

NOTICE AND AGENDA

TOUR OF THE CHILDRENS JUSTICE CENTER AT 4:00 PM.

SANTA CLARA CITY COUNCIL WORK MEETING

WEDNESDAY June 14, 2023

TIME: 5:30 PM.

AGENDA

Public Notice is hereby given that the Santa Clara City Council will hold a Work Meeting in the Santa Clara City Council Chambers, located at 2603 Santa Clara Drive, Santa Clara Utah on Wednesday June 14, 2023, commencing at 5:00 PM. The meeting will be broadcast via You Tube linked on our website at <https://sccity.org/meetings>.

1. Call to Order:

2. General Citizen Public Comment:

3. Working Agenda:

A. General Business:

1. Water Master Plan Updates with Impact Fee Discussion.
2. Tentative late payment 10% to 5%.
3. Solar Agreement and Fee Structure discussion.
4. Regulations for Accessory Structures discussion.

4. Staff Reports:

5. Adjournment:

Note: In compliance with the Americans with Disabilities Act, individuals needing special accommodation during this meeting should notify the city no later than 24 hours in advance of the meeting by calling 435-673-6712. In accordance with State Statute and Council Policy, one or more Council Members may be connected via speakerphone or may by two-thirds vote to go into a closed meeting.

Zoom Meeting Participants: Participants on the Zoom call are limited to City Staff, Council Members, and applicants on the agenda. Email calendar invitations will be sent out in advance of the meeting. Instructions for each meeting will include the meeting ID, and password to join. When joining the meeting your screen name must show your full name. Each applicant will be accepted into the meeting when their item is up for discussion. Please contact Chris Shelley at (435)673-6712 Ext. 203 with any questions regarding public meetings.

The undersigned, duly appointed City Recorder, does hereby certify that the above notice and agenda was posted within the Santa Clara City limits on this 7th day of June 2023 at the Santa Clara City Hall, on the City Hall Notice Board, at the Santa Clara Post Office, on the Utah State Public Notice Website, and on the City Website at <http://www.sccity.org>. The 2022 meeting schedule was also provided to the Spectrum on January 3, 2023

Chris Shelley – City Recorder

Mayor
Rick Rosenberg

City Manager
Brock Jacobsen



City Council
Denny Drake
Leina Mathis
Ben Shakespeare
Jarett Waite
Christa Hinton

CITY COUNCIL

Meeting Date: 6-14-23

Agenda Item: 1

Applicant: Dustin
Mouritsen

Requested by: Dustin Mouritsen

Subject: Water Master Plan Updates with Impact Fee Discussion.

Recommendation:

Cost:

Legal Approval:

Finance Approval:

Budget Approval:

Attachments:

Yes



SANTA CLARA CITY, UTAH

Water System Impact Fee Facilities Plan & Impact Fee Analysis

May 2023

PREPARED BY:

SUNRISE ENGINEERING, INC.

11 North 300 West
Washington, UT 84780
TEL: 435-652-8450



Water System Impact Fee Facilities Plan & Impact Fee Analysis

May 2023

INCLUDES:

**FIVE POINT SYSTEM ANALYSIS
RECOMMENDED SYSTEM IMPROVEMENTS
SYSTEM FINANCING PLAN
IMPACT FEE FACILITIES PLAN
IMPACT FEE ANALYSIS**

MAYOR-----	Rick Rosenberg
COUNCIL MEMBER-----	Jarett Waite
COUNCIL MEMBER-----	Christa Hinton
COUNCIL MEMBER-----	Ben Shakespeare
COUNCIL MEMBER-----	Leina Mathis
COUNCIL MEMBER-----	Denny Drake
CITY MANAGER-----	Brock Jacobsen
PUBLIC WORKS DIRECTOR-----	Dustin Mouritsen
RECORDER-----	Chris Shelley

PREPARED BY:



Nathan Wallentine, P.E.
Project Engineer
State of Utah #12338863

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APPENDIX F - IMPACT FEE CERTIFICATION

I. INTRODUCTION

A. PREFACE

The City of Santa Clara (the city) has entered into an agreement with Sunrise Engineering, Inc. to prepare this Culinary and Irrigation Water Master Plan. The plan will provide council members with the information they need to make important decisions relating to water infrastructure as the city continues to grow and develop over the next 20 years. This plan will provide information regarding the existing culinary and irrigation water infrastructure, analyze these facilities for adequacy, and make recommendations in order to meet projected demands.

