6994	233.0	8.0	0.071	2.081	0.001	0.028	0.006	0.049	0.001	0.028	0.005	0.049
V31094.00-V31098.00	6995	388.0	8.0	0.029	1.330	0.003	0.051	0.009	0.081	0.003	0.056	0.009	0.084
V31098.00-V31099.00	6688	265.0	8.0	0.006	0.605	0.005	0.072	0.014	0.112	0.007	0.080	0.015	0.117
V31099.00-V31100.00	6687	283.0	8.0	0.005	0.552	0.007	0.082	0.017	0.126	0.008	0.089	0.019	0.130
V31100.00-V31101.00	5377	284.0	8.0	0.005	0.552	0.009	0.106	0.021	0.162	0.010	0.106	0.022	0.163
V31101.00-V31102.00	5376	285.0	8.0	0.005	0.552	0.011	0.099	0.025	0.148	0.011	0.101	0.026	0.149
V31102.00-V31106.00	5375	391.0	8.0	0.029	1.330	0.013	0.069	0.029	0.102	0.014	0.073	0.031	0.105
V31103.00-V31104.00	6686	255.0	8.0	0.039	1.542	0.001	0.022	0.003	0.038	0.000	0.015	0.002	0.035
V31104.00-V31105.00	5374	159.0	8.0	0.047	1.693	0.002	0.032	0.006	0.053	0.001	0.024	0.005	0.050
V31105.00-V31106.B0	2435	248.0	8.0	0.022	1.158	0.003	0.041	0.009	0.073	0.002	0.034	0.008	0.069
V31106.00-V31107.00	5709	389.0	8.0	0.076	2.153	0.018	0.069	0.047	0.109	0.018	0.071	0.047	0.110

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V31106.A0-V31106.B0	6996	110.0	8.0	0.010	0.781	0.001	0.035	0.003	0.063	0.001	0.031	0.003	0.061
V31106.B0-V31106.00	7585	53.0	8.0	0.010	0.781	0.004	0.055	0.015	0.092	0.003	0.052	0.013	0.091
V31107.00-V31108.00	5753	285.0	8.0	0.052	1.781	0.019	0.078	0.050	0.124	0.021	0.081	0.052	0.126
V31108.00-V31109.00	6250	355.0	8.0	0.033	1.419	0.020	0.142	0.053	0.242	0.021	0.176	0.054	0.265
V31109.00-V31110.00	4553	362.0	8.0	0.024	1.210	0.108	0.236	0.320	0.417	0.187	0.312	0.399	0.473
V31110.00-V31111.00	5874	357.0	8.0	0.008	0.699	0.109	0.365	0.323	0.665	0.188	0.489	0.402	0.766
V31111.00-V31116.F0	5873	342.0	8.0	0.003	0.428	0.109	0.331	0.326	0.601	0.190	0.443	0.407	0.690
V31112.00-V31113.00	4552	396.0	8.0	0.053	1.798	0.000	0.017	0.002	0.049	0.001	0.035	0.003	0.056
V31113.00-V31114.00	5872	123.0	8.0	0.004	0.494	0.001	0.046	0.005	0.084	0.003	0.060	0.007	0.092
V31114.00-V31115.00	5871	325.0	8.0	0.004	0.494	0.003	0.060	0.009	0.234	0.005	0.109	0.011	0.279
V31115.00-V31116.00	5870	64.0	8.0	0.004	0.494	0.004	0.249	0.013	0.574	0.005	0.352	0.014	0.659
V31116.00-V31118.00	5869	160.3	10.0	0.002	0.633	0.134	0.290	0.410	0.517	0.217	0.369	0.493	0.574
V31116.A0-V31116.C0	5752	248.0	8.0	0.070	2.066	0.001	0.025	0.003	0.042	0.001	0.024	0.003	0.042
V31116.B0-V31116.C0	6249	10.0	8.0	0.003	0.428	0.001	0.023	0.003	0.041	0.000	0.019	0.002	0.040
V31116.C0-V31116.D0	4551	302.0	8.0	0.038	1.522	0.002	0.035	0.009	0.063	0.002	0.033	0.008	0.062
V31116.D0-V31116.E0	5867	156.0	8.0	0.019	1.077	0.003	0.049	0.011	0.092	0.003	0.047	0.011	0.091
V31116.E0-V31116.F0	5866	145.0	8.0	0.005	0.552	0.004	0.130	0.014	0.233	0.003	0.160	0.014	0.254
V31116.F0-V31116.00	5865	11.3	8.0	0.003	0.428	0.113	0.319	0.342	0.565	0.194	0.409	0.422	0.629
V31117.00-V31118.00	6998	320.0	8.0	0.025	1.235	0.002	0.159	0.004	0.278	0.003	0.202	0.005	0.309
V31118.00-V31136.00	5864	66.4	10.0	0.005	1.001	0.137	0.270	0.417	0.496	0.220	0.341	0.501	0.551
V31119.00-V31121.00	5373	240.0	8.0	0.045	1.657	0.001	0.021	0.003	0.039	0.001	0.024	0.003	0.041
V31120.00-V31121.00	1878	93.0	8.0	0.030	1.353	0.001	0.025	0.003	0.042	0.003	0.035	0.005	0.048
V31121.00-V31122.00	6485	326.0	8.0	0.058	1.881	0.002	0.025	0.008	0.050	0.004	0.033	0.010	0.054
V31122.00-V31123.00	5708	247.0	8.0	0.063	1.960	0.002	0.028	0.010	0.057	0.004	0.035	0.012	0.060
V31123.00-V31125.00	6469	251.0	8.0	0.051	1.764	0.003	0.035	0.014	0.068	0.004	0.041	0.015	0.071
V31124.00-V31125.00	6468	201.0	8.0	0.012	0.856	0.001	0.032	0.003	0.059	0.002	0.039	0.004	0.063
V31125.00-V31131.00	5751	92.0	8.0	0.039	1.542	0.005	0.045	0.019	0.084	0.007	0.048	0.021	0.085
V31126.00-V31128.00	5269	175.0	8.0	0.010	0.781	0.002	0.036	0.004	0.053	0.001	0.031	0.003	0.049
V31127.00-V31128.00	5268	20.0	8.0	0.006	0.605	0.001	0.024	0.003	0.041	0.000	0.018	0.002	0.038
V31128.00-V31129.00	5707	280.0	8.0	0.044	1.638	0.003	0.056	0.009	0.091	0.002	0.046	0.008	0.085
V31129.00-V31130.00	5706	149.0	8.0	0.010	0.781	0.005	0.055	0.013	0.089	0.003	0.045	0.011	0.084
V31130.00-V31131.00	5705	94.0	8.0	0.089	2.330	0.005	0.041	0.016	0.072	0.004	0.038	0.014	0.070
V31131.00-V31134.00	6248	176.0	8.0	0.071	2.081	0.011	0.059	0.037	0.104	0.010	0.058	0.037	0.103
V31132.00-V31133.00	6247	328.0	8.0	0.018	1.048	0.002	0.036	0.005	0.049	0.001	0.027	0.003	0.043
V31133.00-V31134.00	6246	124.0	8.0	0.051	1.764	0.004	0.052	0.008	0.082	0.002	0.046	0.007	0.079
V31134.00-V31135.00	4550	233.0	8.0	0.049	1.729	0.016	0.077	0.049	0.132	0.015	0.074	0.047	0.130
V31135.00-V31136.00	5863	245.0	8.0	0.020	1.104	0.017	0.237	0.052	0.435	0.016	0.284	0.051	0.475
V31136.00-V31137.00	4549	328.5	10.0	0.003	0.776	0.155	0.310	0.472	0.583	0.237	0.389	0.554	0.651
V31137.00-V31138.00	6245	316.4	10.0	0.003	0.776	0.156	0.311	0.475	0.577	0.239	0.389	0.558	0.640
V31138.00-V31139.00	6383	103.4	10.0	0.003	0.776	0.157	0.292	0.479	0.531	0.240	0.363	0.561	0.584
V32001.00-V32002.00	5862	32.0	8.0	0.005	0.552	0.000	0.000	0.002	0.040	0.004	0.092	0.007	0.100
V32002.00-V32003.00	5861	266.0	8.0	0.030	1.353	0.000	0.000	0.004	0.040	0.032	0.107	0.036	0.113
V32003.00-V32004.00	5626	65.9	8.0	0.042	1.601	0.000	0.000	0.006	0.039	0.032	0.085	0.039	0.093
V32004.00-V32005.00	5689	258.0	8.0	0.111	2.602	0.000	0.000	0.008	0.047	0.044	0.109	0.052	0.119
V32005.00-V32006.A0	1269	271.0	8.0	0.055	1.832	0.000	0.059	0.010	0.090	0.044	0.107	0.054	0.118
V32006.00-V32007.00	5500	278.0	8.0	0.037	1.502	0.090	0.166	0.105	0.178	0.058	0.134	0.073	0.149
V32006.A0-V32006.00	4785	271.0	8.0	0.060	1.913	0.090	0.154	0.103	0.164	0.046	0.120	0.059	0.133
V32008.00-V32009.00	6244	200.0	8.0	0.030	1.353	0.002	0.034	0.004	0.046	0.001	0.025	0.003	0.041
V32009.00-V32013.00	6116	200.0	8.0	0.038	1.522	0.004	0.060	0.008	0.090	0.002	0.043	0.006	0.080
V32010.00-V32012.00	6115	136.0	8.0	0.030	1.353	0.001	0.025	0.003	0.043	0.001	0.018	0.003	0.039
V32011.00-V32012.00	6114	160.0	6.0	0.019	0.500	0.001	0.039	0.003	0.063	0.001	0.026	0.003	0.056
V32012.00-V32013.00	6112	58.3	8.0	0.026	1.259	0.003	0.056	0.009	0.088	0.001	0.040	0.008	0.080
V32013.00-V32016.00	4548	248.7	8.0	0.006	0.605	0.008	0.149	0.021	0.189	0.004	0.104	0.016	0.154
V32014.00-V32015.00	4546	146.0	8.0	0.006	0.605	0.015	0.142	0.017	0.150	0.010	0.108	0.012	0.118
V32015.00-V32016.00	5860	344.2	8.0	0.005	0.552	0.038	0.195	0.042	0.217	0.019	0.137	0.023	0.165

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V32016.00-V32025.00	2182	295.3	8.0	0.006	0.605	0.049	0.196	0.068	0.229	0.029	0.152	0.047	0.192
V32017.00-V32018.00	6058	33.0	8.0	0.003	0.428	0.001	0.039	0.003	0.065	0.006	0.085	0.008	0.099
V32018.00-V32020.00	5985	329.0	8.0	0.006	0.605	0.003	0.069	0.008	0.103	0.013	0.130	0.019	0.150
V32018.00-V32023.00	5984	245.0	8.0	-0.042	Adverse	0.001	0.037	0.002	0.056	0.004	0.071	0.006	0.082
V32019.00-V32020.00	2429	345.0	8.0	0.007	0.653	0.003	0.069	0.005	0.093	0.009	0.119	0.011	0.134
V32020.00-V32021.00	2428	295.0	8.0	0.008	0.699	0.010	0.081	0.019	0.112	0.030	0.140	0.039	0.159
V32021.00-V32022.00	4545	346.0	8.0	0.022	1.158	0.013	0.093	0.025	0.125	0.037	0.150	0.048	0.172
V32022.00-V32026.00	5859	172.0	8.0	0.006	0.605	0.016	0.197	0.030	0.248	0.043	0.238	0.056	0.282
V32023.00-V32024.00	2427	346.0	8.0	0.029	1.330	0.001	0.033	0.002	0.042	0.004	0.050	0.005	0.056
V32024.00-V32025.00	6433	352.6	8.0	0.030	1.353	0.005	0.109	0.008	0.131	0.010	0.108	0.013	0.130
V32025.00-V32026.00	6432	267.0	8.0	0.012	0.856	0.057	0.228	0.081	0.276	0.044	0.225	0.068	0.274
V32026.00-V32027.00	5858	169.0	8.0	0.005	0.552	0.076	0.242	0.115	0.299	0.089	0.264	0.129	0.317
V32027.00-V32029.00	5857	270.0	8.0	0.020	1.104	0.076	0.178	0.117	0.220	0.091	0.195	0.132	0.234
V32028.00-V32029.A0	3361	180.0	8.0	0.000	0.000	0.011	0.147	0.013	0.159	0.016	0.173	0.018	0.183
V32029.00-V32030.00	5688	300.0	8.0	0.071	2.081	0.087	0.139	0.134	0.172	0.107	0.154	0.154	0.184
V32029.A0-V32029.00	7951	180.0	8.0	0.049	1.729	0.011	0.104	0.015	0.127	0.016	0.113	0.020	0.134
V32030.00-V32031.00	1268	280.0	8.0	0.109	2.578	0.087	0.210	0.136	0.249	0.126	0.239	0.176	0.275
V32031.00-V32034.00	4784	130.0	8.0	0.011	0.819	0.151	0.323	0.203	0.372	0.187	0.355	0.239	0.401
V32032.00-V32033.00	4783	229.0	8.0	0.005	0.552	0.000	0.105	0.002	0.131	0.000	0.103	0.002	0.129
V32033.00-V32034.00	4782	148.0	8.0	0.005	0.552	0.055	0.281	0.059	0.310	0.052	0.293	0.056	0.321
V32034.00-V32035.00	5499	241.0	8.0	0.010	0.781	0.206	0.386	0.264	0.441	0.239	0.418	0.297	0.471
V32035.00-V32036.00	4540	192.0	10.0	0.004	0.896	0.206	0.376	0.266	0.427	0.239	0.405	0.299	0.453
V32036.00-V32037.00	4539	64.0	10.0	0.003	0.776	0.206	0.312	0.268	0.354	0.239	0.335	0.301	0.374
V32037.00-V32038.00	4328	316.0	10.0	0.024	2.194	0.206	0.297	0.270	0.340	0.239	0.320	0.303	0.361
V32038.00-V32039.00	4327	190.0	10.0	0.010	1.416	0.206	0.251	0.272	0.288	0.239	0.270	0.305	0.305
V32040.00-V32041.A0	5687	300.0	8.0	0.101	2.482	0.002	0.012	0.003	0.028	0.003	0.025	0.005	0.035
V32041.00-V32042.00	5498	380.0	8.0	0.040	1.562	0.001	0.036	0.007	0.069	0.003	0.049	0.009	0.076
V32041.A0-V32041.00	1267	300.0	8.0	0.102	2.494	0.001	0.015	0.005	0.040	0.003	0.030	0.007	0.047
V32042.00-V32043.00	4318	26.0	8.0	0.004	0.494	0.004	0.061	0.013	0.103	0.006	0.071	0.014	0.108
V32043.00-V32044.00	5425	106.0	8.0	0.017	1.018	0.004	0.048	0.015	0.084	0.006	0.056	0.016	0.088
V32044.00-V32047.00	5424	26.6	8.0	0.025	1.235	0.004	0.047	0.017	0.097	0.006	0.072	0.019	0.111
V32045.00-V32046.00	7002	260.0	8.0	0.006	0.605	0.000	0.000	0.002	0.053	0.005	0.077	0.007	0.092
V32046.00-V32047.00	5423	322.0	8.0	0.004	0.494	0.000	0.032	0.004	0.102	0.008	0.098	0.012	0.136
V32047.00-V32048.00	5422	322.0	8.0	0.005	0.552	0.004	0.069	0.023	0.150	0.014	0.123	0.033	0.181
V32048.00-V32049.00	5421	293.0	8.0	0.013	0.890	0.005	0.052	0.025	0.115	0.018	0.099	0.039	0.141
V32050.00-V32051.00	5420	191.0	8.0	0.040	1.562	0.060	0.228	0.062	0.233	0.034	0.174	0.036	0.182
V32051.00-V32052.00	5518	213.0	8.0	0.007	0.653	0.060	0.199	0.064	0.206	0.034	0.152	0.038	0.161
V32053.00-V32054.00	5704	62.0	8.0	0.040	1.562	0.001	0.024	0.003	0.036	0.002	0.030	0.004	0.040
V32054.00-V32056.00	5750	297.0	8.0	0.062	1.945	0.003	0.061	0.007	0.086	0.005	0.073	0.009	0.095
V32055.00-V32056.00	2426	257.8	8.0	0.016	0.988	0.002	0.063	0.004	0.088	0.002	0.072	0.004	0.094
V32056.00-V32057.00	2425	141.0	8.0	0.004	0.494	0.008	0.098	0.016	0.135	0.012	0.115	0.020	0.148
V32057.00-V32058.00	2424	210.0	8.0	0.004	0.494	0.011	0.110	0.021	0.150	0.016	0.128	0.026	0.163
V32058.00-V32060.00	2423	300.0	8.0	0.004	0.494	0.014	0.118	0.027	0.162	0.019	0.136	0.031	0.175
V32059.00-V32060.00	2422	44.0	8.0	0.000	0.000	0.001	0.122	0.003	0.169	0.002	0.139	0.004	0.181
V32060.00-V32062.00	2421	180.0	8.0	0.005	0.552	0.017	0.128	0.034	0.177	0.023	0.145	0.039	0.190
V32061.00-V32062.00	2420	246.0	8.0	0.020	1.104	0.002	0.084	0.004	0.116	0.002	0.093	0.004	0.123
V32062.00-V32069.00	2419	180.0	8.0	0.005	0.552	0.022	0.157	0.043	0.219	0.028	0.181	0.049	0.237
V32063.00-V32064.00	5703	120.0	8.0	0.026	1.259	0.001	0.023	0.003	0.044	0.007	0.053	0.009	0.065
V32064.00-V32065.00	5903	178.0	8.0	0.039	1.542	0.002	0.035	0.008	0.059	0.008	0.058	0.015	0.074
V32064.A0-V32064.00	5702	70.0	8.0	0.024	1.210	0.001	0.024	0.003	0.043	0.001	0.038	0.003	0.052
V32065.00-V32068.00	5749	238.0	8.0	0.040	1.562	0.005	0.055	0.013	0.081	0.012	0.074	0.020	0.095
V32066.00-V32067.00	5902	171.0	8.0	0.009	0.741	0.002	0.052	0.005	0.069	0.002	0.054	0.005	0.070
V32067.00-V32068.00	5748	300.0	8.0	0.009	0.741	0.006	0.066	0.010	0.090	0.006	0.076	0.010	0.096
V32068.00-V32069.00	2418	235.0	8.0	0.033	1.419	0.014	0.124	0.028	0.174	0.022	0.147	0.036	0.191
V32069.00-V32070.00	2416	134.6	8.0	0.005	0.552	0.038	0.185	0.075	0.258	0.052	0.214	0.090	0.281