B. INTRODUCTION

This Water Master Plan has been prepared for Santa Clara City, located west of St. George in Washington County, Utah along Old Highway 91. An area map showing the location of the city has been included as Figure I.B-1.

Santa Clara City has experienced significant growth over the past 30 years. At times, this growth has been somewhat rapid and has required improvements and upgrades to much of the city's public infrastructure to meet the increased demands. The growth slowed in the 2008 recession and has since grown significantly. We are currently seeing a slight slowdown in growth, though it is projected that growth rates will level out over the next several years. This plan is intended to help the city evaluate their ability to meet the increasing demands placed on the system by development, and to identify and correct existing deficiencies in the water system.

The water system has been analyzed according to the Utah Division of Drinking Water regulations and includes a 5-point review of the system consisting of water rights, water source capacity, water storage capacity, water treatment, and water distribution.

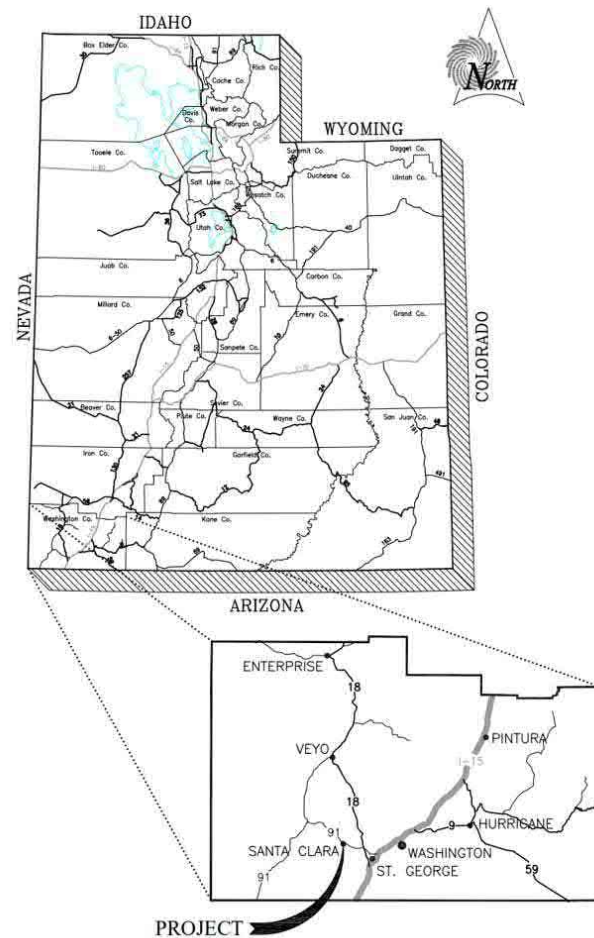


Figure I.B-1: Area Map

As part of the plan, Sunrise Engineering has recommended several improvements to the culinary water system and has developed a sample financing plan as a possible means to fund the recommended improvements.

The existing water rates and impact fees have also been analyzed as a possible means of supporting the recommended system improvements. The recommended water rates and impact fees are fair and reasonable and will allow the city to continue to maintain the level of service that is required of a public water system for the present time and over the planning period.

II. SYSTEM USERS ANALYSIS

A. PROJECTED GROWTH RATE

An important element in the development of a Water Master Plan is the projection of the population growth rate. This projection gives the planner an idea of the future demands on the system throughout the planning period.

Projecting future growth can be subjective but should be grounded in historical trends and current information as much as possible. Table II.A-1 below shows the city's historic growth rates based on official Census data from 1970 to 2010, and the latest population data the city had on record for 2020.

Table II.A-1: Historic Growth

Year	Source	Population	Growth Rate		ERUs
1970	Census	271	-	-	-
1980	Census	1,091	1970-1980	14.9%	-
1990	Census	2,311	1980-1990	7.8%	-
2000	Census	4,630	1990-2000	7.2%	-
2010	Census	6,003	2000-2010	2.6%	-
2020	City	8,685	2010-2020	3.8%	2713
2021	Estimate	9,206	2020-2021	6.0%	3424
2022	Estimate	9,758	2021-2022	6.0%	3629
2023	Estimate	10,149	2022-2023	4.0%	3775

The City of Santa Clara has grown significantly since 1970. During the 1970's it grew at almost 15% per year. During the 1980's and 1990's the city grew at over 7% per year. Despite this rapid population growth, there has been very little commercial development in Santa Clara. The city is primarily a residential community supporting the St. George area. Because it is bounded by lava flows, flood plains, environmentally sensitive areas, and other municipalities, it is not expected to grow as fast as it historically has.

As shown in Table II.A-1 above, the 2020 population was provided by Santa Clara City. This indicated a growth rate of 3.8% since 2010. Sunrise Engineering, Inc. projected the current 2023 population as 10,149 assuming a 6.0% average annual growth rate since 2020 based on the high growth rate recently experienced in the community and a 4.0% growth rate beginning this year.

Recent housing market trends in Southern Utah indicate that Santa Clara is only expected to grow rapidly for a short period. After which, growth will continue at a steady rate. The recent 2020 Santa Clara Public Safety IFFP used a growth rate of 4.0% and to remain consistent, the city chose to use the same growth rate projection for this report, with a slight adjustment to 2021-2022 being at 6.0%. A growth rate of 4.0% is projected through the end of the planning period after 2022. The future growth can be projected using the following compound interest formula:

SECTION II - SYSTEM USERS ANALYSIS

$$F = P(1+i)^N$$

F = Future Population

P = Present Population

i = Projected Growth Rate

N = Years

Table II.A-2 shown below gives the projected population and number of equivalent residential units (ERUs) throughout the 20-year and 40-year planning periods.

Table II.A-2: Projected Growth

Year	Source	Population	Growth Rate		ERUs
1970	Census	271	-	-	-
1980	Census	1,091	1970-1980	14.9%	-
1990	Census	2,311	1980-1990	7.8%	-
2000	Census	4,630	1990-2000	7.2%	-
2010	Census	6,003	2000-2010	2.6%	-
2020	City	8,685	2010-2020	3.8%	2713
2021	Estimate	9,206	2020-2021	6.0%	3424
2022	Estimate	9,758	2021-2022	6.0%	3629
2023	Estimate	10,149	2022-2023	4.0%	3775
2024	Estimate	10,555		4.0%	3926
2025	Estimate	10,977		4.0%	4083
2026	Estimate	11,416		4.0%	4246
2027	Estimate	11,873		4.0%	4416
2028	Estimate	12,348		4.0%	4592
2029	Estimate	12,841		4.0%	4776
2030	Estimate	13,355		4.0%	4967
2031	Estimate	13,889		4.0%	5166
2032	Estimate	14,445		4.0%	5372
2033	Estimate	15,023		4.0%	5587
2034	Estimate	15,624		4.0%	5811
2035	Estimate	16,249		4.0%	6043
2036	Estimate	16,899		4.0%	6285
2037	Estimate	17,574		4.0%	6536
2038	Estimate	18,277		4.0%	6798
2039	Estimate	19,009		4.0%	7070
2040	Estimate	19,769		4.0%	7353
2041	Estimate	20,560		4.0%	7647
2042	Estimate	21,382		4.0%	7953
2043	Estimate	22,237		4.0%	8271
2044	Estimate	23,127		4.0%	8601
2045	Estimate	24,052		4.0%	8946
2046	Estimate	25,014		4.0%	9303
2047	Estimate	26,014		4.0%	9675
2048	Estimate	27,055		4.0%	10063
2049	Estimate	28,137		4.0%	10465
2050	Estimate	29,263		4.0%	10884
2051	Estimate	30,433		4.0%	11319
2052	Estimate	31,651		4.0%	11772
2053	Estimate	32,917		4.0%	12243
2054	Estimate	34,233		4.0%	12732
2055	Estimate	35,603		4.0%	13242
2056	Estimate	37,027		4.0%	13771
2057	Estimate	38,508		4.0%	14322
2058	Estimate	40,048		4.0%	14895
2059	Estimate	41,650		4.0%	15491
2060	Estimate	43,316		4.0%	16110
2061	Estimate	45,049		4.0%	16755
2062	Estimate	46,851		4.0%	17425
2063	Estimate	48,725		4.0%	18122