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V32070.00-V32071.00	2415	193.6	8.0	0.005	0.552	0.040	0.181	0.079	0.254	0.055	0.212	0.094	0.278
V32071.00-V32077.00	2414	310.0	8.0	0.007	0.653	0.041	0.190	0.082	0.270	0.058	0.224	0.099	0.296
V32072.00-V32073.00	5267	224.9	8.0	0.042	1.601	0.002	0.035	0.004	0.050	0.003	0.042	0.005	0.054
V32073.00-V32075.00	5266	83.0	8.0	0.016	0.988	0.004	0.043	0.008	0.062	0.005	0.050	0.009	0.067
V32074.00-V32075.00	5265	88.0	8.0	0.003	0.428	0.001	0.039	0.003	0.062	0.001	0.044	0.003	0.065
V32075.00-V32076.00	5983	350.0	8.0	0.052	1.781	0.006	0.044	0.014	0.066	0.008	0.050	0.016	0.069
V32076.00-V32077.00	5747	245.2	8.0	0.067	2.022	0.008	0.127	0.018	0.183	0.010	0.148	0.021	0.198
V32077.00-V32080.00	2413	174.0	8.0	0.005	0.552	0.053	0.217	0.106	0.308	0.072	0.253	0.126	0.335
V32078.00-V32079.00	4949	238.0	8.0	0.061	1.929	0.002	0.032	0.004	0.043	0.002	0.034	0.004	0.044
V32079.00-V32080.00	5746	350.0	8.0	0.056	1.848	0.006	0.133	0.010	0.185	0.006	0.152	0.011	0.200
V32080.00-V32084.00	4781	199.0	8.0	0.005	0.552	0.061	0.235	0.121	0.331	0.082	0.271	0.142	0.359
V32081.00-V32082.00	4832	210.7	8.0	0.033	1.419	0.001	0.031	0.003	0.044	0.002	0.033	0.004	0.046
V32082.00-V32083.00	5901	309.0	8.0	0.043	1.620	0.004	0.044	0.008	0.059	0.005	0.048	0.009	0.061
V32083.00-V32084.00	5745	350.0	8.0	0.045	1.657	0.008	0.147	0.014	0.205	0.010	0.168	0.016	0.221
V32084.00-V32085.00	4780	128.0	8.0	0.005	0.552	0.072	0.246	0.140	0.347	0.095	0.283	0.163	0.376
V32085.00-V32092.00	4779	136.0	8.0	0.005	0.552	0.073	0.282	0.144	0.396	0.097	0.325	0.167	0.430
V32086.00-V32087.00	5264	116.0	8.0	0.050	1.746	0.001	0.021	0.003	0.036	0.001	0.024	0.003	0.038
V32087.00-V32088.00	4831	181.0	8.0	0.054	1.815	0.002	0.038	0.007	0.058	0.004	0.046	0.008	0.063
V32088.00-V32089.00	5900	238.0	8.0	0.018	1.048	0.005	0.054	0.011	0.078	0.007	0.065	0.013	0.086
V32089.00-V32090.00	5899	237.9	8.0	0.019	1.077	0.008	0.069	0.016	0.096	0.011	0.081	0.019	0.105
V32090.00-V32091.00	5898	300.0	8.0	0.020	1.104	0.011	0.071	0.022	0.097	0.016	0.083	0.026	0.106
V32091.00-V32092.00	5744	196.0	8.0	0.050	1.746	0.015	0.191	0.028	0.265	0.020	0.220	0.033	0.287
V32092.00-V32093.00	4778	121.0	8.0	0.005	0.552	0.091	0.271	0.176	0.379	0.120	0.311	0.205	0.411
V32093.00-V32094.00	4777	71.0	8.0	0.011	0.819	0.092	0.229	0.178	0.321	0.121	0.263	0.207	0.348
V32094.00-V32096.00	4776	177.0	8.0	0.010	0.781	0.093	0.271	0.181	0.382	0.122	0.311	0.210	0.413
V32095.00-V32096.00	4775	165.0	8.0	0.045	1.657	0.002	0.167	0.004	0.236	0.003	0.192	0.005	0.256
V32096.00-V32097.00	4544	240.0	8.0	0.010	0.781	0.097	0.236	0.190	0.331	0.127	0.270	0.220	0.357
V32097.00-V32100.00	5625	318.0	8.0	0.050	1.746	0.099	0.167	0.193	0.233	0.129	0.191	0.224	0.251
V32098.00-V32099.00	4774	85.0	8.0	0.028	1.307	0.001	0.025	0.003	0.038	0.001	0.027	0.003	0.039
V32099.00-V32100.00	4543	272.0	8.0	0.078	2.181	0.003	0.101	0.007	0.142	0.004	0.114	0.008	0.151
V32100.00-V32101.00	5818	163.0	8.0	0.069	2.052	0.105	0.154	0.206	0.214	0.137	0.175	0.238	0.230
V32101.00-V32102.00	5686	110.0	8.0	0.080	2.209	0.106	0.194	0.209	0.289	0.137	0.220	0.241	0.307
V32102.00-V32113.00	4724	240.0	8.0	0.010	0.781	0.106	0.248	0.211	0.353	0.137	0.283	0.243	0.380
V32103.00-V32104.00	5742	198.0	8.0	0.063	1.960	0.001	0.076	0.003	0.084	0.001	0.073	0.003	0.080
V32104.00-V32105.00	4542	287.8	8.0	0.038	1.522	0.059	0.147	0.063	0.151	0.051	0.135	0.055	0.141
V32105.00-V32108.00	5856	158.0	8.0	0.025	1.235	0.062	0.152	0.068	0.159	0.055	0.146	0.061	0.155
V32106.00-V32107.00	5855	184.0	8.0	0.011	0.819	0.002	0.044	0.005	0.059	0.002	0.044	0.004	0.059
V32107.00-V32108.00	5854	340.0	8.0	0.017	1.018	0.005	0.096	0.009	0.110	0.005	0.098	0.009	0.112
V32108.00-V32109.00	5623	255.0	8.0	0.041	1.581	0.070	0.171	0.083	0.186	0.074	0.176	0.087	0.190
V32109.00-V32112.00	5816	126.0	8.0	0.012	0.856	0.072	0.260	0.087	0.288	0.077	0.292	0.091	0.317
V32110.00-V32111.00	5853	200.0	8.0	0.039	1.542	0.002	0.035	0.004	0.047	0.002	0.036	0.004	0.048
V32111.00-V32112.00	5622	212.0	8.0	0.039	1.542	0.005	0.182	0.009	0.208	0.006	0.212	0.010	0.235
V32112.00-V32113.A0	5955	115.0	8.0	0.010	0.781	0.079	0.208	0.099	0.233	0.110	0.245	0.131	0.266
V32113.00-V32116.00	1266	112.6	8.0	0.065	1.991	0.186	0.193	0.316	0.251	0.249	0.223	0.379	0.275
V32113.A0-V32113.00	5956	65.0	8.0	0.086	2.290	0.080	0.168	0.103	0.210	0.112	0.195	0.135	0.233
V32114.00-V32115.00	5685	318.4	8.0	0.101	2.482	0.002	0.033	0.004	0.046	0.003	0.042	0.005	0.052
V32115.00-V32116.00	1265	262.4	8.0	0.019	1.077	0.004	0.094	0.008	0.125	0.006	0.110	0.011	0.137
V32116.00-V32117.00	1554	48.3	8.0	0.060	1.913	0.191	0.177	0.327	0.231	0.256	0.204	0.392	0.253
V32117.00-V32118.00	1283	54.6	8.0	0.026	1.259	0.191	0.210	0.329	0.276	0.256	0.243	0.394	0.303
V32118.00-V32119.00	5497	293.8	8.0	0.064	1.976	0.191	0.276	0.331	0.370	0.256	0.321	0.396	0.407
V32119.00-V32121.00	5517	64.8	8.0	0.015	0.957	0.191	0.269	0.345	0.364	0.258	0.313	0.412	0.399
V32119.A0-V32119.B0	7433	122.3	8.0	-0.281	Adverse	0.000	0.000	0.002	0.507	0.000	0.394	0.003	0.508
V32119.B0-V32119.C0	7434	43.4	8.0	0.185	3.359	0.000	0.000	0.004	0.038	0.000	0.012	0.005	0.041
V32119.C0-V32119.D0	7909	134.5	8.0	0.011	0.819	0.000	0.000	0.006	0.068	0.001	0.028	0.007	0.074
V32119.D0-V32119.00	7815	69.5	8.0	0.011	0.819	0.000	0.000	0.008	0.069	0.001	0.031	0.010	0.076

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V32119.E0-V32119.00	7910	178.7	8.0	0.026	1.259	0.000	0.029	0.010	0.121	0.002	0.071	0.012	0.147
V32119.F0-V32119.00	7911	2.1	8.0	0.002	0.349	0.001	0.200	0.015	0.321	0.002	0.257	0.020	0.368
V32120.00-V32121.00	5516	399.0	8.0	0.025	1.235	0.000	0.097	0.002	0.147	0.000	0.113	0.002	0.159
V32121.00-V32122.00	5513	138.0	8.0	0.081	2.223	0.191	0.219	0.349	0.299	0.258	0.255	0.416	0.327
V32122.A0-V32122.B0	7647	28.2	8.0	0.003	0.428	0.025	0.127	0.079	0.224	0.011	0.085	0.065	0.204
V32122.AA-V32122.AB	7912	118.0	8.0	0.021	1.132	0.002	0.039	0.005	0.053	0.001	0.019	0.003	0.042
V32122.AB-V32122.AC	7913	42.6	8.0	0.011	0.819	0.004	0.044	0.008	0.064	0.001	0.022	0.005	0.052
V32122.AC-V32122.AE	7914	110.2	8.0	0.021	1.132	0.004	0.045	0.010	0.068	0.001	0.022	0.007	0.057
V32122.AD-V32122.AE	7813	223.2	8.0	0.084	2.264	0.001	0.033	0.003	0.049	0.001	0.016	0.002	0.041
V32122.AE-V32122.AF	7814	203.2	8.0	0.056	1.848	0.007	0.049	0.018	0.076	0.002	0.026	0.012	0.064
V32122.AF-V32122.AG	7915	102.0	8.0	0.033	1.419	0.007	0.052	0.020	0.083	0.002	0.029	0.014	0.072
V32122.AG-V32122.AH	7916	161.3	8.0	0.037	1.502	0.008	0.061	0.022	0.102	0.002	0.038	0.017	0.091
V32122.AH-V32122.AI	7878	306.3	8.0	0.010	0.781	0.008	0.071	0.024	0.122	0.003	0.049	0.020	0.112
V32122.AI-V32122.AJ	7917	128.7	8.0	0.011	0.819	0.009	0.078	0.027	0.141	0.005	0.059	0.023	0.132
V32122.AJ-V32122.AO	7918	148.8	8.0	0.011	0.819	0.009	0.075	0.030	0.130	0.005	0.054	0.025	0.120
V32122.AK-V32122.AL	7876	97.3	8.0	0.011	0.819	0.002	0.047	0.004	0.065	0.000	0.028	0.002	0.054
V32122.AL-V32122.AM	7667	143.4	8.0	0.013	0.890	0.004	0.048	0.008	0.067	0.001	0.031	0.006	0.057
V32122.AM-V32122.AN	7875	204.3	8.0	0.070	2.066	0.005	0.038	0.011	0.054	0.002	0.023	0.008	0.045
V32122.AN-V32122.AO	7874	341.9	8.0	0.114	2.637	0.008	0.053	0.016	0.080	0.002	0.033	0.011	0.068
V32122.AO-V32122.AP	7873	124.4	8.0	0.073	2.110	0.019	0.068	0.050	0.108	0.007	0.044	0.038	0.095
V32122.AP-V32122.AQ	7872	85.5	8.0	0.043	1.620	0.020	0.073	0.053	0.117	0.008	0.047	0.041	0.103
V32122.AQ-V32122.AR	7871	48.4	8.0	0.023	1.184	0.021	0.076	0.056	0.122	0.008	0.048	0.043	0.108
V32122.AR-V32122.AS	7870	18.0	8.0	0.010	0.781	0.021	0.076	0.058	0.125	0.008	0.048	0.045	0.111
V32122.AS-V32122.AT	7869	51.2	8.0	0.024	1.210	0.021	0.079	0.061	0.130	0.008	0.049	0.048	0.116
V32122.AT-V32122.AU	7834	47.4	8.0	0.019	1.077	0.022	0.099	0.063	0.166	0.008	0.062	0.050	0.147
V32122.AU-V32122.AV	7833	261.1	8.0	0.011	0.819	0.023	0.117	0.067	0.196	0.008	0.072	0.052	0.173
V32122.AV-V32122.AW	7832	97.0	8.0	0.012	0.856	0.025	0.117	0.070	0.195	0.009	0.071	0.055	0.172
V32122.AW-V32122.AX	7831	68.9	8.0	0.011	0.819	0.025	0.138	0.073	0.233	0.009	0.084	0.057	0.206
V32122.AX-V32122.AY	7817	94.1	8.0	0.010	0.781	0.025	0.122	0.075	0.207	0.009	0.074	0.059	0.184
V32122.AY-V32122.A0	7432	333.4	8.0	0.050	1.746	0.025	0.103	0.077	0.179	0.009	0.066	0.061	0.161
V32122.B0-V32122.C0	7646	300.0	8.0	0.007	0.653	0.025	0.157	0.081	0.281	0.011	0.145	0.067	0.276
V32122.C0-V32122.D0	7645	300.0	8.0	0.007	0.653	0.025	0.131	0.083	0.234	0.030	0.144	0.089	0.242
V32123.00-V32124.00	5511	223.0	8.0	0.015	0.957	0.000	0.000	0.002	0.045	0.000	0.000	0.002	0.045
V32124.00-V32125.00	5510	185.0	8.0	0.008	0.699	0.000	0.049	0.004	0.089	0.000	0.044	0.004	0.084
V32125.00-V32126.00	5509	108.0	8.0	0.005	0.552	0.011	0.099	0.017	0.125	0.009	0.088	0.015	0.117
V32126.00-V32128.00	5508	68.0	8.0	0.005	0.552	0.011	0.133	0.019	0.224	0.009	0.138	0.017	0.226
V32127.A0-V32127.B0	4830	152.0	8.0	0.108	2.567	0.001	0.015	0.003	0.027	0.006	0.034	0.008	0.039
V32127.B0-V32127.C0	5897	70.6	8.0	0.072	2.096	0.002	0.022	0.006	0.040	0.006	0.038	0.010	0.050
V32127.C0-V32127.D0	5741	146.0	8.0	0.058	1.881	0.002	0.028	0.009	0.050	0.007	0.043	0.013	0.059
V32127.D0-V32127.E0	4541	284.0	8.0	0.087	2.304	0.004	0.030	0.012	0.052	0.007	0.041	0.016	0.059
V32127.E0-V32127.F0	5684	284.0	8.0	0.120	2.705	0.005	0.034	0.015	0.057	0.008	0.048	0.019	0.066
V32127.F0-V32127.G0	5496	295.1	8.0	0.102	2.494	0.006	0.036	0.018	0.061	0.013	0.051	0.025	0.071
V32127.G0-V32127.H0	5512	144.8	8.0	0.110	2.590	0.006	0.040	0.021	0.070	0.013	0.055	0.027	0.079
V32127.H0-V32127.I0	5515	111.4	8.0	0.048	1.711	0.007	0.053	0.023	0.096	0.013	0.072	0.030	0.108
V32127.I0-V32128.D0	7735	52.6	8.0	0.009	0.741	0.007	0.065	0.026	0.119	0.013	0.085	0.032	0.131
V32128.00-V32129.00	5507	68.0	8.0	0.005	0.552	0.033	0.166	0.121	0.320	0.043	0.189	0.131	0.333
V32128.A0-V32122.AS	7816	99.1	8.0	0.011	0.819	0.000	0.046	0.001	0.075	0.000	0.027	0.001	0.066
V32128.A0-V32128.B0	7919	49.9	8.0	0.032	1.397	0.001	0.021	0.003	0.033	0.000	0.009	0.002	0.028
V32128.B0-V32128.C0	7879	104.9	8.0	0.049	1.729	0.002	0.037	0.006	0.058	0.000	0.017	0.004	0.048
V32128.C0-V32128.E0	7920	138.8	8.0	0.011	0.819	0.004	0.069	0.010	0.118	0.001	0.060	0.006	0.114
V32128.D0-V32128.E0	7734	69.5	8.0	0.011	0.819	0.008	0.078	0.028	0.143	0.013	0.092	0.034	0.151
V32128.E0-V32128.F0	7733	106.4	8.0	0.008	0.699	0.012	0.092	0.040	0.165	0.014	0.102	0.043	0.171
V32128.F0-V32128.I0	7736	31.2	8.0	0.005	0.552	0.013	0.093	0.043	0.168	0.014	0.099	0.045	0.170
V32128.G0-V32128.H0	7921	150.7	8.0	0.050	1.746	0.001	0.022	0.003	0.037	0.001	0.009	0.002	0.031
V32128.H0-V32128.I0	7922	50.4	8.0	0.025	1.235	0.002	0.059	0.006	0.103	0.000	0.050	0.005	0.100

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V32128.I0-V32128.J0	7737	155.0	8.0	0.013	0.890	0.016	0.097	0.052	0.171	0.015	0.092	0.051	0.169
V32128.J0-V32128.K0	7738	137.8	8.0	0.011	0.819	0.018	0.108	0.056	0.178	0.015	0.095	0.054	0.173
V32128.K0-V32128.X0	7739	57.6	8.0	0.009	0.741	0.020	0.104	0.061	0.183	0.016	0.105	0.057	0.186
V32128.L0-V32128.M0	7931	42.1	8.0	0.031	1.375	0.000	0.000	0.002	0.026	0.004	0.029	0.006	0.038
V32128.M0-V32128.N0	7932	228.3	8.0	0.109	2.578	0.000	0.000	0.004	0.033	0.004	0.032	0.008	0.045
V32128.N0-V32128.P0	7930	56.6	8.0	0.047	1.693	0.000	0.000	0.006	0.047	0.006	0.051	0.012	0.068
V32128.P0-V32128.Q0	7929	142.6	8.0	0.041	1.581	0.000	0.000	0.010	0.068	0.014	0.076	0.024	0.100
V32128.PA-V32128.P0	8349	77.8	8.0	0.002	0.349	0.000	0.000	0.002	0.056	0.008	0.102	0.010	0.114
V32128.Q0-V32128.R0	7928	278.8	8.0	0.015	0.957	0.000	0.000	0.012	0.089	0.014	0.101	0.027	0.132
V32128.R0-V32128.T0	7927	302.1	8.0	0.010	0.781	0.000	0.000	0.014	0.093	0.015	0.095	0.030	0.131
V32128.S0-V32128.T0	7926	154.6	8.0	0.011	0.819	0.000	0.000	0.008	0.079	0.002	0.054	0.010	0.095
V32128.SA-V32128.SB	7923	84.5	8.0	0.020	1.104	0.000	0.000	0.002	0.038	0.000	0.013	0.002	0.040
V32128.SB-V32128.SC	7924	159.0	8.0	0.021	1.132	0.000	0.000	0.004	0.052	0.000	0.022	0.005	0.056
V32128.SC-V32128.S0	7925	134.5	8.0	0.012	0.856	0.000	0.000	0.006	0.066	0.001	0.033	0.008	0.072
V32128.T0-V32128.U0	7760	77.2	8.0	0.028	1.307	0.000	0.000	0.025	0.088	0.017	0.074	0.042	0.113
V32128.U0-V32128.V0	7761	68.3	8.0	0.025	1.235	0.000	0.010	0.027	0.095	0.018	0.077	0.045	0.120
V32128.V0-V32128.W0	7762	65.6	8.0	0.032	1.397	0.001	0.018	0.030	0.088	0.018	0.068	0.047	0.108
V32128.W0-V32128.X0	7763	57.6	8.0	0.046	1.675	0.001	0.056	0.032	0.132	0.018	0.086	0.049	0.145
V32128.X0-V32128.Y0	7740	171.1	8.0	0.059	1.897	0.022	0.075	0.096	0.152	0.034	0.093	0.108	0.161
V32128.Y0-V32128.Z0	7741	74.0	8.0	0.075	2.139	0.022	0.085	0.098	0.175	0.034	0.105	0.110	0.186
V32128.Z0-V32128.00	5537	182.9	8.0	0.011	0.819	0.022	0.139	0.100	0.277	0.034	0.164	0.112	0.290
V32129.00-V32130.00	6106	227.0	8.0	0.005	0.552	0.033	0.171	0.123	0.332	0.043	0.194	0.133	0.346
V32130.00-V32131.00	6107	319.0	8.0	0.004	0.494	0.033	0.209	0.125	0.413	0.043	0.235	0.135	0.428
V32131.00-V32139.00	5506	263.0	8.0	0.004	0.494	0.033	0.174	0.127	0.338	0.043	0.197	0.137	0.351
V32132.00-V32133.A0	5505	80.0	8.0	0.015	0.957	0.000	0.000	0.002	0.039	0.000	0.011	0.002	0.041
V32133.00-V32135.00	6103	192.0	8.0	0.017	1.018	0.007	0.060	0.013	0.087	0.007	0.070	0.013	0.094
V32133.A0-V32133.00	6102	80.0	8.0	0.015	0.957	0.000	0.029	0.004	0.062	0.001	0.039	0.005	0.064
V32134.00-V32135.00	6104	178.3	8.0	0.012	0.856	0.000	0.031	0.002	0.066	0.000	0.041	0.002	0.073
V32135.00-V32139.00	6105	231.6	8.0	0.013	0.890	0.007	0.083	0.017	0.144	0.012	0.102	0.022	0.156
V32136.00-V32137.00	6109	138.0	8.0	0.004	0.494	0.000	0.039	0.002	0.071	0.000	0.045	0.002	0.076
V32137.00-V32138.00	6110	100.5	8.0	0.004	0.494	0.005	0.072	0.009	0.095	0.007	0.082	0.011	0.103
V32138.00-V32139.00	5503	191.7	8.0	0.006	0.605	0.005	0.086	0.011	0.144	0.007	0.099	0.013	0.152
V32139.00-V32140.00	6111	248.2	8.0	0.061	1.929	0.045	0.150	0.158	0.282	0.062	0.183	0.175	0.302
V32140.00-V32140.A0	7009	170.7	8.0	0.009	0.741	0.045	0.164	0.160	0.308	0.069	0.203	0.184	0.331
V32141.00-V32142.00	7016	305.0	8.0	0.016	0.988	0.000	0.000	0.002	0.044	0.002	0.086	0.004	0.096
V32142.00-V32143.00	7015	298.0	8.0	0.008	0.699	0.000	0.053	0.004	0.088	0.028	0.136	0.032	0.145
V32143.00-V32145.00	7013	254.0	8.0	0.010	0.781	0.018	0.123	0.024	0.140	0.028	0.145	0.034	0.160
V32144.00-V32145.00	7014	261.0	8.0	0.073	2.110	0.005	0.089	0.007	0.100	0.004	0.096	0.006	0.108
V32145.00-V32148.00	7012	75.0	8.0	0.008	0.699	0.024	0.125	0.034	0.149	0.032	0.145	0.043	0.167
V32146.00-V32147.00	5502	263.0	8.0	0.014	0.924	0.000	0.008	0.002	0.034	0.000	0.019	0.002	0.040
V32147.00-V32148.00	7222	200.0	8.0	0.021	1.132	0.000	0.062	0.005	0.093	0.003	0.085	0.007	0.107
V01056.00-V32T228.00	7553	189.8	10.0	0.072	3.800	0.911	0.434	1.729	0.614	1.139	0.488	1.911	0.647
V04031.00-V32T082.00	7392	197.5	8.0	0.010	0.781	0.057	0.184	0.138	0.286	0.119	0.264	0.199	0.346
V04081.00-V32T078.00	7399	240.0	8.0	0.023	1.184	0.089	0.458	0.190	0.635	0.115	0.554	0.216	0.644
V05091.A0-V32T091.00	7379	12.2	12.0	0.005	1.628	1.039	0.797	1.119	1.000	1.197	0.912	1.144	1.000
V05106.00-V32T090.00	7381	9.0	10.0	0.009	1.343	0.423	0.595	0.771	0.628	0.600	0.613	0.964	1.000
V08124.00-V32T418.00	7779	91.5	8.0	0.022	1.158	0.011	0.533	0.040	0.564	0.050	0.571	0.079	0.588
V08126.00-V32T414.00	7772	94.7	8.0	0.040	1.562	0.000	0.500	0.002	0.513	0.002	0.512	0.004	0.517
V08147.00-V32T400.00	7698	45.1	24.0	0.002	6.539	1.853	0.278	3.466	0.387	2.110	0.297	3.691	0.400
V24089.00-V32T420.00	7229	41.7	18.0	0.015	8.315	1.101	0.299	2.747	0.467	2.080	0.404	3.534	0.544
V24101.00-V32T420.00	7232	200.1	27.0	0.008	17.903	2.221	0.264	4.898	0.404	3.752	0.350	6.463	0.472
V29049.00-V32T094.00	1320	303.4	8.0	0.022	1.158	0.024	0.550	0.075	0.586	0.046	0.568	0.098	0.598
V29129.00-V32T093.00	72	357.0	8.0	0.078	2.181	0.078	0.565	0.244	0.613	0.132	0.583	0.298	0.625
V29132.00-V32T414.00	7773	36.3	8.0	0.027	1.283	0.000	0.500	0.002	0.511	0.000	0.500	0.002	0.511
V29133.00-V32T410.00	7759	258.5	8.0	0.044	1.638	0.000	0.500	0.002	0.513	0.000	0.500	0.002	0.513

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V29134.00-V32T409.00	7766	165.5	8.0	0.020	1.104	0.037	0.472	0.092	0.598	0.077	0.590	0.133	0.618
V30061.00-V32T092.A0	7372	17.0	10.0	0.012	1.551	0.313	0.580	0.791	0.627	0.548	0.606	1.063	1.000
V30062.00-V32T087.A0	7587	291.0	8.0	0.019	1.077	0.020	0.096	0.024	0.106	0.009	0.066	0.013	0.078
V30063.00-V32T085.00	5949	48.0	8.0	0.010	0.781	0.009	0.533	0.012	0.686	0.013	0.544	0.012	0.783
V32007.00-V32T083.00	7389	80.0	8.0	0.049	1.729	0.090	0.571	0.107	0.577	0.058	0.557	0.075	0.565
V32039.00-V32T080.00	7552	37.0	10.0	0.037	2.724	0.206	0.558	0.274	0.567	0.239	0.562	0.307	0.570
V32049.00-V32T078.00	825	52.0	8.0	0.041	1.581	0.005	0.381	0.027	0.535	0.021	0.480	0.043	0.544
V32052.00-V32T075.00	824	40.1	8.0	0.064	1.976	0.060	0.538	0.066	0.540	0.034	0.529	0.040	0.532
V32122.00-V32T070.00	7003	1947.0	8.0	0.035	1.461	0.191	0.622	0.351	0.667	0.257	0.642	0.418	0.683
V32122.D0-V32T066.00	7644	45.8	8.0	0.023	1.184	0.025	0.539	0.085	0.570	0.030	0.543	0.091	0.572
V32140.A0-V32T228.00	7334	212.9	24.0	0.007	12.233	0.045	0.134	0.162	0.198	0.069	0.152	0.186	0.209
V32148.00-V32T224.00	7011	286.4	8.0	0.015	0.957	0.024	0.555	0.041	0.570	0.035	0.565	0.052	0.579
V32T011.00-V32T010.00	829	103.5	36.0	0.000	0.000	8.144	0.439	17.040	0.631	12.143	0.533	20.445	0.691
V32T012.00-V32T011.00	163	385.0	36.0	0.005	30.481	8.144	0.427	17.039	0.621	12.143	0.521	20.444	0.687
V32T013.00-V32T012.00	120	388.0	36.0	0.002	19.278	8.144	0.421	17.038	0.632	12.143	0.521	20.443	0.708
V32T014.00-V32T013.00	122	305.0	36.0	0.002	19.278	8.144	0.471	17.036	0.730	12.143	0.591	20.441	0.830
V32T015.00-V32T014.00	123	318.0	36.0	0.002	19.278	8.144	0.458	17.035	0.737	12.143	0.583	20.440	0.859
V32T016.00-V32T015.00	124	364.0	36.0	0.002	19.278	8.144	0.453	17.035	0.730	12.143	0.574	20.439	0.866
V32T017.00-V32T016.00	125	340.0	36.0	0.002	19.278	8.144	0.452	17.035	0.725	12.143	0.571	20.439	0.867
V32T018.00-V32T017.00	126	481.0	36.0	0.002	19.278	8.144	0.456	17.035	0.731	12.143	0.578	20.440	0.877
V32T019.00-V32T018.00	128	256.2	36.0	0.002	19.278	8.144	0.453	17.035	0.730	12.143	0.575	20.441	0.880
V32T021.00-V32T019.00	127	378.0	36.0	0.007	36.066	8.144	0.387	17.035	0.605	12.143	0.486	20.442	0.708
V32T021.A0-V32T021.00	8273	20.8	36.0	0.000	0.000	8.144	0.338	17.033	0.498	12.143	0.414	20.440	0.553
V32T022.00-V32T021.00	131	155.0	42.0	0.004	41.125	8.144	0.304	17.032	0.447	12.143	0.373	20.439	0.495
V32T022.A0-V32T022.00	132	143.9	42.0	0.003	35.615	8.144	0.306	17.031	0.455	12.143	0.378	20.438	0.505
V32T023.00-V32T022.A0	133	328.7	42.0	0.001	20.562	8.144	0.358	17.029	0.524	12.143	0.438	20.436	0.580
V32T024.00-V32T023.00	134	552.0	42.0	0.004	41.125	8.144	0.357	17.028	0.523	12.143	0.437	20.435	0.579
V32T025.00-V32T024.00	135	203.1	42.0	0.003	35.615	8.144	0.326	17.027	0.481	12.144	0.401	20.434	0.534
V32T025.A0-V32T025.00	8294	181.8	8.0	0.048	1.711	0.000	0.500	0.002	0.513	0.000	0.500	0.002	0.513
V32T026.00-V32T025.00	136	529.3	42.0	0.004	41.125	8.144	0.326	17.024	0.481	12.144	0.400	20.431	0.533
V32T027.00-V32T026.00	137	408.0	42.0	0.005	45.979	8.144	0.296	17.023	0.439	12.144	0.365	20.430	0.487
V32T027.A0-V32T027.00	138	347.0	42.0	0.008	58.159	8.144	0.270	17.022	0.398	12.144	0.333	20.429	0.441
V32T028.00-V32T027.A0	139	76.0	42.0	0.002	29.080	8.144	0.262	17.021	0.383	12.144	0.321	20.428	0.423
V32T029.00-V32T028.00	141	207.0	42.0	0.023	98.614	8.144	0.224	17.019	0.324	12.144	0.273	20.426	0.357
V32T030.00-V32T029.00	142	460.0	36.0	0.012	47.222	8.144	0.277	17.018	0.405	12.144	0.340	20.425	0.447
V32T031.00-V32T030.00	143	421.8	36.0	0.009	40.895	8.144	0.323	17.016	0.478	12.144	0.398	20.423	0.530
V32T032.00-V32T031.00	144	470.5	36.0	0.004	27.263	8.144	0.352	17.015	0.521	12.144	0.433	20.422	0.580
V32T033.00-V32T032.00	145	477.6	36.0	0.004	27.263	8.144	0.389	17.014	0.585	12.144	0.482	20.421	0.656
V32T034.00-V32T033.00	146	457.8	36.0	0.004	27.263	8.144	0.369	17.013	0.563	12.144	0.460	20.420	0.634
V32T035.00-V32T034.00	147	430.5	36.0	0.033	78.308	8.144	0.291	17.012	0.434	12.144	0.359	20.419	0.485
V32T036.00-V32T035.00	148	553.4	36.0	0.006	33.391	8.144	0.321	17.010	0.470	12.144	0.393	20.417	0.519
V32T037.00-V32T036.00	150	432.6	36.0	0.029	73.409	8.144	0.325	17.008	0.476	12.144	0.398	20.416	0.526
V32T038.00-V32T037.00	149	221.6	36.0	0.034	79.486	8.144	0.213	17.007	0.309	12.144	0.260	20.415	0.340
V32T039.00-V32T038.00	151	507.5	36.0	0.006	33.391	8.144	0.315	17.005	0.459	12.144	0.385	20.413	0.506
V32T040.00-V32T039.00	152	613.9	36.0	0.005	30.481	8.144	0.391	17.003	0.582	12.144	0.483	20.412	0.647
V32T041.00-V32T040.00	154	373.1	36.0	0.042	88.343	8.145	0.280	17.002	0.417	12.144	0.346	20.412	0.465
V32T042.00-V32T041.00	155	550.2	36.0	0.074	117.264	8.145	0.192	17.001	0.278	12.144	0.234	20.411	0.305
V32T043.00-V32T042.00	157	558.2	36.0	0.005	30.481	8.145	0.323	16.999	0.470	12.144	0.395	20.410	0.518
V32T044.00-V32T043.00	159	50.0	36.0	0.006	33.391	8.145	0.339	16.997	0.493	12.144	0.414	20.409	0.544
V32T045.00-V32T044.00	158	102.3	36.0	0.004	27.263	8.145	0.286	16.996	0.407	12.144	0.345	20.408	0.446
V32T046.00-V32T045.00	160	223.9	36.0	0.025	68.158	7.141	0.288	15.002	0.411	10.860	0.350	18.182	0.452
V32T047.00-V32T046.00	162	467.7	36.0	0.003	23.611	7.141	0.346	15.000	0.494	10.860	0.422	18.181	0.543
V32T048.00-V32T047.00	7446	467.7	36.0	0.003	23.611	7.141	0.431	14.998	0.634	10.860	0.533	18.179	0.709
V32T049.00-V32T048.00	7445	200.0	36.0	0.003	23.611	7.141	0.382	14.996	0.589	10.860	0.483	18.178	0.672
V32T050.00-V32T049.00	7444	350.0	36.0	0.048	94.443	7.141	0.282	14.995	0.426	10.860	0.353	18.177	0.481

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V32T051.00-V32T050.00	7037	465.7	36.0	0.037	82.918	7.141	0.198	14.993	0.287	10.860	0.244	18.176	0.317
V32T052.00-V32T051.00	7036	362.4	36.0	0.006	33.391	7.141	0.300	14.991	0.435	10.860	0.369	18.174	0.482
V32T053.00-V32T052.00	7035	482.9	36.0	0.003	23.611	7.141	0.378	14.990	0.563	10.860	0.471	18.173	0.632
V32T054.00-V32T053.00	7034	322.5	36.0	0.015	52.795	7.141	0.308	14.988	0.462	10.860	0.385	18.171	0.521
V32T055.00-V32T054.00	7033	289.8	36.0	0.003	23.611	7.141	0.342	14.987	0.487	10.860	0.417	18.170	0.538
V32T056.00-V32T055.00	7032	443.3	36.0	0.003	23.611	7.141	0.410	14.984	0.601	10.860	0.506	18.168	0.673
V32T057.00-V32T056.00	7030	443.3	36.0	0.008	38.556	7.141	0.339	14.984	0.513	10.860	0.425	18.167	0.580
V32T058.00-V32T057.00	7029	443.0	36.0	0.009	40.895	7.140	0.288	14.980	0.427	10.856	0.359	18.161	0.477
V32T059.00-V32T058.00	7028	431.3	36.0	0.006	33.391	7.140	0.307	14.978	0.455	10.856	0.382	18.159	0.507
V32T060.00-V32T059.00	7027	550.4	36.0	0.003	23.611	7.139	0.374	14.976	0.560	10.855	0.467	18.156	0.628
V32T061.00-V32T060.00	7026	300.6	36.0	0.012	47.222	7.140	0.341	14.974	0.510	10.855	0.426	18.154	0.572
V32T062.00-V32T061.00	7025	552.9	36.0	0.002	19.278	7.138	0.396	14.971	0.578	10.854	0.489	18.152	0.642
V32T063.00-V32T062.00	7024	605.0	36.0	0.004	27.263	7.137	0.442	14.968	0.654	10.853	0.549	18.149	0.732
V32T064.00-V32T063.00	7023	473.8	36.0	0.003	23.611	7.137	0.380	14.967	0.577	10.854	0.478	18.148	0.653
V32T065.00-V32T064.00	7022	406.9	36.0	0.003	23.611	7.137	0.388	14.965	0.590	10.823	0.488	18.116	0.668
V32T066.00-V32T065.00	7412	483.2	36.0	0.003	23.611	7.137	0.389	14.964	0.594	10.823	0.489	18.115	0.674
V32T067.00-V32T066.00	7411	499.0	36.0	0.003	23.611	7.112	0.390	14.886	0.595	10.794	0.491	18.032	0.676
V32T068.00-V32T067.00	7409	397.3	36.0	0.003	23.611	7.112	0.383	14.884	0.584	10.788	0.482	18.024	0.663
V32T069.00-V32T068.00	7408	398.5	36.0	0.043	89.389	7.112	0.292	14.883	0.437	10.788	0.364	18.023	0.492
V32T070.00-V32T069.00	7407	464.0	36.0	0.011	45.211	7.112	0.258	14.881	0.372	10.732	0.316	17.965	0.410
V32T071.00-V32T070.00	7406	464.0	36.0	0.011	45.211	6.927	0.294	14.554	0.428	10.482	0.362	17.576	0.473
V32T072.00-V32T071.00	7405	111.9	36.0	0.006	33.391	6.927	0.262	14.553	0.387	10.482	0.325	17.574	0.429
V32T073.00-V32T072.00	7404	443.0	36.0	0.007	36.066	6.927	0.294	14.551	0.433	10.482	0.364	17.573	0.481
V32T074.00-V32T073.00	7403	341.4	36.0	0.004	27.263	6.927	0.341	14.549	0.508	10.482	0.424	17.571	0.567
V32T075.00-V32T074.00	7402	323.0	36.0	0.003	23.611	6.928	0.370	14.547	0.558	10.482	0.462	17.569	0.627
V32T076.00-V32T075.00	7401	152.7	36.0	0.003	23.611	6.871	0.380	14.482	0.580	10.449	0.478	17.529	0.655
V32T077.00-V32T076.00	7400	149.9	36.0	0.013	49.150	6.871	0.301	14.480	0.455	10.430	0.377	17.508	0.511
V32T078.00-V32T077.00	7398	160.5	36.0	0.034	79.486	6.871	0.195	14.478	0.284	10.430	0.240	17.507	0.313
V32T079.00-V32T078.00	7397	403.1	36.0	0.003	23.611	6.780	0.310	14.278	0.443	10.298	0.378	17.267	0.487
V32T080.00-V32T079.00	7396	461.3	36.0	0.003	23.611	6.785	0.421	14.276	0.622	10.298	0.521	17.265	0.695
V32T081.00-V32T080.00	7395	461.0	36.0	0.003	23.611	6.597	0.375	14.015	0.577	10.062	0.474	16.971	0.656
V32T082.00-V32T081.00	7393	383.2	36.0	0.003	23.611	6.622	0.371	14.014	0.569	10.062	0.467	16.969	0.645
V32T083.00-V32T083.A0	7390	477.0	36.0	0.003	23.611	6.629	0.373	13.885	0.567	9.947	0.466	16.782	0.640
V32T083.A0-V32T082.00	7391	119.8	36.0	0.002	19.278	6.615	0.382	13.887	0.583	9.947	0.479	16.784	0.660
V32T084.00-V32T083.00	7388	457.0	36.0	0.016	54.527	6.653	0.297	13.783	0.444	9.891	0.368	16.710	0.497
V32T085.00-V32T084.00	7387	42.0	30.0	0.003	14.520	6.705	0.309	13.781	0.446	9.891	0.375	16.709	0.494
V32T086.00-V32T085.00	7551	374.3	30.0	0.002	11.855	6.664	0.461	13.768	0.677	9.889	0.564	16.703	0.759
V32T087.00-V32T086.00	7386	372.0	30.0	0.000	0.000	6.736	0.582	13.764	0.874	9.886	0.721	16.699	0.994
V32T087.A0-V32T087.00	6856	233.1	30.0	0.002	11.855	6.843	0.553	13.762	0.888	9.886	0.703	16.698	0.999
V32T088.00-V32T087.A0	6855	12.0	30.0	0.002	11.855	6.912	0.533	13.737	0.907	9.875	0.685	16.683	1.000
V32T089.00-V32T088.00	7385	76.0	30.0	0.002	11.855	7.019	0.440	13.736	0.814	9.875	0.576	16.689	1.000
V32T090.00-V32T089.00	7383	70.0	30.0	0.003	14.520	6.962	0.381	13.737	0.685	9.875	0.483	16.691	1.000
V32T091.00-V32T090.00	7382	440.0	30.0	0.000	0.000	6.370	0.473	12.966	0.715	9.276	0.561	15.748	1.000
V32T092.00-V32T092.B0	7369	88.6	30.0	0.002	11.855	5.343	0.456	11.568	0.813	8.275	0.615	14.084	1.000
V32T092.A0-V32T091.00	7377	440.1	30.0	0.002	11.855	5.669	0.514	12.347	0.815	8.816	0.644	15.040	1.000
V32T092.B0-V32T092.A0	7370	19.5	30.0	0.000	0.000	5.348	0.485	11.569	0.844	8.275	0.648	14.134	1.000
V32T093.00-V32T092.00	73	251.0	30.0	0.002	11.855	5.336	0.444	11.567	0.779	8.275	0.589	14.066	1.000
V32T094.00-V32T093.00	74	774.0	30.0	0.003	14.520	5.258	0.427	11.333	0.704	8.144	0.552	13.767	1.000
V32T095.A0-V32T094.00	7694	28.0	33.0	0.002	15.286	5.234	0.366	11.264	0.578	8.096	0.469	13.674	1.000
V32T096.00-V32T097.A0	7549	340.6	24.0	0.005	10.339	3.369	0.372	7.779	0.598	5.978	0.505	10.273	1.000
V32T096.00-V32T409.00	7764	137.3	27.0	0.004	12.659	1.684	0.330	3.889	0.514	2.989	0.445	5.121	0.879
V32T097.A0-V32T395.00	7550	30.2	21.0	0.005	7.241	3.369	0.425	7.781	0.696	5.979	0.558	10.157	1.000
V32T205.00-V32T045.00	1327	83.1	27.0	0.009	18.989	0.000	0.241	0.006	0.345	0.000	0.290	0.006	0.376
V32T206.00-V32T207.00	828	12.8	27.0	0.000	0.000	0.000	0.000	0.002	0.017	0.000	0.000	0.002	0.017
V32T207.00-V32T205.00	1001	164.1	27.0	0.002	8.951	0.000	0.000	0.004	0.016	0.000	0.000	0.004	0.016

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V32T208.00-V32T045.00	827	53.0	27.0	0.003	10.963	1.020	0.362	1.999	0.562	1.302	0.462	2.234	0.626
V32T209.00-V32T208.00	1000	175.0	27.0	-0.044	Adverse	1.030	0.622	2.014	0.722	1.313	0.672	2.244	0.755
V32T210.00-V32T210.A0	999	119.1	27.0	0.043	41.506	1.018	0.541	1.996	0.557	1.300	0.546	2.226	0.560
V32T210.A0-V32T209.00	826	23.9	27.0	0.001	6.330	1.091	1.000	2.066	1.000	1.373	1.000	2.299	1.000
V32T211.00-V32T210.00	7218	457.9	27.0	0.002	8.951	1.018	0.204	1.995	0.280	1.300	0.229	2.225	0.294
V32T212.00-V32T211.00	7217	324.9	27.0	0.002	8.951	1.018	0.272	1.993	0.376	1.300	0.305	2.223	0.396
V32T213.00-V32T212.00	7216	443.4	24.0	0.004	9.247	1.018	0.234	1.991	0.330	1.300	0.265	2.222	0.349
V32T214.00-V32T213.00	7215	394.6	21.0	0.009	9.715	1.018	0.238	1.990	0.335	1.300	0.269	2.220	0.354
V32T215.00-V32T214.00	7214	387.1	21.0	0.009	9.715	1.018	0.220	1.988	0.309	1.300	0.248	2.218	0.327
V32T216.00-V32T215.00	7454	408.0	21.0	0.009	9.715	1.018	0.220	1.986	0.309	1.300	0.248	2.217	0.327
V32T216.A0-V32T216.00	7453	155.5	21.0	0.009	9.715	1.018	0.220	1.985	0.308	1.300	0.248	2.215	0.327
V32T217.00-V32T216.A0	7452	282.3	21.0	0.009	9.715	1.018	0.220	1.983	0.308	1.300	0.248	2.213	0.326
V32T218.00-V32T217.00	7221	165.9	21.0	0.004	6.477	1.018	0.259	1.981	0.360	1.300	0.292	2.211	0.381
V32T219.00-V32T218.00	7220	165.0	21.0	0.004	6.477	1.018	0.282	1.979	0.395	1.300	0.319	2.210	0.419
V32T220.00-V32T219.00	7451	591.6	21.0	0.012	11.218	1.018	0.235	1.978	0.330	1.300	0.266	2.208	0.350
V32T221.00-V32T220.00	7450	594.6	21.0	0.009	9.715	1.018	0.219	1.976	0.306	1.300	0.248	2.207	0.325
V32T222.00-V32T221.00	7449	255.4	21.0	0.009	9.715	1.018	0.228	1.974	0.319	1.300	0.258	2.205	0.338
V32T223.00-V32T222.00	7448	468.8	21.0	0.004	6.477	1.018	0.264	1.972	0.371	1.300	0.299	2.203	0.393
V32T224.00-V32T223.00	7339	73.2	24.0	0.000	0.000	1.018	0.306	1.971	0.421	1.300	0.344	2.201	0.445
V32T225.00-V32T224.00	7338	311.1	24.0	0.005	10.339	0.994	0.276	1.931	0.377	1.261	0.309	2.145	0.398
V32T226.00-V32T225.00	7337	377.0	24.0	0.004	9.247	0.956	0.217	1.891	0.305	1.255	0.248	2.138	0.325
V32T227.00-V32T226.00	7336	443.0	24.0	0.004	9.247	0.956	0.220	1.889	0.312	1.213	0.252	2.094	0.332
V32T228.00-V32T227.00	7335	380.4	24.0	0.004	9.247	0.956	0.220	1.887	0.310	1.208	0.247	2.088	0.327
V32T395.00-V32T095.A0	7693	70.1	33.0	0.002	15.286	5.234	0.352	11.262	0.556	8.096	0.452	13.671	1.000
V32T397.00-V32T395.00	264	94.9	21.0	0.006	7.932	1.866	0.420	3.486	0.636	2.120	0.507	3.760	1.000
V32T398.00-V32T397.00	14	232.1	24.0	0.005	10.339	1.853	0.279	3.471	0.387	2.111	0.298	3.748	0.753
V32T399.00-V32T398.00	13	170.5	24.0	0.005	10.339	1.853	0.287	3.469	0.397	2.111	0.306	3.696	0.453
V32T400.00-V32T399.00	12	32.0	24.0	0.001	4.624	1.853	0.282	3.468	0.391	2.110	0.301	3.693	0.405
V32T409.00-V32T096.00	7758	137.3	27.0	0.004	12.659	1.684	0.330	3.889	0.514	2.989	0.445	5.121	0.879
V32T410.00-V32T409.00	7767	215.9	27.0	0.004	12.659	3.333	0.326	7.690	0.497	5.901	0.429	10.128	0.719
V32T411.00-V32T410.00	7768	241.5	27.0	0.004	12.659	3.333	0.383	7.687	0.592	5.897	0.513	10.111	0.700
V32T412.00-V32T411.00	7769	238.5	27.0	0.004	12.659	3.333	0.360	7.685	0.580	5.897	0.494	10.109	0.701
V32T413.00-V32T412.00	7770	156.1	27.0	0.004	12.659	3.333	0.355	7.683	0.571	5.884	0.486	10.095	0.689
V32T414.00-V32T413.00	7771	77.3	27.0	0.003	10.963	3.332	0.338	7.681	0.543	5.884	0.462	10.093	0.654
V32T415.00-V32T414.00	7774	143.2	27.0	0.004	12.659	3.332	0.341	7.676	0.542	5.883	0.463	10.086	0.649
V32T416.00-V32T415.00	7776	242.3	27.0	0.004	12.659	3.332	0.356	7.674	0.568	5.881	0.486	10.083	0.679
V32T417.00-V32T416.00	7778	77.9	27.0	0.003	10.963	3.332	0.342	7.672	0.553	5.879	0.469	10.079	0.666
V32T418.00-V32T417.00	7777	31.0	27.0	0.002	8.951	3.332	0.311	7.670	0.506	5.879	0.428	10.078	0.611
V32T419.00-V32T418.00	7791	35.0	27.0	0.002	8.951	3.321	0.294	7.632	0.475	5.831	0.403	10.000	0.570
V32T420.00-V32T419.00	7230	385.0	27.0	0.008	17.903	3.321	0.292	7.630	0.461	5.830	0.395	9.998	0.546
B15243.00-V33136.00	2984	119.1	12.0	0.027	3.784	0.682	0.321	0.981	0.390	0.524	0.280	0.823	0.355
B15330.00-V33169.00	2999	94.4	15.0	0.028	6.986	0.117	0.076	0.230	0.105	0.084	0.065	0.196	0.098
EE	278	515.0	14.0	0.027	5.707	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EE	279	311.5	14.0	0.006	2.690	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EE	280	258.2	14.0	-0.101	Adverse	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V33001.00-V33002.00	1721	359.0	8.0	0.010	0.781	0.003	0.046	0.004	0.053	0.001	0.026	0.002	0.038
V33002.00-V33005.00	1720	266.0	8.0	0.020	1.104	0.004	0.061	0.005	0.069	0.001	0.034	0.002	0.048
V33002.00-V33083.00	1719	329.0	8.0	0.023	1.184	0.004	0.055	0.006	0.062	0.001	0.030	0.002	0.042
V33003.00-V33004.00	1718	156.0	8.0	0.007	0.653	0.002	0.051	0.003	0.062	0.001	0.030	0.002	0.046
V33004.00-V33005.00	1717	346.0	8.0	0.008	0.699	0.005	0.070	0.008	0.081	0.002	0.039	0.004	0.058
V33005.00-V33006.00	1716	232.0	8.0	0.021	1.132	0.014	0.090	0.018	0.103	0.004	0.051	0.009	0.073
V33006.00-V33007.00	1715	345.0	8.0	0.010	0.781	0.017	0.108	0.023	0.124	0.005	0.063	0.011	0.087
V33007.00-V33008.00	1714	344.0	8.0	0.010	0.781	0.022	0.130	0.029	0.148	0.007	0.075	0.014	0.103
V33008.00-V33009.00	1713	143.0	8.0	0.010	0.781	0.026	0.123	0.034	0.140	0.008	0.071	0.016	0.098
V33009.00-V33012.00	1712	143.0	8.0	0.029	1.330	0.028	0.133	0.037	0.153	0.009	0.077	0.018	0.108

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V33010.00-V33011.00	1711	354.0	8.0	0.041	1.581	0.001	0.030	0.002	0.035	0.000	0.017	0.001	0.026
V33010.00-V33082.00	1710	246.0	8.0	0.020	1.104	0.001	0.032	0.001	0.038	0.000	0.019	0.001	0.028
V33011.00-V33012.00	1709	318.0	8.0	0.050	1.746	0.005	0.102	0.006	0.118	0.001	0.059	0.003	0.084
V33012.00-V33023.00	1630	364.8	8.0	0.006	0.605	0.036	0.190	0.048	0.223	0.011	0.109	0.023	0.159
V33013.00-V33014.00	1629	195.0	8.0	0.020	1.104	0.001	0.031	0.002	0.036	0.000	0.017	0.001	0.026
V33013.00-V33118.00	1628	219.0	8.0	0.021	1.132	0.001	0.029	0.002	0.035	0.000	0.017	0.001	0.026
V33014.00-V33015.00	1627	204.0	8.0	0.054	1.815	0.004	0.040	0.006	0.047	0.001	0.022	0.003	0.034
V33015.00-V33023.00	1626	146.0	8.0	0.057	1.865	0.007	0.129	0.010	0.153	0.002	0.073	0.005	0.110
V33016.00-V33018.00	1625	118.0	8.0	0.011	0.819	0.002	0.043	0.003	0.056	0.000	0.025	0.002	0.044
V33017.00-V33018.00	1624	83.0	8.0	0.012	0.856	0.001	0.041	0.002	0.054	0.000	0.024	0.002	0.044
V33018.00-V33019.00	1623	185.0	8.0	0.010	0.781	0.004	0.053	0.008	0.071	0.001	0.032	0.005	0.057
V33019.00-V33021.00	1622	190.0	8.0	0.019	1.077	0.006	0.053	0.010	0.070	0.002	0.032	0.007	0.056
V33020.00-V33021.00	1621	218.0	8.0	0.011	0.819	0.001	0.040	0.001	0.049	0.000	0.023	0.001	0.038
V33020.00-V33125.00	1620	226.0	8.0	0.045	1.657	0.002	0.029	0.003	0.034	0.001	0.017	0.001	0.025
V33021.00-V33022.00	1619	100.0	8.0	0.037	1.502	0.009	0.057	0.015	0.072	0.003	0.034	0.009	0.057
V33022.00-V33023.00	1618	249.0	8.0	0.040	1.562	0.011	0.137	0.019	0.165	0.004	0.079	0.011	0.122
V33023.00-V33024.00	1617	373.0	8.0	0.005	0.552	0.056	0.252	0.080	0.300	0.018	0.144	0.041	0.217
V33024.00-V33025.00	1616	324.0	8.0	0.005	0.552	0.057	0.211	0.082	0.252	0.018	0.121	0.043	0.183
V33025.00-V33027.00	1615	346.0	8.0	0.043	1.620	0.060	0.133	0.086	0.157	0.020	0.078	0.045	0.115
V33026.00-V33027.00	1217	232.0	6.0	0.011	0.380	0.002	0.115	0.003	0.137	0.001	0.071	0.002	0.104
V33027.00-V33028.00	1216	286.0	8.0	0.050	1.746	0.066	0.135	0.094	0.159	0.022	0.079	0.050	0.117
V33028.00-V33029.00	1215	194.0	8.0	0.050	1.746	0.069	0.137	0.098	0.162	0.023	0.081	0.052	0.120
V33029.00-V33030.00	1214	190.0	8.0	0.050	1.746	0.072	0.139	0.102	0.165	0.024	0.082	0.054	0.122
V33030.00-V33031.00	1213	147.0	8.0	0.049	1.729	0.072	0.193	0.104	0.231	0.024	0.115	0.056	0.171
V33031.00-V33032.00	1212	67.0	8.0	0.016	0.988	0.072	0.167	0.105	0.200	0.024	0.100	0.057	0.149
V33032.00-V33033.00	97	90.0	8.0	0.128	2.794	0.072	0.119	0.106	0.143	0.024	0.070	0.058	0.107
V33033.00-V33034.00	98	108.0	8.0	0.044	1.638	0.072	0.139	0.107	0.169	0.024	0.083	0.059	0.127
V33034.00-V33035.00	99	307.0	10.0	0.051	3.198	0.072	0.109	0.108	0.132	0.024	0.068	0.060	0.101
V33035.00-V33041.00	100	245.0	10.0	0.037	2.724	0.077	0.120	0.115	0.145	0.031	0.086	0.068	0.120
V33036.00-V33037.00	108	188.0	8.0	0.020	1.104	0.005	0.047	0.007	0.057	0.005	0.058	0.007	0.067
V33036.A0-V33036.00	106	69.0	8.0	0.016	0.988	0.000	0.026	0.001	0.041	0.000	0.024	0.001	0.041
V33037.00-V33038.00	109	174.0	8.0	0.030	1.353	0.005	0.052	0.008	0.064	0.013	0.075	0.016	0.084
V33038.00-V33039.00	110	66.0	8.0	0.020	1.104	0.010	0.091	0.015	0.110	0.019	0.111	0.023	0.127
V33039.00-V33040.00	111	46.0	8.0	0.011	0.819	0.020	0.093	0.032	0.115	0.028	0.109	0.039	0.128
V33039.A0-V33039.B0	107	84.0	8.0	0.014	0.924	0.000	0.000	0.001	0.030	0.000	0.000	0.001	0.030
V33039.B0-V33039.D0	103	52.0	8.0	0.013	0.890	0.000	0.023	0.002	0.048	0.000	0.023	0.002	0.047
V33039.C0-V33039.D0	288	99.0	8.0	0.010	0.781	0.000	0.023	0.001	0.046	0.000	0.023	0.001	0.045
V33039.D0-V33039.E0	104	233.0	8.0	0.025	1.235	0.005	0.057	0.010	0.073	0.005	0.054	0.009	0.071
V33039.E0-V33039.00	105	233.0	8.0	0.020	1.104	0.010	0.094	0.016	0.115	0.009	0.102	0.015	0.122
V33040.00-V33041.00	112	87.0	8.0	0.059	1.897	0.020	0.112	0.033	0.138	0.028	0.100	0.041	0.129
V33041.00-V33042.00	115	123.5	10.0	0.039	2.796	0.098	0.148	0.149	0.182	0.059	0.116	0.110	0.157
V33042.00-V33047.00	518	209.0	12.0	0.009	2.184	0.098	0.180	0.150	0.221	0.059	0.139	0.111	0.190
V33047.00-V33048.00	520	69.2	12.0	0.003	1.261	0.098	0.171	0.151	0.210	0.059	0.136	0.112	0.183
V33048.00-V33056.00	521	91.5	12.0	0.013	2.625	0.098	0.226	0.152	0.272	0.067	0.198	0.121	0.251
V33049.00-V33051.A0	464	90.0	8.0	0.009	0.741	0.000	0.028	0.001	0.049	0.000	0.031	0.001	0.051
V33050.00-V33051.00	467	115.0	8.0	0.010	0.781	0.000	0.029	0.001	0.053	0.000	0.032	0.001	0.055
V33051.00-V33052.00	463	221.0	8.0	0.010	0.781	0.005	0.057	0.009	0.079	0.006	0.062	0.010	0.083
V33051.A0-V33051.00	465	80.0	8.0	0.010	0.781	0.005	0.057	0.007	0.073	0.006	0.063	0.008	0.077
V33052.00-V33053.00	462	174.0	8.0	0.010	0.781	0.005	0.067	0.011	0.090	0.006	0.071	0.012	0.093
V33053.00-V33054.00	118	125.0	8.0	0.010	0.781	0.010	0.088	0.017	0.112	0.010	0.089	0.017	0.113
V33054.00-V33055.00	119	36.0	8.0	0.006	0.605	0.011	0.081	0.019	0.104	0.012	0.084	0.020	0.106
V33055.00-V33056.00	448	97.0	8.0	0.030	1.353	0.011	0.277	0.021	0.335	0.014	0.254	0.023	0.318
V33056.00-V33057.00	116	35.1	12.0	-0.001	Adverse	0.109	0.234	0.174	0.284	0.081	0.207	0.146	0.263
V33057.00-V33080.00	460	246.0	12.0	0.012	2.522	0.109	0.188	0.175	0.239	0.081	0.196	0.147	0.247
V33059.00-V33060.00	489	21.0	8.0	0.004	0.494	0.000	0.000	0.001	0.029	0.000	0.000	0.001	0.029

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V33060.00-V33061.00	490	78.0	8.0	0.021	1.132	0.000	0.000	0.002	0.032	0.000	0.000	0.002	0.032
V33061.00-V33063.00	491	204.0	8.0	0.069	2.052	0.000	0.022	0.003	0.046	0.000	0.000	0.003	0.038
V33062.00-V33063.00	514	156.0	8.0	0.020	1.104	0.000	0.022	0.001	0.043	0.000	0.000	0.001	0.035
V33063.00-V33064.00	492	51.0	8.0	0.016	0.988	0.005	0.043	0.011	0.064	0.000	0.026	0.006	0.059
V33064.00-V33080.B0	494	59.0	8.0	0.018	1.048	0.005	0.069	0.012	0.099	0.007	0.091	0.014	0.116
V33065.00-V33066.00	498	70.0	8.0	0.016	0.988	0.009	0.064	0.015	0.081	0.032	0.116	0.038	0.126
V33065.A0-V33065.B0	496	204.0	8.0	0.010	0.781	0.005	0.059	0.006	0.064	0.007	0.084	0.008	0.089
V33065.B0-V33065.00	497	95.0	8.0	0.019	1.077	0.005	0.058	0.008	0.070	0.027	0.114	0.029	0.120
V33065.C0-V33065.D0	207	27.0	8.0	0.049	1.729	0.000	0.000	0.001	0.022	0.000	0.024	0.001	0.034
V33065.D0-V33065.00	495	66.0	8.0	0.016	0.988	0.000	0.035	0.002	0.058	0.006	0.087	0.008	0.096
V33066.00-V33067.00	7588	122.0	8.0	0.029	1.330	0.009	0.062	0.016	0.081	0.032	0.118	0.039	0.129
V33067.00-V33068.00	499	102.0	8.0	0.021	1.132	0.009	0.076	0.017	0.099	0.040	0.136	0.048	0.149
V33068.00-V33080.A0	501	39.0	8.0	0.007	0.653	0.015	0.107	0.024	0.140	0.040	0.162	0.049	0.185
V33069.00-V33080.A0	502	279.0	8.0	0.017	1.018	0.010	0.097	0.022	0.135	0.012	0.130	0.025	0.161
V33069.A0-V33069.B0	485	66.0	8.0	0.008	0.699	0.000	0.000	0.001	0.033	0.000	0.000	0.001	0.033
V33069.B0-V33069.C0	486	78.0	8.0	0.012	0.856	0.000	0.000	0.002	0.042	0.000	0.038	0.002	0.062
V33069.C0-V33069.E0	487	242.0	8.0	0.011	0.819	0.000	0.022	0.003	0.055	0.006	0.062	0.010	0.076
V33069.D0-V33069.E0	484	92.0	8.0	0.010	0.781	0.000	0.022	0.001	0.046	0.000	0.024	0.001	0.047
V33069.E0-V33069.F0	197	344.0	8.0	0.031	1.375	0.005	0.044	0.011	0.064	0.006	0.048	0.012	0.068
V33069.F0-V33069.G0	198	17.0	8.0	0.006	0.605	0.005	0.045	0.012	0.070	0.006	0.050	0.013	0.073
V33069.G0-V33069.00	204	93.0	8.0	0.023	1.184	0.005	0.058	0.013	0.088	0.006	0.064	0.014	0.092
V33069.H0-V33069.I0	200	20.0	8.0	0.004	0.494	0.005	0.050	0.006	0.056	0.000	0.000	0.001	0.029
V33069.I0-V33069.J0	201	34.0	8.0	0.009	0.741	0.005	0.046	0.007	0.056	0.000	0.000	0.002	0.034
V33069.J0-V33069.00	202	65.0	8.0	0.021	1.132	0.005	0.056	0.008	0.079	0.000	0.039	0.003	0.072
V33070.00-V33072.00	469	161.0	8.0	0.011	0.819	0.005	0.093	0.007	0.107	0.075	0.220	0.077	0.227
V33070.A0-V33070.00	468	128.0	8.0	0.017	1.018	0.000	0.028	0.001	0.046	0.000	0.102	0.001	0.116
V33071.00-V33072.B0	474	115.0	8.0	-0.007	Adverse	0.004	0.541	0.003	0.546	0.002	0.524	0.003	0.533
V33071.A0-V33071.00	475	59.0	8.0	0.008	0.699	0.003	0.646	0.004	0.651	0.002	0.630	0.002	0.638
V33072.00-V33073.00	470	165.0	8.0	0.010	0.781	0.025	0.123	0.033	0.141	0.085	0.223	0.093	0.233
V33072.A0-V33072.B0	473	179.0	8.0	-0.010	Adverse	0.011	0.541	0.013	0.546	0.002	0.524	0.002	0.533
V33072.B0-V33072.00	472	162.0	8.0	0.021	1.132	0.016	0.107	0.020	0.120	0.005	0.143	0.010	0.156
V33073.00-V33074.B0	451	55.0	8.0	0.009	0.741	0.025	0.121	0.034	0.140	0.085	0.211	0.094	0.223
V33074.00-V33079.B0	455	76.0	8.0	0.010	0.781	0.030	0.135	0.043	0.162	0.089	0.231	0.102	0.247
V33074.A0-V33074.B0	450	208.0	6.0	0.010	0.363	0.005	0.125	0.006	0.143	0.005	0.183	0.006	0.196
V33074.B0-V33074.00	452	82.0	8.0	0.013	0.890	0.030	0.132	0.042	0.154	0.089	0.224	0.101	0.237
V33075.00-V33076.00	477	240.0	8.0	0.010	0.781	0.005	0.057	0.007	0.070	0.005	0.078	0.008	0.088
V33075.A0-V33075.00	476	82.0	8.0	0.011	0.819	0.000	0.029	0.001	0.048	0.000	0.030	0.001	0.049
V33076.00-V33077.00	479	346.0	8.0	0.010	0.781	0.005	0.078	0.008	0.092	0.015	0.112	0.018	0.121
V33077.00-V33078.00	480	193.0	8.0	0.010	0.781	0.015	0.097	0.020	0.109	0.026	0.124	0.030	0.134
V33078.00-V33079.00	481	124.0	8.0	0.012	0.856	0.015	0.120	0.021	0.142	0.026	0.170	0.031	0.187
V33079.00-V33080.00	461	121.0	8.0	0.020	1.104	0.052	0.250	0.076	0.315	0.120	0.313	0.144	0.370
V33079.A0-V33079.B0	458	196.0	6.0	0.016	0.459	0.000	0.089	0.001	0.127	0.000	0.152	0.001	0.183
V33079.B0-V33079.D0	456	161.0	8.0	0.010	0.781	0.030	0.138	0.045	0.167	0.089	0.232	0.104	0.250
V33079.C0-V33079.D0	482	129.0	8.0	0.012	0.856	0.005	0.099	0.006	0.117	0.003	0.141	0.005	0.154
V33079.D0-V33079.00	457	107.0	8.0	0.011	0.819	0.035	0.145	0.053	0.175	0.093	0.228	0.110	0.248
V33080.00-V33081.00	515	76.8	12.0	0.005	1.628	0.204	0.264	0.333	0.339	0.269	0.313	0.399	0.379
V33080.A0-V33080.B0	205	183.0	8.0	0.016	0.988	0.025	0.109	0.048	0.150	0.052	0.157	0.075	0.187
V33080.B0-V33080.H0	195	145.0	8.0	0.043	1.620	0.030	0.108	0.061	0.150	0.060	0.143	0.090	0.176
V33080.C0-V33080.D0	513	315.0	8.0	0.030	1.353	0.000	0.021	0.001	0.037	0.000	0.026	0.001	0.040
V33080.D0-V33080.E0	511	22.0	8.0	0.008	0.699	0.005	0.046	0.007	0.057	0.007	0.055	0.009	0.065
V33080.E0-V33080.H0	510	128.0	8.0	0.018	1.048	0.005	0.086	0.008	0.115	0.007	0.107	0.011	0.132
V33080.F0-V33080.G0	7590	151.0	8.0	0.024	1.210	0.007	0.055	0.009	0.065	0.000	0.015	0.002	0.040
V33080.FA-V33080.F0	7591	283.0	8.0	0.002	0.349	0.007	0.094	0.008	0.102	0.000	0.000	0.001	0.042
V33080.G0-V33080.H0	7589	102.0	8.0	0.022	1.158	0.008	0.090	0.011	0.118	0.002	0.092	0.005	0.120
V33080.H0-V33080.00	196	118.0	8.0	0.029	1.330	0.042	0.237	0.081	0.310	0.069	0.280	0.108	0.345

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V33081.00-V33135.00	516	208.0	12.0	0.006	1.784	0.203	0.220	0.334	0.280	0.269	0.250	0.400	0.304
V33082.00-V33083.00	1211	320.0	8.0	0.031	1.375	0.005	0.054	0.006	0.061	0.002	0.031	0.003	0.043
V33083.00-V33092.00	1210	171.0	8.0	0.039	1.542	0.013	0.083	0.017	0.097	0.004	0.049	0.008	0.071
V33084.00-V33085.00	1209	193.0	8.0	0.027	1.283	0.001	0.028	0.002	0.034	0.000	0.017	0.001	0.027
V33084.00-V33093.00	1208	141.0	8.0	0.011	0.819	0.001	0.030	0.001	0.036	0.000	0.020	0.001	0.029
V33085.00-V33086.00	1207	245.0	8.0	0.057	1.865	0.004	0.042	0.005	0.050	0.001	0.026	0.003	0.038
V33086.00-V33087.00	1206	346.0	8.0	0.032	1.397	0.007	0.057	0.010	0.067	0.003	0.036	0.006	0.050
V33087.00-V33088.00	1205	325.0	8.0	0.032	1.397	0.011	0.066	0.015	0.077	0.004	0.041	0.008	0.058
V33088.00-V33091.00	1204	87.0	8.0	0.027	1.283	0.013	0.075	0.018	0.090	0.005	0.047	0.010	0.070
V33089.00-V33090.00	1203	48.0	6.0	0.017	0.473	0.001	0.031	0.002	0.048	0.000	0.021	0.001	0.042
V33090.00-V33091.00	2712	196.0	6.0	0.030	0.628	0.002	0.073	0.004	0.095	0.001	0.047	0.003	0.077
V33091.00-V33092.00	2711	270.8	8.0	0.022	1.158	0.016	0.090	0.024	0.110	0.006	0.056	0.015	0.085
V33092.00-V33103.00	2655	175.0	8.0	0.033	1.419	0.030	0.136	0.044	0.164	0.011	0.085	0.024	0.125
V33093.00-V33095.00	2654	296.0	8.0	0.032	1.397	0.003	0.038	0.005	0.047	0.002	0.027	0.003	0.040
V33094.00-V33095.00	2653	124.0	8.0	0.056	1.848	0.001	0.029	0.002	0.038	0.001	0.020	0.002	0.033
V33095.00-V33096.00	2652	122.0	8.0	0.055	1.832	0.005	0.042	0.009	0.054	0.003	0.030	0.007	0.046
V33096.00-V33097.00	2651	228.0	8.0	0.056	1.848	0.007	0.049	0.012	0.062	0.003	0.035	0.008	0.052
V33097.00-V33098.00	2650	263.0	8.0	0.049	1.729	0.010	0.067	0.016	0.083	0.005	0.047	0.011	0.069
V33098.00-V33099.00	2649	346.0	8.0	0.016	0.988	0.013	0.091	0.021	0.111	0.006	0.062	0.013	0.089
V33099.00-V33102.00	2648	346.0	8.0	0.010	0.781	0.017	0.107	0.026	0.129	0.007	0.072	0.016	0.102
V33100.00-V33101.00	2647	346.0	8.0	0.012	0.856	0.001	0.038	0.002	0.043	0.001	0.026	0.001	0.034
V33100.00-V33109.00	2646	272.0	8.0	0.042	1.601	0.002	0.040	0.003	0.046	0.001	0.028	0.002	0.036
V33101.00-V33102.00	2645	296.0	8.0	0.020	1.104	0.005	0.080	0.006	0.094	0.002	0.053	0.004	0.073
V33102.00-V33103.00	2644	173.2	8.0	0.014	0.924	0.025	0.143	0.036	0.171	0.011	0.092	0.022	0.132
V33103.00-V33105.00	2643	249.0	8.0	0.018	1.048	0.056	0.157	0.082	0.190	0.022	0.100	0.048	0.146
V33104.00-V33105.00	2642	104.0	6.0	0.041	0.734	0.002	0.114	0.003	0.138	0.001	0.075	0.002	0.109
V33105.00-V33106.00	2641	339.0	8.0	0.031	1.375	0.059	0.146	0.088	0.176	0.023	0.094	0.052	0.136
V33106.00-V33107.00	2640	346.0	8.0	0.028	1.307	0.064	0.152	0.093	0.183	0.025	0.098	0.055	0.142
V33107.00-V33108.00	2639	346.0	8.0	0.028	1.307	0.068	0.173	0.098	0.208	0.027	0.111	0.058	0.159
V33108.00-V33115.00	2638	347.0	8.0	0.025	1.235	0.071	0.162	0.103	0.194	0.029	0.105	0.061	0.150
V33109.00-V33110.00	2637	247.0	8.0	0.023	1.184	0.005	0.048	0.007	0.056	0.002	0.033	0.004	0.043
V33110.00-V33111.00	2636	225.0	8.0	0.069	2.052	0.008	0.049	0.011	0.057	0.003	0.034	0.006	0.045
V33111.00-V33114.00	2635	116.0	8.0	0.055	1.832	0.011	0.057	0.015	0.069	0.005	0.042	0.009	0.056
V33112.00-V33113.00	2634	202.0	6.0	0.040	0.725	0.001	0.035	0.002	0.048	0.001	0.029	0.002	0.044
V33113.00-V33114.00	2633	163.0	8.0	0.040	1.562	0.003	0.047	0.005	0.059	0.002	0.035	0.004	0.050
V33114.00-V33115.00	2632	233.0	8.0	0.060	1.913	0.014	0.097	0.022	0.117	0.007	0.067	0.015	0.094
V33115.00-V33116.00	2631	261.0	8.0	0.088	2.317	0.087	0.132	0.128	0.160	0.037	0.088	0.078	0.126
V33116.00-V33117.00	2630	152.0	8.0	0.088	2.317	0.087	0.144	0.129	0.176	0.038	0.096	0.079	0.138
V33117.00-V33132.00	2629	154.0	8.0	0.048	1.711	0.087	0.154	0.130	0.187	0.038	0.103	0.080	0.148
V33118.00-V33121.00	2628	284.0	8.0	0.059	1.897	0.004	0.045	0.005	0.053	0.001	0.026	0.003	0.039
V33119.00-V33120.00	2627	111.0	8.0	0.011	0.819	0.002	0.042	0.003	0.053	0.001	0.025	0.002	0.040
V33120.00-V33121.00	2626	296.0	8.0	0.013	0.890	0.005	0.054	0.007	0.065	0.001	0.032	0.004	0.048
V33121.00-V33123.00	2625	335.0	8.0	0.061	1.929	0.012	0.061	0.017	0.073	0.004	0.036	0.009	0.053
V33122.00-V33123.00	2624	180.0	8.0	0.017	1.018	0.001	0.047	0.002	0.056	0.000	0.028	0.001	0.041
V33122.00-V33126.00	2623	230.0	8.0	0.013	0.890	0.001	0.036	0.002	0.042	0.000	0.021	0.001	0.032
V33123.00-V33124.00	2622	278.0	8.0	0.060	1.913	0.017	0.082	0.024	0.097	0.005	0.049	0.012	0.072
V33124.00-V33128.00	2621	109.0	8.0	0.014	0.924	0.019	0.102	0.027	0.122	0.006	0.061	0.014	0.091
V33125.00-V33126.00	2620	305.0	8.0	0.080	2.209	0.004	0.037	0.006	0.045	0.001	0.022	0.003	0.034
V33126.00-V33127.00	2619	196.0	8.0	0.079	2.195	0.008	0.052	0.011	0.062	0.003	0.032	0.006	0.047
V33127.00-V33128.00	2618	163.0	8.0	0.035	1.461	0.010	0.083	0.015	0.099	0.004	0.050	0.008	0.075
V33128.00-V33129.00	2617	130.0	8.0	0.027	1.283	0.030	0.147	0.044	0.173	0.010	0.089	0.024	0.129
V33129.00-V33130.00	2616	274.0	8.0	0.011	0.819	0.038	0.145	0.053	0.171	0.015	0.092	0.030	0.129
V33130.00-V33131.00	2615	324.0	8.0	0.050	1.746	0.039	0.104	0.056	0.123	0.017	0.071	0.033	0.097
V33131.00-V33132.00	2614	246.0	8.0	0.055	1.832	0.042	0.128	0.059	0.153	0.020	0.088	0.037	0.122
V33132.00-V33133.00	2613	283.0	12.0	0.070	6.092	0.129	0.101	0.190	0.122	0.058	0.069	0.119	0.097

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V33133.00-V33134.00	2612	336.0	12.0	0.069	6.049	0.129	0.109	0.191	0.132	0.058	0.075	0.120	0.106
V33134.00-V33135.00	507	242.0	12.0	0.036	4.369	0.129	0.132	0.193	0.163	0.058	0.113	0.121	0.148
V33135.00-V33143.00	517	135.0	12.0	0.069	6.049	0.332	0.345	0.528	0.436	0.327	0.319	0.523	0.413
V33136.00-V33137.00	2611	251.0	12.0	0.011	2.415	0.682	0.428	0.982	0.531	0.524	0.370	0.824	0.477
V33137.00-V33140.00	2610	304.0	12.0	0.004	1.456	0.682	0.490	0.983	0.615	0.524	0.422	0.825	0.550
V33138.00-V33140.00	1614	6.0	12.0	0.000	0.000	0.028	0.484	0.017	0.609	0.032	0.415	0.017	0.544
V33139.00-V33140.00	1613	5.8	12.0	0.000	0.000	0.029	0.484	0.018	0.609	0.034	0.415	0.017	0.544
V33140.00-V33141.00	2609	306.0	12.0	0.004	1.456	0.682	0.544	0.986	0.678	0.524	0.469	0.828	0.609
V33141.00-V33142.00	2608	284.0	12.0	0.004	1.456	0.682	0.470	0.987	0.580	0.524	0.407	0.830	0.524
V33142.00-V33143.00	508	277.0	12.0	0.014	2.725	0.682	0.443	0.989	0.553	0.524	0.396	0.831	0.512
V33143.00-V33144.00	509	257.0	15.0	0.004	2.640	1.014	0.437	1.518	0.553	0.850	0.396	1.355	0.516
V33144.00-V33146.00	3000	346.0	15.0	0.004	2.640	1.014	0.438	1.519	0.555	0.850	0.397	1.356	0.518
V33145.00-V33146.00	2607	6.9	15.0	0.000	0.000	0.092	0.433	0.044	0.551	0.040	0.392	0.053	0.514
V33146.00-V33148.00	2606	381.0	15.0	0.004	2.640	1.014	0.439	1.521	0.558	0.850	0.398	1.358	0.520
V33147.00-V33148.00	1612	12.2	15.0	0.000	0.000	0.076	0.431	0.039	0.549	0.039	0.389	0.039	0.512
V33148.00-V33149.00	2605	446.0	15.0	0.004	2.640	1.014	0.441	1.523	0.560	0.850	0.399	1.360	0.522
V33149.00-V33150.00	2604	445.0	15.0	0.004	2.640	1.014	0.440	1.524	0.559	0.850	0.399	1.361	0.522
V33150.00-V33151.00	2603	454.0	15.0	0.004	2.640	1.014	0.452	1.526	0.574	0.850	0.410	1.362	0.536
V33151.00-V33152.00	3002	453.0	15.0	0.004	2.640	1.014	0.436	1.527	0.552	0.850	0.396	1.364	0.516
V33152.00-V33154.00	3001	446.0	15.0	0.005	2.952	1.014	0.522	1.528	0.665	0.850	0.473	1.365	0.620
V33153.00-V33154.00	2602	13.0	8.0	0.005	0.552	0.003	0.655	0.025	0.822	0.004	0.599	0.007	0.769
V33154.00-V33156.00	2601	348.0	15.0	0.002	1.867	1.014	0.502	1.530	0.638	0.850	0.456	1.367	0.596
V33155.00-V33156.00	1751	10.5	15.0	0.000	0.000	0.048	0.359	0.053	0.453	0.043	0.326	0.044	0.424
V33156.00-V33173.00	2600	346.0	15.0	0.007	3.493	1.014	0.469	1.532	0.601	0.850	0.422	1.369	0.558
V33157.00-V33158.00	3004	138.0	8.0	0.020	1.104	0.001	0.035	0.002	0.045	0.001	0.026	0.002	0.038
V33158.00-V33162.00	2599	337.9	8.0	0.020	1.104	0.004	0.068	0.007	0.080	0.002	0.043	0.004	0.061
V33159.00-V33160.00	2598	275.7	8.0	0.024	1.210	0.003	0.044	0.004	0.050	0.002	0.028	0.003	0.038
V33160.00-V33161.00	2597	345.8	8.0	0.040	1.562	0.008	0.058	0.010	0.066	0.003	0.035	0.005	0.048
V33161.00-V33162.00	2596	159.9	8.0	0.025	1.235	0.011	0.079	0.014	0.091	0.004	0.048	0.007	0.066
V33162.00-V33163.00	2595	314.1	8.0	0.020	1.104	0.019	0.094	0.026	0.109	0.007	0.058	0.014	0.081
V33163.00-V33164.00	2594	325.4	8.0	0.020	1.104	0.022	0.100	0.030	0.116	0.008	0.062	0.016	0.086
V33164.00-V33165.00	2593	313.6	8.0	0.020	1.104	0.024	0.123	0.033	0.142	0.009	0.075	0.018	0.105
V33165.00-V33166.00	2592	355.9	8.0	0.007	0.653	0.029	0.143	0.040	0.169	0.010	0.085	0.020	0.119
V33166.00-V33168.00	2591	299.9	8.0	0.010	0.781	0.035	0.145	0.046	0.165	0.011	0.104	0.023	0.127
V33167.00-V33168.00	2590	215.0	8.0	0.052	1.781	0.043	0.127	0.045	0.133	0.045	0.116	0.046	0.123
V33168.00-V33172.00	2589	214.0	8.0	0.051	1.764	0.081	0.202	0.095	0.244	0.057	0.171	0.071	0.219
V33169.00-V33171.00	2588	322.0	15.0	0.057	9.968	0.118	0.093	0.232	0.129	0.084	0.079	0.198	0.120
V33169.A0-V33169.00	8062	78.0	8.0	0.034	1.440	0.000	0.077	0.001	0.110	0.000	0.061	0.001	0.101
V33170.00-V33171.00	2587	63.0	8.0	0.069	2.052	0.000	0.103	0.001	0.150	0.000	0.087	0.001	0.140
V33171.00-V33172.00	2586	243.0	15.0	0.012	4.573	0.118	0.124	0.234	0.164	0.083	0.105	0.200	0.151
V33172.00-V33173.00	2585	175.5	15.0	0.014	4.940	0.199	0.355	0.331	0.459	0.140	0.313	0.272	0.422
V33173.00-V33174.00	3003	472.4	18.0	0.002	3.036	1.212	0.461	1.863	0.593	0.990	0.412	1.642	0.549
V33174.00-V33175.00	2584	471.1	18.0	0.003	3.718	1.212	0.405	1.865	0.515	0.990	0.364	1.643	0.479
EE	281	195.6	14.0	0.010	3.473	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EE	283	341.3	14.0	0.057	8.293	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EE	285	51.3	14.0	0.029	5.915	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EE	8017	1400.8	14.0	-0.042	Adverse	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EE	8018	1755.2	14.0	0.012	3.805	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EE	8019	1972.7	14.0	0.012	3.805	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EE	8128	608.9	14.0	0.034	6.405	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V34001.00-V34002.00	2583	348.5	8.0	0.010	0.781	0.006	0.063	0.009	0.075	0.003	0.044	0.006	0.061
V34002.00-V34003.00	2582	263.0	8.0	0.050	1.746	0.009	0.056	0.015	0.071	0.005	0.041	0.011	0.060
V34003.00-V34015.00	2581	316.1	8.0	0.066	2.006	0.015	0.133	0.024	0.185	0.007	0.101	0.016	0.163
V34004.00-V34006.00	2580	350.0	8.0	0.006	0.605	0.002	0.060	0.005	0.084	0.001	0.034	0.004	0.069
V34005.00-V34006.00	2579	140.0	8.0	0.045	1.657	0.004	0.055	0.007	0.074	0.001	0.032	0.004	0.059

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V34006.00-V34009.00	2578	286.0	8.0	0.013	0.890	0.010	0.082	0.019	0.108	0.003	0.046	0.012	0.086
V34007.00-V34008.00	2577	299.2	8.0	0.020	1.104	0.005	0.057	0.008	0.072	0.001	0.033	0.004	0.055
V34008.00-V34009.00	2576	275.1	8.0	0.020	1.104	0.010	0.078	0.016	0.100	0.003	0.044	0.009	0.077
V34009.00-V34010.00	2575	172.0	8.0	0.040	1.562	0.024	0.086	0.042	0.113	0.007	0.049	0.025	0.088
V34010.00-V34015.00	2574	230.2	8.0	0.062	1.945	0.028	0.144	0.049	0.201	0.008	0.103	0.029	0.174
V34011.00-V34012.00	3007	65.0	8.0	0.017	1.018	0.001	0.036	0.004	0.059	0.011	0.076	0.014	0.089
V34012.00-V34013.00	2573	292.6	8.0	0.010	0.781	0.003	0.052	0.009	0.084	0.012	0.090	0.018	0.111
V34013.00-V34014.00	2572	219.9	8.0	0.010	0.781	0.005	0.068	0.014	0.108	0.014	0.104	0.023	0.132
V34014.00-V34015.D0	8325	114.0	8.0	0.006	0.605	0.007	0.078	0.019	0.138	0.016	0.112	0.027	0.158
V34015.00-V34018.00	2570	275.2	8.0	0.006	0.605	0.053	0.214	0.110	0.307	0.032	0.166	0.089	0.274
V34015.A0-V34015.C0	8003	4.8	4.0	0.002	0.055	0.000	0.026	0.003	0.123	0.000	0.015	0.003	0.120
V34015.B0-V34015.C0	8002	5.0	4.0	0.002	0.055	0.001	0.053	0.004	0.130	0.000	0.030	0.003	0.123
V34015.C0-V34015.D0	8001	134.3	6.0	0.014	0.429	0.001	0.070	0.010	0.154	0.000	0.082	0.009	0.163
V34015.D0-V34015.00	2571	209.5	8.0	0.007	0.653	0.008	0.142	0.032	0.223	0.016	0.134	0.040	0.216
V34016.00-V34017.00	2569	171.0	8.0	0.040	1.562	0.002	0.037	0.005	0.052	0.001	0.020	0.004	0.041
V34017.00-V34018.00	2568	350.0	8.0	0.053	1.798	0.007	0.135	0.013	0.191	0.002	0.098	0.008	0.167
V34018.00-V34020.00	2567	251.9	8.0	0.006	0.605	0.064	0.223	0.130	0.318	0.035	0.165	0.101	0.279
V34019.00-V34020.00	2566	227.0	8.0	0.054	1.815	0.008	0.135	0.015	0.190	0.002	0.092	0.009	0.161
V34020.00-V34028.00	2565	251.9	8.0	0.008	0.699	0.077	0.249	0.152	0.350	0.039	0.172	0.114	0.297
V34021.00-V34028.00	2564	260.0	8.0	0.057	1.865	0.009	0.162	0.015	0.224	0.002	0.106	0.009	0.185
V34022.00-V34023.00	3298	98.0	8.0	0.011	0.819	0.002	0.036	0.005	0.055	0.000	0.017	0.003	0.046
V34023.00-V34019.00	2563	284.6	8.0	0.045	1.657	0.003	0.040	0.007	0.056	0.001	0.022	0.005	0.046
V34023.00-V34024.00	2562	252.1	8.0	0.010	0.781	0.001	0.033	0.003	0.047	0.000	0.018	0.002	0.039
V34024.00-V34021.00	2561	256.0	8.0	0.050	1.746	0.004	0.042	0.007	0.055	0.001	0.023	0.004	0.043
V34024.00-V34025.00	2560	254.1	8.0	0.010	0.781	0.002	0.040	0.003	0.053	0.000	0.023	0.002	0.041
V34025.00-V34026.00	2559	225.0	8.0	0.040	1.562	0.006	0.051	0.011	0.066	0.002	0.029	0.006	0.052
V34026.00-V34027.00	2558	229.4	8.0	0.040	1.562	0.010	0.065	0.017	0.084	0.003	0.036	0.010	0.066
V34027.00-V34028.00	2557	242.0	8.0	0.028	1.307	0.014	0.174	0.024	0.240	0.004	0.112	0.014	0.198
V34028.00-V34029.00	2556	262.7	8.0	0.008	0.699	0.103	0.257	0.198	0.361	0.046	0.172	0.141	0.302
V34029.00-V34035.00	2555	173.0	8.0	0.011	0.819	0.103	0.244	0.201	0.344	0.046	0.164	0.144	0.289
V34030.00-V34031.00	2554	254.5	8.0	0.010	0.781	0.004	0.062	0.007	0.080	0.002	0.043	0.005	0.067
V34031.00-V34032.00	2553	254.5	8.0	0.010	0.781	0.009	0.084	0.015	0.109	0.004	0.056	0.010	0.090
V34032.00-V34033.00	2552	257.0	8.0	0.010	0.781	0.012	0.087	0.021	0.113	0.005	0.056	0.014	0.092
V34033.00-V34034.00	2551	265.0	8.0	0.005	0.552	0.007	0.081	0.012	0.104	0.002	0.053	0.007	0.084
V34033.00-V34052.00	2550	248.3	8.0	0.010	0.781	0.010	0.090	0.017	0.115	0.004	0.052	0.011	0.088
V34034.00-V34035.00	2549	316.0	8.0	0.012	0.856	0.012	0.166	0.020	0.229	0.005	0.112	0.013	0.192
V34035.00-V34036.00	2548	327.9	8.0	0.012	0.856	0.115	0.260	0.224	0.369	0.052	0.177	0.161	0.313
V34036.00-V34037.00	2546	343.9	8.0	0.012	0.856	0.115	0.249	0.227	0.353	0.055	0.173	0.167	0.301
V34037.00-V34060.00	2545	109.5	8.0	0.019	1.077	0.121	0.265	0.236	0.387	0.059	0.230	0.174	0.363
V34038.00-V34039.00	2544	210.0	8.0	0.020	1.104	0.000	0.007	0.003	0.047	0.000	0.023	0.003	0.054
V34039.00-V34040.00	2543	294.0	8.0	0.017	1.018	0.000	0.020	0.006	0.069	0.004	0.061	0.010	0.089
V34040.00-V34042.00	2542	236.0	8.0	0.008	0.699	0.001	0.026	0.010	0.086	0.008	0.093	0.017	0.123
V34041.00-V34042.00	2541	49.0	8.0	0.010	0.781	0.000	0.012	0.003	0.064	0.013	0.094	0.016	0.112
V34042.00-V34043.00	2540	350.0	8.0	0.023	1.184	0.001	0.020	0.016	0.081	0.022	0.094	0.037	0.120
V34043.00-V34044.00	2539	303.0	8.0	0.054	1.815	0.001	0.017	0.019	0.074	0.022	0.082	0.040	0.108
V34044.00-V34047.00	2538	320.0	8.0	0.054	1.815	0.001	0.017	0.022	0.088	0.029	0.108	0.049	0.137
V34045.00-V34047.00	2537	49.0	8.0	0.006	0.605	0.000	0.008	0.003	0.072	0.028	0.133	0.031	0.150
V34046.00-V34047.00	2536	160.1	8.0	0.010	0.781	0.000	0.008	0.009	0.087	0.008	0.101	0.017	0.132
V34046.A0-V34046.B0	7297	192.6	8.0	0.074	2.125	0.000	0.000	0.003	0.033	0.008	0.045	0.011	0.055
V34046.B0-V34046.00	7298	284.5	8.0	0.077	2.167	0.000	0.000	0.006	0.057	0.008	0.059	0.014	0.081
V34047.00-V34048.00	2535	316.0	8.0	0.054	1.815	0.001	0.017	0.037	0.100	0.065	0.134	0.100	0.165
V34048.00-V34050.00	2534	210.0	8.0	0.053	1.798	0.001	0.018	0.040	0.112	0.074	0.148	0.113	0.183
V34049.00-V34050.00	2533	49.0	8.0	0.008	0.699	0.000	0.010	0.003	0.081	0.000	0.079	0.003	0.119
V34050.00-V34051.00	2532	211.0	8.0	0.035	1.461	0.001	0.023	0.046	0.142	0.079	0.183	0.123	0.230
V34051.00-V34060.00	2531	137.5	8.0	0.011	0.819	0.001	0.164	0.049	0.309	0.079	0.254	0.126	0.358

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V34052.00-V34053.00	2529	248.3	8.0	0.010	0.781	0.015	0.096	0.025	0.123	0.005	0.065	0.015	0.100
V34053.00-V34058.00	2528	248.3	8.0	0.020	1.104	0.019	0.120	0.032	0.155	0.012	0.090	0.025	0.133
V34054.00-V34055.00	2527	242.0	8.0	0.049	1.729	0.002	0.038	0.005	0.052	0.001	0.024	0.004	0.043
V34055.00-V34056.00	2526	296.0	8.0	0.050	1.746	0.008	0.054	0.014	0.070	0.003	0.033	0.009	0.056
V34056.00-V34057.00	2525	296.0	8.0	0.050	1.746	0.012	0.066	0.021	0.085	0.004	0.040	0.013	0.068
V34057.00-V34058.00	2088	276.0	8.0	0.041	1.581	0.017	0.110	0.029	0.143	0.006	0.074	0.018	0.118
V34058.00-V34059.00	2087	205.5	8.0	0.011	0.819	0.039	0.149	0.067	0.196	0.019	0.106	0.047	0.166
V34059.00-V34060.00	2086	252.0	8.0	0.011	0.819	0.039	0.227	0.070	0.327	0.019	0.203	0.050	0.310
V34060.00-V34061.00	2085	208.0	10.0	0.010	1.416	0.161	0.226	0.358	0.339	0.157	0.223	0.354	0.337
V34061.00-V34063.00	2084	197.0	10.0	0.014	1.675	0.161	0.230	0.361	0.352	0.157	0.246	0.357	0.364
V34062.A0-V34062.B0	8023	34.0	8.0	0.011	0.819	0.005	0.050	0.008	0.063	0.018	0.090	0.021	0.098
V34062.B0-V34062.C0	8024	133.8	8.0	0.028	1.307	0.006	0.047	0.012	0.066	0.023	0.091	0.029	0.102
V34062.C0-V34062.D0	8022	264.1	8.0	0.079	2.195	0.006	0.049	0.014	0.080	0.029	0.107	0.038	0.123
V34062.D0-V34063.00	1750	104.4	8.0	0.011	0.819	0.006	0.186	0.018	0.294	0.031	0.245	0.043	0.337
V34063.00-V34065.00	2083	346.9	10.0	0.008	1.267	0.167	0.248	0.381	0.381	0.204	0.274	0.418	0.400
V34064.00-V34065.00	1749	74.0	8.0	0.035	1.461	0.012	0.187	0.015	0.269	0.000	0.165	0.003	0.257
V34065.00-V34066.00	2082	270.0	10.0	0.011	1.485	0.179	0.236	0.400	0.356	0.204	0.251	0.424	0.367
V34066.00-V34073.00	2081	161.0	10.0	0.013	1.615	0.181	0.251	0.404	0.385	0.204	0.274	0.427	0.402
V34067.00-V34068.00	2080	242.0	8.0	0.044	1.638	0.000	0.016	0.003	0.042	0.000	0.027	0.003	0.049
V34068.00-V34069.00	2079	232.0	8.0	0.048	1.711	0.003	0.035	0.009	0.057	0.009	0.060	0.015	0.075
V34069.00-V34070.00	2078	240.0	8.0	0.048	1.711	0.005	0.038	0.014	0.066	0.015	0.074	0.024	0.091
V34070.00-V34071.00	2077	227.0	8.0	0.048	1.711	0.005	0.041	0.017	0.078	0.023	0.091	0.034	0.111
V34071.00-V34073.00	2076	146.0	8.0	0.026	1.259	0.005	0.195	0.020	0.312	0.027	0.244	0.042	0.346
V34073.00-V34079.00	2075	142.0	10.0	0.006	1.097	0.187	0.284	0.428	0.441	0.231	0.312	0.473	0.462
V34074.00-V34077.00	1807	163.0	8.0	0.048	1.711	0.002	0.041	0.005	0.058	0.001	0.026	0.004	0.049
V34075.00-V34076.00	1806	222.0	8.0	0.035	1.461	0.002	0.042	0.005	0.058	0.001	0.026	0.004	0.048
V34076.00-V34077.00	1805	236.0	8.0	0.026	1.259	0.007	0.054	0.013	0.073	0.002	0.033	0.008	0.060
V34077.00-V34078.00	1804	265.0	8.0	0.073	2.110	0.012	0.075	0.024	0.105	0.004	0.046	0.016	0.087
V34078.00-V34079.00	1803	234.6	8.0	0.009	0.741	0.014	0.230	0.029	0.350	0.005	0.226	0.020	0.350
V34079.00-V34081.00	1802	164.0	10.0	0.006	1.097	0.203	0.313	0.462	0.483	0.237	0.338	0.496	0.501
V34080.00-V34081.00	1801	121.0	8.0	0.023	1.184	0.002	0.226	0.005	0.345	0.001	0.239	0.004	0.355
V34081.00-V34082.00	1800	211.0	10.0	0.009	1.343	0.208	0.259	0.473	0.394	0.239	0.277	0.504	0.407
V34082.00-V34086.00	1799	240.0	10.0	0.043	2.936	0.211	0.186	0.479	0.280	0.240	0.196	0.508	0.287
V34083.00-V34084.00	1798	134.0	8.0	0.010	0.781	0.001	0.029	0.004	0.050	0.000	0.019	0.003	0.047
V34084.00-V34085.00	1797	251.0	8.0	0.102	2.494	0.004	0.037	0.010	0.054	0.002	0.023	0.007	0.045
V34085.00-V34086.00	1796	259.9	8.0	0.091	2.356	0.009	0.141	0.018	0.209	0.003	0.137	0.012	0.208
V34086.00-V34088.00	1795	246.0	10.0	0.040	2.832	0.224	0.226	0.504	0.343	0.244	0.238	0.524	0.351
V34087.00-V34088.00	1794	48.0	8.0	0.014	0.924	0.002	0.180	0.005	0.274	0.000	0.181	0.003	0.276
V34088.00-V34093.00	1793	216.0	10.0	0.022	2.100	0.227	0.221	0.513	0.334	0.245	0.230	0.531	0.340
V34089.00-V34090.00	1792	168.0	8.0	0.082	2.236	0.002	0.028	0.005	0.041	0.001	0.017	0.004	0.035
V34090.00-V34091.00	1791	246.0	8.0	0.116	2.660	0.005	0.039	0.011	0.054	0.002	0.023	0.008	0.044
V34091.00-V34092.00	1790	276.0	8.0	0.111	2.602	0.010	0.051	0.019	0.068	0.003	0.029	0.012	0.054
V34092.00-V34093.00	1789	271.0	8.0	0.092	2.369	0.015	0.141	0.027	0.205	0.004	0.130	0.016	0.198
V34093.00-V34104.00	1788	170.0	10.0	0.060	3.469	0.245	0.302	0.545	0.449	0.250	0.327	0.551	0.468
V34094.00-V34095.00	1787	275.0	8.0	0.070	2.066	0.005	0.043	0.008	0.053	0.005	0.069	0.008	0.076
V34095.00-V34096.00	1786	300.0	8.0	0.070	2.066	0.009	0.066	0.015	0.078	0.044	0.113	0.050	0.120
V34096.00-V34097.00	2524	190.0	8.0	0.052	1.781	0.025	0.083	0.034	0.098	0.059	0.125	0.068	0.135
V34097.00-V34098.00	2523	187.0	8.0	0.053	1.798	0.025	0.083	0.037	0.101	0.059	0.124	0.071	0.137
V34098.00-V34099.00	2522	183.0	8.0	0.054	1.815	0.025	0.082	0.040	0.104	0.059	0.124	0.074	0.139
V34099.00-V34100.00	2521	190.0	8.0	0.054	1.815	0.025	0.093	0.043	0.117	0.059	0.146	0.077	0.163
V34100.00-V34101.00	2520	275.0	8.0	0.041	1.581	0.035	0.119	0.056	0.150	0.098	0.194	0.119	0.214
V34101.00-V34102.00	2519	137.0	8.0	0.017	1.018	0.035	0.128	0.059	0.164	0.098	0.210	0.122	0.234
V34102.00-V34103.00	2518	173.4	8.0	0.041	1.581	0.035	0.103	0.062	0.135	0.098	0.168	0.125	0.189
V34103.00-V34104.00	2517	183.2	8.0	0.102	2.494	0.036	0.308	0.066	0.450	0.099	0.363	0.128	0.493
V34104.00-V34105.A0	20	89.0	10.0	0.007	1.185	0.282	0.311	0.615	0.462	0.349	0.346	0.682	0.488

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V34105.00-V34106.00	2516	346.0	12.0	0.005	1.628	0.282	0.281	0.621	0.427	0.359	0.320	0.699	0.458
V34105.A0-V34105.00	21	346.0	10.0	0.054	3.291	0.282	0.266	0.618	0.400	0.349	0.299	0.685	0.426
V34106.00-V34107.00	2515	425.2	12.0	0.005	1.628	0.282	0.283	0.624	0.433	0.369	0.326	0.711	0.466
V34107.00-V34108.00	2514	316.0	12.0	0.005	1.628	0.282	0.383	0.627	0.578	0.369	0.441	0.714	0.622
V34108.00-V34109.00	2513	341.0	12.0	0.004	1.456	0.282	0.285	0.631	0.426	0.378	0.329	0.726	0.458
V34109.00-V34110.00	3299	2.3	12.0	0.047	4.992	0.282	0.544	0.633	0.565	0.378	0.551	0.729	0.570
V34110.00-V34111.00	822	71.1	15.0	0.003	2.287	0.526	0.239	1.318	0.385	1.046	0.340	1.837	0.463
V35225.00-V34110.00	3629	230.5	15.0	0.027	6.860	0.526	0.213	1.315	0.341	1.046	0.302	1.834	0.408
V35001.00-V35002.00	3434	2.0	8.0	0.001	0.247	0.000	0.000	0.003	0.057	0.007	0.079	0.010	0.094
V35002.00-V35003.00	2512	200.0	8.0	0.030	1.353	0.000	0.000	0.006	0.041	0.007	0.043	0.013	0.058
V35003.00-V35005.00	2511	124.0	8.0	0.095	2.407	0.000	0.015	0.009	0.049	0.007	0.041	0.016	0.060
V35004.00-V35005.00	1748	2.0	6.0	0.000	0.000	0.005	0.097	0.008	0.125	0.006	0.111	0.009	0.135
V35005.00-V35006.00	2510	141.0	10.0	0.092	4.295	0.005	0.031	0.020	0.060	0.013	0.048	0.028	0.070
V35006.00-V35007.00	2509	220.0	10.0	0.020	2.003	0.005	0.049	0.023	0.088	0.013	0.069	0.031	0.101
V35007.00-V35008.00	2508	345.0	10.0	0.010	1.416	0.010	0.069	0.031	0.118	0.019	0.104	0.040	0.141
V35008.00-V35009.00	2507	291.0	10.0	0.010	1.416	0.011	0.062	0.035	0.107	0.029	0.098	0.053	0.131
V35009.00-V35021.00	2506	302.0	10.0	0.030	2.453	0.012	0.052	0.039	0.088	0.029	0.071	0.056	0.100
V35010.00-V35011.00	2505	70.0	8.0	0.007	0.653	0.000	0.000	0.003	0.064	0.002	0.046	0.005	0.078
V35011.00-V35012.00	2504	125.0	8.0	0.008	0.699	0.000	0.000	0.006	0.065	0.002	0.038	0.008	0.074
V35012.00-V35013.00	2503	260.0	8.0	0.066	2.006	0.000	0.029	0.009	0.065	0.002	0.028	0.011	0.060
V35013.00-V35014.00	2502	208.0	8.0	0.045	1.657	0.011	0.062	0.023	0.091	0.003	0.034	0.015	0.075
V35014.00-V35018.00	2501	40.1	8.0	0.010	0.781	0.012	0.079	0.026	0.117	0.003	0.055	0.018	0.103
V35015.00-V35016.00	2500	83.0	8.0	0.008	0.699	0.009	0.079	0.012	0.095	0.005	0.063	0.008	0.082
V35016.00-V35018.00	2499	159.0	8.0	0.009	0.741	0.009	0.084	0.015	0.116	0.006	0.069	0.012	0.106
V35017.00-V35018.00	2498	216.0	8.0	0.009	0.741	0.000	0.055	0.003	0.091	0.003	0.060	0.006	0.094
V35018.00-V35019.00	2497	417.7	8.0	0.026	1.259	0.021	0.145	0.048	0.223	0.014	0.147	0.041	0.224
V35019.00-V35020.00	2496	208.0	8.0	0.008	0.699	0.027	0.131	0.068	0.205	0.033	0.144	0.074	0.214
V35019.A0-V35019.B0	8116	120.7	8.0	0.028	1.307	0.000	0.019	0.006	0.054	0.001	0.042	0.007	0.066
V35019.B0-V35019.C0	8115	274.4	8.0	0.012	0.856	0.000	0.006	0.003	0.046	0.000	0.012	0.003	0.048
V35019.C0-V35019.D0	8114	219.4	8.0	0.047	1.693	0.002	0.032	0.011	0.075	0.012	0.073	0.021	0.099
V35019.D0-V35019.00	8113	218.3	8.0	0.011	0.819	0.002	0.119	0.014	0.202	0.012	0.153	0.024	0.222
V35020.00-V35021.00	2191	96.0	8.0	0.121	2.717	0.027	0.067	0.072	0.108	0.034	0.080	0.079	0.117
V35021.00-V35022.00	2190	218.4	10.0	0.176	5.941	0.039	0.070	0.113	0.117	0.063	0.088	0.138	0.128
V35022.00-V35023.00	2189	296.0	10.0	0.040	2.832	0.039	0.089	0.116	0.152	0.063	0.113	0.141	0.166
V35023.00-V35024.00	2188	296.0	10.0	0.020	2.003	0.039	0.102	0.119	0.176	0.063	0.129	0.144	0.193
V35024.00-V35025.00	2187	346.0	10.0	0.017	1.846	0.039	0.100	0.122	0.174	0.063	0.126	0.147	0.190
V35025.00-V35040.00	2186	346.0	10.0	0.025	2.239	0.039	0.127	0.125	0.221	0.063	0.184	0.150	0.261
V35027.00-V35028.00	2185	276.0	8.0	0.084	2.264	0.002	0.048	0.005	0.061	0.010	0.066	0.013	0.076
V35028.00-V35031.00	2184	229.0	8.0	0.022	1.158	0.012	0.093	0.018	0.126	0.016	0.116	0.022	0.143
V35029.00-V35030.00	2183	47.7	8.0	0.005	0.552	0.000	0.009	0.003	0.052	0.003	0.057	0.006	0.076
V35030.00-V35031.00	425	298.0	8.0	0.016	0.988	0.000	0.061	0.006	0.111	0.008	0.106	0.014	0.136
V35031.00-V35032.00	424	184.0	8.0	0.010	0.781	0.012	0.086	0.027	0.126	0.024	0.120	0.039	0.151
V35032.00-V35033.00	423	359.0	8.0	0.062	1.945	0.013	0.068	0.031	0.098	0.035	0.106	0.052	0.127
V35033.00-V35037.00	422	360.0	8.0	0.045	1.657	0.020	0.113	0.041	0.167	0.050	0.193	0.071	0.229
V35034.00-V35035.00	421	79.0	8.0	0.071	2.081	0.005	0.036	0.008	0.048	0.016	0.062	0.019	0.069
V35035.00-V35036.00	420	278.0	8.0	0.074	2.125	0.005	0.040	0.011	0.061	0.016	0.073	0.022	0.085
V35036.00-V35037.D0	8108	101.6	8.0	0.032	1.397	0.006	0.050	0.015	0.085	0.022	0.105	0.030	0.125
V35037.00-V35038.00	419	387.0	8.0	0.034	1.440	0.031	0.101	0.076	0.155	0.106	0.183	0.150	0.218
V35037.A0-V35037.B0	8111	209.9	8.0	0.014	0.924	0.003	0.041	0.006	0.057	0.026	0.114	0.029	0.120
V35037.B0-V35037.C0	8112	63.0	8.0	0.057	1.865	0.003	0.025	0.009	0.045	0.026	0.068	0.032	0.077
V35037.C0-V35037.D0	8110	32.0	8.0	0.019	1.077	0.003	0.041	0.012	0.076	0.026	0.100	0.035	0.117
V35037.D0-V35037.00	8109	224.8	8.0	0.032	1.397	0.009	0.102	0.029	0.163	0.047	0.197	0.068	0.234
V35038.00-V35039.00	418	92.0	8.0	0.155	3.075	0.031	0.082	0.079	0.129	0.106	0.147	0.153	0.178
V35039.00-V35040.00	417	16.0	8.0	0.010	0.781	0.031	0.156	0.082	0.262	0.106	0.255	0.156	0.336
V35040.00-V35061.00	416	13.6	10.0	0.001	0.448	0.070	0.182	0.210	0.296	0.169	0.266	0.309	0.359

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V35041.00-V35042.00	415	115.0	8.0	0.009	0.741	0.000	0.003	0.003	0.048	0.000	0.016	0.003	0.052
V35042.00-V35043.00	414	278.0	8.0	0.026	1.259	0.000	0.025	0.006	0.061	0.002	0.051	0.008	0.074
V35043.00-V35044.00	413	276.0	8.0	0.026	1.259	0.004	0.054	0.013	0.096	0.012	0.102	0.021	0.129
V35044.00-V35045.00	411	330.0	8.0	0.005	0.552	0.004	0.128	0.016	0.172	0.020	0.141	0.032	0.177
V35045.00-V35046.00	3431	203.0	8.0	0.004	0.494	0.042	0.204	0.056	0.237	0.024	0.166	0.039	0.204
V35046.00-V35047.00	3430	179.0	8.0	0.004	0.494	0.054	0.277	0.072	0.321	0.039	0.237	0.057	0.288
V35047.00-V35048.00	410	179.0	8.0	0.004	0.494	0.054	0.217	0.075	0.254	0.039	0.186	0.060	0.228
V35048.00-V35059.00	409	32.0	8.0	0.028	1.307	0.054	0.097	0.078	0.121	0.039	0.101	0.063	0.124
V35049.00-V35050.00	408	60.0	8.0	0.002	0.349	0.000	0.000	0.003	0.053	0.008	0.068	0.011	0.085
V35050.00-V35054.00	407	207.0	8.0	0.004	0.494	0.000	0.050	0.006	0.106	0.008	0.121	0.014	0.147
V35051.00-V35052.00	406	5.0	8.0	0.000	0.000	0.016	0.103	0.019	0.110	0.019	0.122	0.022	0.129
V35052.00-V35053.00	933	230.0	8.0	0.035	1.461	0.021	0.083	0.027	0.094	0.037	0.109	0.043	0.118
V35053.00-V35054.00	932	232.0	8.0	0.048	1.711	0.021	0.088	0.030	0.113	0.037	0.127	0.046	0.145
V35054.00-V35055.00	1586	348.0	8.0	0.016	0.988	0.021	0.100	0.038	0.137	0.050	0.153	0.068	0.180
V35055.00-V35056.00	1585	300.0	8.0	0.016	0.988	0.021	0.115	0.041	0.163	0.050	0.181	0.071	0.215
V35056.00-V35057.00	1584	310.0	8.0	0.018	1.048	0.021	0.097	0.044	0.140	0.060	0.161	0.083	0.190
V35057.00-V35058.00	1583	121.0	8.0	0.083	2.250	0.021	0.118	0.048	0.186	0.073	0.234	0.099	0.273
V35058.00-V35059.00	1582	89.0	8.0	0.005	0.552	0.021	0.135	0.051	0.202	0.073	0.236	0.102	0.278
V35059.00-V35060.00	3432	276.0	8.0	0.235	3.786	0.075	0.109	0.132	0.143	0.112	0.131	0.168	0.161
V35060.00-V35061.00	3433	185.0	8.0	0.101	2.482	0.075	0.185	0.135	0.274	0.112	0.247	0.171	0.320
V35061.00-V35063.00	1581	529.0	10.0	0.016	1.791	0.145	0.192	0.348	0.297	0.281	0.266	0.483	0.353
V35062.00-V35063.00	2336	45.0	8.0	0.006	0.605	0.000	0.114	0.003	0.199	0.000	0.158	0.003	0.232
V35063.00-V35064.00	1580	306.0	10.0	0.021	2.052	0.145	0.179	0.354	0.280	0.281	0.249	0.489	0.331
V35064.00-V35065.00	1891	346.0	10.0	0.023	2.148	0.145	0.193	0.357	0.304	0.281	0.268	0.492	0.360
V35065.00-V35066.00	1890	228.0	10.0	0.011	1.485	0.145	0.211	0.360	0.335	0.281	0.294	0.495	0.397
V35066.00-V35067.00	1889	346.0	10.0	0.011	1.485	0.145	0.214	0.362	0.342	0.281	0.299	0.498	0.405
V35067.00-V35068.00	1888	326.0	10.0	0.010	1.416	0.145	0.215	0.365	0.345	0.281	0.301	0.501	0.409
V35068.00-V35069.00	1887	345.0	10.0	0.010	1.416	0.145	0.215	0.368	0.349	0.281	0.307	0.504	0.421
V35069.00-V35100.00	1886	273.0	10.0	0.010	1.416	0.145	0.221	0.371	0.347	0.281	0.300	0.507	0.410
V35070.00-V35071.00	1885	108.0	8.0	0.008	0.699	0.018	0.126	0.021	0.136	0.005	0.084	0.008	0.098
V35071.00-V35073.00	1884	258.0	8.0	0.006	0.605	0.019	0.123	0.025	0.140	0.011	0.092	0.017	0.114
V35072.00-V35073.00	1883	8.0	8.0	0.001	0.247	0.000	0.051	0.003	0.082	0.000	0.037	0.003	0.073
V35073.00-V35074.00	1882	221.0	8.0	0.015	0.957	0.019	0.099	0.031	0.125	0.011	0.076	0.023	0.109
V35074.00-V35075.00	1881	225.0	8.0	0.018	1.048	0.020	0.099	0.035	0.126	0.013	0.081	0.028	0.113
V35075.00-V35076.00	1880	295.0	8.0	0.031	1.375	0.031	0.111	0.048	0.136	0.020	0.095	0.038	0.124
V35076.00-V35080.00	1879	274.0	8.0	0.033	1.419	0.042	0.141	0.063	0.183	0.034	0.148	0.055	0.187
V35077.00-V35078.00	1578	8.0	8.0	0.002	0.349	0.008	0.053	0.011	0.066	0.010	0.072	0.013	0.081
V35078.00-V35079.00	1577	265.0	8.0	0.033	1.419	0.008	0.054	0.014	0.074	0.021	0.086	0.027	0.099
V35079.00-V35080.00	1576	300.0	8.0	0.029	1.330	0.008	0.109	0.017	0.150	0.021	0.139	0.030	0.171
V35080.00-V35081.00	1575	317.0	8.0	0.015	0.957	0.050	0.156	0.083	0.199	0.060	0.169	0.092	0.210
V35081.00-V35097.00	1574	309.0	8.0	0.039	1.542	0.068	0.144	0.104	0.185	0.073	0.155	0.109	0.196
V35082.00-V35083.00	3435	106.0	8.0	0.041	1.581	0.001	0.022	0.004	0.040	0.002	0.029	0.005	0.044
V35083.00-V35097.00	1573	346.0	8.0	0.070	2.066	0.001	0.080	0.007	0.118	0.002	0.094	0.008	0.128
V35084.00-V35085.00	1572	173.0	6.0	0.007	0.303	0.002	0.064	0.005	0.103	0.004	0.081	0.007	0.114
V35085.00-V35086.00	1571	92.0	6.0	0.007	0.303	0.003	0.064	0.009	0.120	0.005	0.087	0.011	0.133
V35086.00-V35087.00	1570	65.0	6.0	0.009	0.344	0.003	0.080	0.012	0.168	0.006	0.105	0.015	0.179
V35087.00-V35088.00	1569	371.0	8.0	0.004	0.494	0.003	0.054	0.015	0.118	0.008	0.088	0.020	0.136
V35088.00-V35089.00	1568	321.0	8.0	0.035	1.461	0.003	0.044	0.018	0.084	0.022	0.089	0.037	0.113
V35089.00-V35091.00	1567	350.0	8.0	0.040	1.562	0.008	0.071	0.026	0.129	0.028	0.128	0.046	0.166
V35090.00-V35091.00	1566	97.0	8.0	0.010	0.781	0.000	0.045	0.003	0.106	0.000	0.081	0.003	0.129
V35091.00-V35092.00	2150	211.0	8.0	0.010	0.781	0.008	0.072	0.032	0.137	0.028	0.129	0.052	0.173
V35092.00-V35096.00	2149	243.0	8.0	0.035	1.461	0.008	0.067	0.035	0.124	0.028	0.110	0.055	0.151
V35093.00-V35094.00	2148	260.0	6.0	0.013	0.413	0.008	0.106	0.011	0.128	0.009	0.111	0.012	0.132
V35094.00-V35095.00	2147	175.0	6.0	0.016	0.459	0.008	0.090	0.014	0.118	0.009	0.095	0.015	0.122
V35095.00-V35096.00	2146	73.4	6.0	0.042	0.743	0.008	0.085	0.017	0.141	0.009	0.116	0.018	0.161

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V35096.00-V35097.00	2145	96.0	8.0	0.025	1.235	0.016	0.109	0.055	0.167	0.041	0.142	0.080	0.190
V35097.00-V35098.00	2144	268.0	8.0	0.070	2.066	0.086	0.162	0.170	0.217	0.117	0.178	0.201	0.230
V35098.00-V35099.00	2143	266.0	8.0	0.071	2.081	0.116	0.160	0.202	0.211	0.129	0.169	0.216	0.217
V35099.00-V35100.00	2142	253.0	8.0	0.138	2.901	0.116	0.210	0.205	0.303	0.129	0.250	0.219	0.334
V35100.00-V35107.00	2141	346.0	10.0	0.027	2.327	0.261	0.231	0.580	0.353	0.410	0.299	0.729	0.405
V35101.00-V35102.00	2140	296.0	8.0	0.053	1.798	0.000	0.025	0.003	0.063	0.011	0.089	0.014	0.104
V35102.00-V35103.00	2139	235.0	8.0	0.071	2.081	0.010	0.063	0.040	0.121	0.065	0.152	0.095	0.183
V35102.A0-V35102.B0	8123	224.7	8.0	0.026	1.259	0.002	0.037	0.005	0.055	0.014	0.081	0.017	0.090
V35102.B0-V35102.C0	8124	229.0	8.0	0.026	1.259	0.004	0.048	0.010	0.086	0.020	0.126	0.026	0.144
V35102.C0-V35102.D0	8125	275.6	8.0	0.029	1.330	0.005	0.044	0.023	0.091	0.051	0.134	0.069	0.155
V35102.CA-V35102.CB	8121	170.4	8.0	0.065	1.991	0.000	0.006	0.003	0.035	0.004	0.044	0.007	0.055
V35102.CB-V35102.CC	8122	210.0	8.0	0.065	1.991	0.001	0.008	0.006	0.046	0.013	0.073	0.019	0.085
V35102.CC-V35102.C0	8120	240.0	8.0	0.050	1.746	0.000	0.031	0.009	0.080	0.029	0.127	0.037	0.145
V35102.D0-V35102.E0	8126	225.9	8.0	0.094	2.394	0.005	0.040	0.026	0.097	0.054	0.138	0.075	0.163
V35102.E0-V35102.00	8127	199.3	8.0	0.022	1.158	0.005	0.048	0.029	0.108	0.054	0.147	0.078	0.175
V35103.00-V35104.00	2138	262.0	8.0	0.045	1.657	0.010	0.056	0.043	0.111	0.065	0.135	0.098	0.164
V35104.00-V35105.00	2137	83.0	8.0	0.101	2.482	0.010	0.047	0.046	0.097	0.065	0.113	0.101	0.140
V35105.00-V35106.00	2136	140.0	8.0	0.042	1.601	0.010	0.069	0.049	0.147	0.065	0.166	0.104	0.211
V35106.00-V35107.00	2135	130.0	8.0	0.010	0.781	0.010	0.187	0.052	0.315	0.065	0.293	0.107	0.389
V35107.00-V35108.00	2132	158.8	10.0	0.025	2.239	0.271	0.265	0.634	0.416	0.475	0.355	0.838	0.488
V35108.00-V35109.00	2131	346.0	10.0	0.010	1.416	0.271	0.296	0.637	0.469	0.475	0.398	0.841	0.553
V35109.00-V35125.00	2130	346.0	10.0	0.010	1.416	0.271	0.319	0.640	0.508	0.475	0.425	0.844	0.597
V35110.00-V35111.00	1782	207.0	8.0	0.011	0.819	0.009	0.081	0.012	0.095	0.004	0.063	0.007	0.080
V35111.00-V35112.00	1781	255.0	8.0	0.011	0.819	0.013	0.100	0.019	0.118	0.009	0.082	0.015	0.104
V35112.00-V35114.00	1780	340.0	8.0	0.010	0.781	0.018	0.102	0.026	0.125	0.014	0.092	0.022	0.117
V35113.00-V35114.00	1779	68.0	8.0	0.020	1.104	0.004	0.066	0.007	0.085	0.007	0.073	0.010	0.091
V35114.00-V35115.00	1778	177.0	8.0	0.025	1.235	0.022	0.120	0.037	0.153	0.022	0.114	0.037	0.148
V35115.00-V35116.00	1777	239.0	8.0	0.022	1.158	0.027	0.105	0.045	0.134	0.024	0.099	0.042	0.130
V35116.00-V35117.00	1776	152.0	8.0	0.162	3.143	0.029	0.063	0.050	0.083	0.029	0.064	0.050	0.083
V35117.00-V35124.00	1775	281.0	8.0	0.205	3.536	0.029	0.109	0.053	0.154	0.029	0.116	0.053	0.159
V35118.00-V35119.00	1774	244.0	8.0	0.020	1.104	0.003	0.055	0.006	0.071	0.012	0.079	0.015	0.092
V35119.00-V35120.00	1773	88.0	8.0	0.010	0.781	0.007	0.068	0.013	0.091	0.012	0.086	0.018	0.106
V35120.00-V35121.00	1611	346.0	8.0	0.014	0.924	0.007	0.082	0.016	0.126	0.014	0.114	0.023	0.148
V35121.00-V35122.00	1610	76.0	8.0	0.009	0.741	0.007	0.068	0.019	0.106	0.014	0.092	0.026	0.122
V35122.00-V35123.00	1609	156.0	8.0	0.245	3.866	0.010	0.036	0.025	0.057	0.017	0.046	0.032	0.063
V35123.00-V35124.00	1607	40.0	8.0	0.040	1.562	0.010	0.096	0.028	0.143	0.017	0.108	0.035	0.151
V35124.00-V35125.00	1606	111.0	8.0	0.010	0.781	0.039	0.291	0.084	0.453	0.046	0.366	0.091	0.517
V35125.00-V35126.00	365	253.0	10.0	0.010	1.416	0.310	0.314	0.727	0.499	0.522	0.414	0.938	0.583
V35126.00-V35144.00	364	346.0	10.0	0.015	1.734	0.310	0.296	0.730	0.466	0.522	0.391	0.941	0.544
V35127.00-V35128.00	886	100.0	8.0	0.019	1.077	0.000	0.000	0.003	0.045	0.000	0.000	0.003	0.045
V35128.00-V35129.00	885	351.0	8.0	0.020	1.104	0.000	0.061	0.006	0.096	0.000	0.085	0.006	0.118
V35129.00-V35136.00	884	249.0	8.0	0.013	0.890	0.028	0.133	0.036	0.158	0.056	0.174	0.065	0.194
V35130.00-V35131.00	883	297.0	6.0	0.005	0.256	0.000	0.081	0.003	0.128	0.000	0.091	0.003	0.140
V35131.00-V35132.00	882	314.0	6.0	0.007	0.303	0.015	0.148	0.021	0.174	0.020	0.173	0.026	0.196
V35132.00-V35135.00	881	282.0	6.0	0.011	0.380	0.015	0.138	0.024	0.173	0.020	0.155	0.029	0.186
V35133.00-V35134.00	880	267.0	6.0	0.006	0.281	0.000	0.071	0.003	0.119	0.012	0.145	0.015	0.161
V35134.00-V35135.00	879	253.0	6.0	0.011	0.380	0.016	0.143	0.022	0.172	0.012	0.137	0.018	0.167
V35135.00-V35136.00	878	58.0	6.0	0.033	0.659	0.031	0.168	0.049	0.208	0.033	0.193	0.051	0.228
V35136.00-V35137.00	877	250.0	8.0	0.027	1.283	0.058	0.185	0.088	0.230	0.089	0.228	0.118	0.266
V35137.00-V35139.00	876	269.0	8.0	0.004	0.494	0.058	0.235	0.091	0.299	0.089	0.292	0.121	0.347
V35138.00-V35139.00	875	386.0	8.0	0.005	0.552	0.001	0.138	0.004	0.188	0.003	0.179	0.006	0.220
V35139.00-V35140.00	874	300.0	8.0	0.003	0.428	0.059	0.287	0.098	0.374	0.092	0.378	0.130	0.450
V35140.00-V35141.00	873	330.0	8.0	0.005	0.552	0.059	0.222	0.101	0.289	0.109	0.301	0.151	0.355
V35141.00-V35142.00	872	275.0	8.0	0.114	2.637	0.060	0.104	0.105	0.136	0.109	0.139	0.154	0.164
V35142.00-V35143.00	871	300.0	8.0	0.167	3.192	0.060	0.107	0.108	0.143	0.109	0.143	0.157	0.171

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V35143.00-V35144.00	870	138.0	8.0	0.054	1.815	0.060	0.251	0.111	0.379	0.109	0.334	0.160	0.448
V35144.00-V35145.00	246	297.0	10.0	0.016	1.791	0.371	0.319	0.844	0.502	0.631	0.425	1.104	0.593
V35145.00-V35146.00	245	122.0	10.0	0.012	1.551	0.371	0.340	0.847	0.540	0.631	0.454	1.107	0.642
V35146.00-V35147.00	244	268.0	10.0	0.010	1.416	0.371	0.379	0.850	0.609	0.631	0.514	1.110	0.733
V35147.00-V35148.00	243	357.0	10.0	0.010	1.416	0.371	0.345	0.853	0.548	0.651	0.468	1.133	0.658
V35148.00-V35149.00	242	318.0	10.0	0.027	2.327	0.371	0.270	0.856	0.420	0.651	0.362	1.136	0.494
V35149.00-V35204.00	241	363.0	10.0	0.031	2.493	0.371	0.359	0.859	0.574	0.651	0.498	1.139	0.690
V35150.00-V35152.00	240	288.0	8.0	0.042	1.601	0.001	0.055	0.004	0.117	0.010	0.110	0.013	0.151
V35151.00-V35152.00	363	98.0	8.0	0.017	1.018	0.007	0.075	0.028	0.155	0.016	0.126	0.037	0.184
V35151.A0-V35151.B0	362	105.0	8.0	0.012	0.856	0.005	0.059	0.008	0.078	0.004	0.062	0.007	0.080
V35151.B0-V35151.C0	361	170.0	8.0	0.009	0.741	0.006	0.070	0.012	0.099	0.009	0.092	0.015	0.115
V35151.C0-V35151.D0	360	256.0	8.0	0.012	0.856	0.007	0.063	0.016	0.094	0.013	0.086	0.022	0.111
V35151.D0-V35151.E0	359	147.0	8.0	0.048	1.711	0.007	0.045	0.019	0.073	0.013	0.062	0.025	0.084
V35151.E0-V35151.00	166	47.0	8.0	0.030	1.353	0.007	0.050	0.022	0.090	0.016	0.073	0.031	0.104
V35151.F0-V35151.00	8295	5.0	8.0	0.000	0.000	0.001	0.061	0.003	0.114	0.001	0.088	0.003	0.131
V35152.00-V35153.00	165	101.0	8.0	0.006	0.605	0.008	0.082	0.035	0.163	0.026	0.141	0.052	0.198
V35153.00-V35154.00	164	346.0	8.0	0.037	1.502	0.012	0.064	0.042	0.115	0.033	0.102	0.063	0.140
V35154.00-V35155.C0	8096	338.0	8.0	0.012	0.856	0.012	0.056	0.045	0.106	0.033	0.099	0.066	0.133
V35155.00-V35172.00	1423	346.0	8.0	0.069	2.052	0.013	0.073	0.057	0.138	0.052	0.138	0.097	0.181
V35155.A0-V35155.B0	8136	367.0	8.0	0.029	1.330	0.001	0.023	0.004	0.058	0.014	0.107	0.017	0.112
V35155.B0-V35155.C0	8137	75.0	8.0	0.005	0.552	0.001	0.042	0.007	0.094	0.019	0.126	0.025	0.145
V35155.C0-V35155.00	8135	338.0	8.0	0.072	2.096	0.013	0.056	0.055	0.111	0.052	0.109	0.094	0.144
V35156.00-V35158.00	1422	76.0	6.0	0.010	0.363	0.000	0.031	0.003	0.085	0.000	0.038	0.003	0.089
V35157.00-V35158.00	1420	55.0	6.0	0.014	0.429	0.004	0.064	0.007	0.095	0.006	0.078	0.009	0.104
V35158.00-V35160.00	1419	194.0	8.0	0.017	1.018	0.004	0.059	0.013	0.093	0.006	0.081	0.015	0.108
V35159.00-V35160.00	1418	25.0	6.0	0.008	0.324	0.000	0.051	0.003	0.096	0.003	0.095	0.006	0.122
V35160.00-V35162.00	1417	194.0	8.0	0.017	1.018	0.008	0.064	0.023	0.104	0.019	0.094	0.034	0.125
V35161.00-V35162.00	1416	73.0	8.0	0.031	1.375	0.000	0.032	0.003	0.067	0.000	0.042	0.003	0.074
V35162.00-V35165.00	1415	167.0	8.0	0.029	1.330	0.009	0.058	0.029	0.110	0.019	0.092	0.040	0.130
V35163.00-V35165.00	1414	28.0	6.0	0.007	0.303	0.000	0.039	0.003	0.105	0.006	0.104	0.009	0.140
V35164.00-V35165.00	1413	27.0	6.0	0.007	0.303	0.001	0.052	0.004	0.107	0.004	0.100	0.007	0.136
V35165.00-V35167.00	1412	169.0	8.0	0.030	1.353	0.009	0.064	0.039	0.129	0.029	0.110	0.059	0.157
V35167.00-V35168.00	1410	66.0	8.0	0.012	0.856	0.009	0.087	0.042	0.157	0.029	0.159	0.061	0.207
V35168.00-V35170.00	1409	188.0	8.0	0.012	0.856	0.020	0.125	0.056	0.201	0.077	0.232	0.112	0.281
V35169.00-V35170.00	1406	15.0	6.0	0.003	0.199	0.005	0.124	0.008	0.188	0.008	0.210	0.011	0.253
V35170.00-V35171.00	1405	188.0	8.0	0.013	0.890	0.025	0.114	0.067	0.184	0.085	0.207	0.126	0.252
V35171.00-V35172.00	1404	130.0	8.0	0.050	1.746	0.025	0.087	0.070	0.151	0.085	0.160	0.129	0.201
V35172.00-V35173.00	1403	226.0	8.0	0.079	2.195	0.038	0.093	0.130	0.171	0.137	0.174	0.229	0.225
V35173.00-V35174.G0	3426	104.6	8.0	0.050	1.746	0.038	0.121	0.133	0.198	0.137	0.189	0.232	0.245
V35174.00-V35175.00	1402	346.0	8.0	0.039	1.542	0.089	0.179	0.208	0.277	0.170	0.247	0.289	0.327
V35174.A0-V35174.B0	3353	90.0	8.0	0.013	0.890	0.044	0.152	0.047	0.157	0.013	0.085	0.016	0.095
V35174.B0-V35174.C0	3354	181.0	8.0	0.040	1.562	0.047	0.119	0.053	0.126	0.024	0.089	0.030	0.098
V35174.C0-V35174.D0	3355	145.8	8.0	0.069	2.052	0.051	0.109	0.060	0.117	0.033	0.088	0.042	0.099
V35174.D0-V35174.E0	3356	81.2	8.0	0.047	1.693	0.051	0.109	0.063	0.122	0.033	0.089	0.045	0.105
V35174.E0-V35174.F0	3357	91.7	8.0	0.039	1.542	0.051	0.189	0.066	0.197	0.033	0.130	0.048	0.159
V35174.F0-V35174.G0	3424	184.9	8.0	0.005	0.552	0.051	0.204	0.069	0.238	0.033	0.183	0.051	0.232
V35174.G0-V35174.00	3425	245.0	8.0	0.062	1.945	0.089	0.154	0.205	0.233	0.170	0.212	0.286	0.276
V35175.00-V35178.00	1401	346.0	8.0	0.018	1.048	0.089	0.196	0.211	0.302	0.170	0.272	0.292	0.358
V35176.00-V35177.A0	3344	70.3	8.0	0.023	1.184	0.002	0.031	0.005	0.049	0.003	0.040	0.006	0.055
V35177.00-V35178.E0	3346	55.1	8.0	0.025	1.235	0.007	0.055	0.016	0.080	0.038	0.104	0.047	0.119
V35177.A0-V35177.00	3345	279.8	8.0	0.038	1.522	0.003	0.039	0.009	0.060	0.006	0.073	0.012	0.086
V35178.00-V35193.00	322	216.0	10.0	0.043	2.936	0.108	0.131	0.257	0.200	0.227	0.188	0.376	0.242
V35178.A0-V35178.B0	3348	103.1	8.0	0.013	0.890	0.006	0.059	0.009	0.077	0.009	0.072	0.012	0.087
V35178.B0-V35178.C0	3350	231.8	8.0	0.011	0.819	0.006	0.067	0.012	0.093	0.009	0.080	0.015	0.102
V35178.C0-V35178.D0	3351	148.7	8.0	0.012	0.856	0.010	0.080	0.019	0.107	0.014	0.090	0.022	0.114

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V35178.D0-V35178.E0	3352	143.7	8.0	0.018	1.048	0.012	0.075	0.024	0.104	0.019	0.101	0.031	0.123
V35178.E0-V35178.00	3347	292.0	8.0	0.085	2.277	0.019	0.130	0.043	0.197	0.057	0.191	0.081	0.242
V35179.00-V35180.00	321	367.0	10.0	0.015	1.734	0.000	0.007	0.003	0.031	0.016	0.069	0.019	0.075
V35180.00-V35191.00	319	365.0	10.0	0.076	3.904	0.001	0.056	0.007	0.090	0.020	0.109	0.026	0.129
V35181.00-V35183.00	318	256.0	8.0	0.011	0.819	0.003	0.069	0.006	0.089	0.010	0.088	0.013	0.104
V35182.00-V35183.00	317	276.0	8.0	0.058	1.881	0.010	0.074	0.013	0.089	0.005	0.067	0.008	0.083
V35183.00-V35187.00	316	236.0	8.0	0.011	0.819	0.015	0.111	0.024	0.143	0.016	0.118	0.025	0.149
V35184.00-V35186.00	315	241.0	8.0	0.038	1.522	0.004	0.041	0.007	0.058	0.002	0.034	0.005	0.053
V35185.00-V35186.00	314	18.0	6.0	0.005	0.256	0.001	0.049	0.004	0.077	0.001	0.045	0.004	0.075
V35186.00-V35187.00	313	295.0	8.0	0.049	1.729	0.006	0.085	0.015	0.117	0.005	0.089	0.014	0.120
V35187.00-V35189.00	312	246.0	8.0	0.010	0.781	0.023	0.119	0.044	0.162	0.029	0.131	0.049	0.171
V35188.00-V35189.00	311	322.0	6.0	0.056	0.858	0.003	0.095	0.006	0.133	0.003	0.102	0.006	0.138
V35189.00-V35190.00	310	29.5	8.0	0.005	0.552	0.026	0.122	0.053	0.169	0.032	0.136	0.059	0.181
V35190.00-V35191.00	309	346.0	8.0	0.010	0.781	0.028	0.128	0.057	0.183	0.038	0.178	0.068	0.224
V35191.00-V35192.00	308	241.0	10.0	0.010	1.416	0.029	0.103	0.067	0.157	0.086	0.185	0.125	0.219
V35192.00-V35193.00	307	167.0	10.0	0.007	1.185	0.029	0.107	0.070	0.164	0.086	0.181	0.128	0.220
V35193.00-V35202.A0	8221	60.0	10.0	0.047	3.070	0.137	0.149	0.330	0.231	0.316	0.226	0.510	0.289
V35202.00-V35203.00	815	343.0	10.0	0.014	1.675	0.137	0.193	0.372	0.320	0.318	0.295	0.553	0.395
V35202.A0-V35202.B0	8245	241.7	10.0	0.014	1.675	0.137	0.194	0.333	0.305	0.318	0.297	0.514	0.384
V35202.B0-V35202.C0	8246	122.7	10.0	0.013	1.615	0.137	0.197	0.336	0.310	0.318	0.301	0.517	0.390
V35202.C0-V35202.D0	8244	220.0	10.0	0.013	1.615	0.137	0.246	0.339	0.390	0.318	0.376	0.520	0.489
V35202.D0-V35202.E0	8243	312.6	10.0	0.013	1.615	0.137	0.195	0.342	0.307	0.318	0.296	0.523	0.383
V35202.E0-V35202.F0	8242	95.0	10.0	0.106	4.610	0.137	0.152	0.345	0.241	0.318	0.231	0.526	0.301
V35202.F0-V35202.G0	8241	345.8	10.0	0.010	1.416	0.137	0.210	0.348	0.338	0.318	0.322	0.529	0.423
V35202.G0-V35202.H0	8240	243.9	10.0	0.010	1.416	0.137	0.209	0.351	0.339	0.318	0.321	0.532	0.424
V35202.H0-V35202.I0	8239	243.9	10.0	0.010	1.416	0.137	0.234	0.354	0.380	0.318	0.358	0.535	0.474
V35202.I0-V35202.J0	8238	302.6	10.0	0.013	1.615	0.137	0.195	0.357	0.316	0.318	0.297	0.538	0.391
V35202.J0-V35202.K0	8237	185.0	10.0	0.080	4.005	0.137	0.126	0.360	0.203	0.318	0.191	0.541	0.248
V35202.K0-V35202.L0	8236	145.9	10.0	0.082	4.055	0.137	0.121	0.363	0.194	0.318	0.182	0.544	0.237
V35202.L0-V35202.M0	8235	91.4	10.0	0.052	3.229	0.137	0.136	0.366	0.220	0.318	0.205	0.547	0.270
V35202.M0-V35202.00	1408	84.2	10.0	0.025	2.239	0.137	0.187	0.369	0.309	0.318	0.286	0.550	0.381
V35203.00-V35204.00	576	346.0	10.0	0.028	2.369	0.137	0.310	0.375	0.505	0.318	0.446	0.556	0.616
V35204.00-V35205.00	696	496.0	15.0	0.004	2.640	0.507	0.369	1.236	0.587	0.969	0.515	1.698	0.703
V35205.00-V35206.00	3427	317.0	15.0	0.004	2.640	0.507	0.286	1.239	0.447	0.969	0.395	1.701	0.528
V35206.00-V35207.00	575	159.0	15.0	0.066	10.726	0.507	0.274	1.242	0.437	0.969	0.382	1.704	0.521
V35207.00-V35208.00	574	498.0	15.0	0.004	2.640	0.507	0.296	1.245	0.473	0.969	0.413	1.707	0.565
V35208.00-V35225.00	3428	202.9	15.0	0.027	6.860	0.507	0.185	1.248	0.292	0.969	0.258	1.709	0.346
V35209.00-V35210.00	573	195.0	8.0	0.050	1.746	0.000	0.000	0.003	0.037	0.005	0.041	0.008	0.054
V35210.00-V35212.00	572	197.0	8.0	0.050	1.746	0.000	0.016	0.006	0.055	0.005	0.071	0.011	0.087
V35211.00-V35212.00	571	332.0	8.0	0.071	2.081	0.001	0.026	0.004	0.050	0.026	0.090	0.029	0.099
V35212.00-V35213.00	570	215.0	8.0	0.047	1.693	0.003	0.036	0.015	0.070	0.037	0.102	0.048	0.117
V35213.00-V35214.00	569	240.0	8.0	0.059	1.897	0.005	0.044	0.020	0.079	0.042	0.109	0.057	0.127
V35214.00-V35215.00	568	285.0	8.0	0.050	1.746	0.008	0.060	0.026	0.108	0.050	0.144	0.068	0.169
V35215.00-V35220.00	567	132.0	8.0	0.010	0.781	0.008	0.071	0.029	0.146	0.050	0.184	0.071	0.224
V35216.00-V35217.00	566	8.0	8.0	0.002	0.349	0.000	0.000	0.003	0.051	0.016	0.099	0.019	0.109
V35217.00-V35218.00	565	200.0	8.0	0.015	0.957	0.000	0.000	0.006	0.062	0.016	0.095	0.022	0.111
V35218.00-V35219.00	564	250.0	8.0	0.015	0.957	0.000	0.000	0.009	0.069	0.016	0.090	0.025	0.111
V35219.00-V35220.00	563	344.0	8.0	0.024	1.210	0.000	0.035	0.012	0.115	0.016	0.139	0.028	0.174
V35220.00-V35222.00	562	191.0	8.0	0.010	0.781	0.008	0.089	0.044	0.172	0.066	0.204	0.102	0.252
V35222.00-V35223.00	561	163.0	8.0	0.010	0.781	0.019	0.154	0.058	0.261	0.077	0.294	0.116	0.356
V35223.00-V35224.00	560	62.0	8.0	0.004	0.494	0.019	0.124	0.061	0.210	0.077	0.234	0.119	0.283
V35224.00-V35225.00	3429	68.0	8.0	0.083	2.250	0.019	0.199	0.064	0.320	0.077	0.293	0.122	0.387
EE	8284	387.3	14.0	-0.019	Adverse	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EE	8285	1888.8	12.0	-0.040	Adverse	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EE	8286	3472.8	12.0	-0.013	Adverse	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
EE	8287	1451.5	12.0	0.012	2.522	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EE	8317	3458.9	12.0	0.021	3.337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EE	8356	1740.1	14.0	0.062	8.649	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EE	8357	1018.2	12.0	0.051	5.200	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V36T001.00-V36T001.B0	997	263.1	30.0	0.001	8.383	5.317	0.615	8.851	0.782	7.900	0.740	11.558	0.897
V36T001.B0-V36T001.A0	998	266.3	30.0	0.001	8.383	5.317	0.411	8.851	0.518	7.900	0.492	11.558	0.586
V36T002.00-V36T001.00	297	549.0	30.0	0.001	8.383	5.318	0.580	8.851	0.789	7.900	0.734	11.558	0.963
V36T003.00-V36T002.00	296	446.5	30.0	0.001	8.383	5.318	0.571	8.852	0.805	7.900	0.740	11.562	0.988
V36T003.A0-V36T003.00	295	436.0	30.0	0.001	8.383	5.319	0.585	8.852	0.833	7.900	0.762	11.595	1.000
V36T004.00-V36T003.A0	294	436.0	30.0	0.001	8.383	4.958	0.589	8.512	0.848	7.537	0.773	11.214	1.000
V36T005.00-V36T004.00	293	204.9	30.0	0.003	14.520	4.958	0.519	8.513	0.791	7.537	0.710	11.229	1.000
V36T006.00-V36T005.00	292	233.8	24.0	0.006	11.325	4.958	0.502	8.515	0.768	7.538	0.690	11.219	1.000
V36T007.00-V36T006.00	291	467.6	24.0	0.008	13.077	4.958	0.442	8.515	0.614	7.538	0.567	11.213	0.870
V36T008.00-V36T007.00	290	579.2	24.0	0.008	13.077	4.958	0.421	8.516	0.578	7.538	0.536	11.215	0.719
V36T009.00-V36T008.00	710	270.9	24.0	0.009	13.871	4.958	0.418	8.516	0.573	7.538	0.532	11.215	0.692
V36T010.00-V36T009.00	709	267.9	24.0	0.002	6.539	4.958	0.539	8.516	0.741	7.538	0.686	11.215	0.843
V36T011.00-V36T010.00	708	299.5	24.0	0.003	8.008	4.959	0.633	8.516	0.948	7.538	0.843	11.215	1.000
V36T012.00-V36T011.00	707	261.0	24.0	0.003	8.008	4.959	0.574	8.516	0.948	7.538	0.792	11.215	1.000
V36T013.00-V36T012.00	706	260.6	21.0	0.006	7.932	4.959	0.595	8.518	1.000	7.538	0.804	11.215	1.000
V36T014.00-V36T013.00	705	246.4	21.0	0.006	7.932	4.959	0.562	8.518	1.000	7.538	0.757	11.215	1.000
V36T015.00-V36T014.00	704	247.3	21.0	0.006	7.932	4.959	0.573	8.518	1.000	7.538	0.773	11.215	1.000
V36T016.00-V36T015.00	703	163.0	21.0	0.038	19.963	4.959	0.449	8.519	0.708	7.538	0.592	11.215	0.950
V36T017.00-V36T016.00	702	491.4	21.0	0.009	9.715	4.959	0.482	8.519	0.668	7.538	0.618	11.219	0.950
V36T018.00-V36T017.00	701	400.3	21.0	0.006	7.932	4.959	0.619	8.519	0.960	7.538	0.824	11.220	1.000
V36T019.00-V36T018.00	699	398.3	21.0	0.006	7.932	4.959	0.577	8.519	1.000	7.538	0.786	11.220	1.000
V36T020.00-V36T019.00	698	304.4	21.0	0.028	17.136	4.959	0.468	8.519	0.749	7.538	0.616	11.220	0.940
V36T021.00-V36T020.00	697	480.2	21.0	0.005	7.241	4.959	0.551	8.519	0.749	7.538	0.717	11.239	0.940
V36T022.00-V36T021.00	695	450.2	21.0	0.005	7.241	4.959	0.676	8.519	1.000	7.538	0.975	11.239	1.000
V36T022.A0-V36T022.00	694	127.7	18.0	0.011	7.120	4.894	0.665	8.456	1.000	7.472	1.000	11.164	1.000
V36T023.00-V36T022.A0	693	370.0	18.0	0.011	7.120	4.894	0.610	8.456	1.000	7.473	1.000	11.165	1.000
V36T024.00-V36T023.00	692	587.5	21.0	0.005	7.241	4.894	0.603	8.456	1.000	7.545	1.000	11.165	1.000
V36T025.00-V36T024.00	995	587.1	18.0	0.010	6.789	4.894	0.709	8.456	1.000	7.508	1.000	11.165	1.000
V36T026.00-V36T025.00	994	255.0	18.0	0.010	6.789	4.894	0.628	8.456	1.000	7.509	1.000	11.165	1.000
V36T027.00-V36T026.00	996	139.2	18.0	0.010	6.789	4.894	0.636	8.456	1.000	7.510	1.000	11.166	1.000
V36T028.00-V36T027.00	993	718.2	18.0	0.010	6.789	4.894	0.639	8.456	1.000	7.511	1.000	11.166	1.000
V36T029.00-V36T028.00	992	526.8	18.0	0.009	6.441	4.894	0.644	8.456	1.000	7.511	1.000	11.166	1.000
V36T030.00-V36T029.00	991	629.3	18.0	0.010	6.789	4.894	0.641	8.456	1.000	7.511	1.000	11.166	1.000
V36T031.00-V36T030.00	990	292.1	18.0	0.010	6.789	4.894	0.631	8.456	1.000	7.512	1.000	11.166	1.000
V36T032.00-V36T031.00	989	319.2	18.0	0.010	6.789	4.894	0.626	8.456	1.000	7.512	1.000	11.167	1.000
V36T033.00-V36T032.00	988	194.4	18.0	0.021	9.838	4.894	0.561	8.764	1.000	7.513	1.000	11.168	1.000
V36T033.A0-V36T033.00	987	247.4	18.0	0.020	9.601	4.894	0.507	8.458	1.000	7.514	1.000	11.169	1.000
V36T034.00-V36T033.A0	986	150.0	18.0	0.019	9.358	4.894	0.509	8.460	1.000	7.516	1.000	11.171	1.000
V36T035.00-V36T034.00	985	587.8	18.0	0.020	9.601	4.894	0.507	8.461	1.000	7.519	0.835	11.174	1.000
V36T036.00-V36T035.00	984	366.2	18.0	0.010	6.789	4.874	0.611	8.443	1.000	7.486	0.835	11.143	1.000
V36T037.00-V36T036.00	983	372.3	18.0	0.010	6.789	4.874	0.674	8.444	1.000	7.486	1.000	11.145	1.000
V36T037.A0-V36T037.00	982	262.4	18.0	0.010	6.789	4.874	0.629	8.446	1.000	7.486	1.000	11.148	1.000
V36T038.00-V36T037.A0	981	337.3	18.0	0.010	6.789	4.874	0.623	8.448	1.000	7.486	1.000	11.151	1.000
V36T039.00-V36T038.00	980	296.2	18.0	0.017	8.852	4.874	0.576	8.451	1.000	7.486	1.000	11.155	1.000
V36T040.00-V36T039.00	979	459.0	18.0	0.021	9.838	4.874	0.515	8.453	1.000	7.486	0.829	11.159	1.000
V36T041.00-V36T040.00	978	407.7	18.0	0.010	6.789	4.874	0.610	8.455	1.000	7.486	0.829	11.162	1.000
V36T042.00-V36T041.00	977	440.0	18.0	0.010	6.789	4.874	0.671	8.458	1.000	7.486	1.000	11.166	1.000
V36T042.A0-V36T042.00	976	330.0	18.0	0.010	6.789	4.707	0.620	8.297	1.000	7.263	1.000	10.951	1.000
V36T043.00-V36T042.A0	975	20.9	18.0	0.002	3.036	4.707	0.618	9.009	1.000	7.263	1.000	10.967	1.000
V36T043.A0-V36T043.00	974	93.0	18.0	0.007	5.680	4.707	0.613	8.329	1.000	7.263	1.000	10.993	1.000
V36T044.00-V36T043.A0	268	288.3	18.0	0.008	6.072	4.707	0.657	8.343	1.000	7.263	1.000	11.010	1.000

Pipe Id	Model Id	Length (Ft)	Dia. (D) (in.)	Slope (Ft/Ft)	Full Flow (mgd)	2006 PDWF (mgd)	2006 PDWF d/D	2006 PWWF (mgd)	2006 PWWF d/D	2027 PDWF (mgd)	2027 PDWF d/D	2027 PWWF (mgd)	2027 PWWF d/D
V36T044.A0-V36T044.00	267	301.2	18.0	0.008	6.072	4.707	0.689	8.352	1.000	7.263	1.000	11.021	1.000
V36T045.00-V36T044.A0	266	264.7	18.0	0.008	6.072	4.707	0.675	8.362	1.000	7.263	1.000	11.032	1.000
V36T046.00-V36T045.00	265	362.0	18.0	0.013	7.741	4.707	0.618	8.371	1.000	7.263	1.000	11.045	1.000
V36T046.A0-V36T046.00	971	341.7	18.0	0.022	10.070	4.707	0.521	8.380	1.000	7.263	1.000	11.057	1.000
V36T047.00-V36T046.A0	970	49.9	18.0	0.009	6.441	4.707	0.460	8.397	1.000	7.291	0.944	11.086	1.000
V36T048.00-V36T047.00	969	342.4	18.0	0.026	10.947	4.707	0.459	8.421	1.000	7.540	0.742	11.120	1.000
V36T051.00-V36T048.00	973	908.6	18.0	0.019	9.358	4.707	0.504	8.440	1.000	7.308	0.668	11.133	1.000
V36T051.A0-V36T051.00	972	329.6	18.0	0.019	9.358	4.707	0.518	8.460	1.000	7.304	0.703	11.146	1.000
V36T052.00-V36T051.A0	688	105.9	18.0	0.013	7.741	4.707	0.505	8.539	1.000	7.304	0.670	11.184	1.000
V36T053.00-V36T052.00	687	435.6	18.0	0.025	10.734	4.685	0.482	8.623	1.000	7.282	0.635	11.202	1.000
V36T054.00-V36T053.00	8364	430.8	18.0	0.027	11.155	4.685	0.457	8.679	1.000	7.282	0.596	11.221	1.000
V36T055.A0-V36T054.00	686	547.4	18.0	0.022	10.070	4.685	0.476	8.949	1.000	7.282	0.625	11.240	1.000