Because the City of Santa Clara will eventually develop all its available land, build-out projections have also been considered in this study.

To determine build-out projections, several samples of existing densities were taken from established areas of the city. These samples were then utilized to estimate densities for other zoning types in the community that have not yet been developed. Table II.A-3 below indicates the densities assumed for each zoning type. The zones marked by an asterisk (*) represent the zoning types for which a sample was taken.

Table II.A-3: Zoning Types and Densities

Zone	Description	Density (DU/Acre)
R-1-10	*Single Family Residential	4.4
PDR	*Planned Development (Residential)	4.0
R-A	*Residential Agricultural	0.7
OS	Open Space	4.5
PDC	Planned Development (Commercial)	0
HDMU	Historic District/Mixed Use	0
R-1-6	*Single Family Residential (6,000 sf lots)	5.6
R-1-10/ML	*Single Family Residential (Mixed Lot)	4.0
COM	Commercial	0

These densities were utilized in conjunction with a current zoning map provided by Santa Clara City. Total areas of each zoning type left to develop were determined and multiplied by the densities to calculate a projected number of dwelling units (DUs) left to develop. The city also provided projected townhome development in areas not zoned for multi-family and these numbers were incorporated. Adding these values to the existing number of DUs resulted in 7,505 total projected DUs at build-out. Multiplying this number by 3.26 people per unit according to the 2020 Census figure, provides a total build-out population projection of 24,466 residents. An exhibit highlighting these zoning calculations can be found in Appendix A.

It is important to understand that projected growth rates are not the cornerstone of this plan. If the projected population is reached earlier or later than anticipated, then future improvements to support growth may either come earlier or later. Impact Fees should not be significantly affected if the actual rate of growth varies from the rate used in the plan.

B. LENGTH OF PLANNING PERIOD

This Water Master Plan uses a 20-year planning period beginning in the year 2023 and running through year 2043. Water rights will be evaluated until the anticipated year of build-out. These planning periods are consistent with standard practice and will allow an adequate evaluation of the system for potential infrastructure improvements or other needs. It is assumed build-out will occur approximately at 8,557 ERU's, which at the assumed 4.0% growth rate would occur between 2043-2044.

C. EXISTING WATER CONNECTIONS

Culinary Connections

As of 2021, the city had 3,424 Equivalent Residential Units (ERUs). An ERU value allows the comparison of water use between a residential connection and any other type of connection. For instance, if a business connection has an ERU of 2.5, then it uses 2.5 times the water of an average residential connection. The city is servicing connections separated into residential, commercial, and “other” units and it is assumed that one residential unit is equal to one ERU. Table II.C-1 shows the anticipated number of ERUs at different points of the planning horizon.

Table II.C-1: Culinary Water Connections

Year	Type of ERU			
	Residential	Commercial	Other	Total
Present (2023)	3311	227	237	3,775
10-Year (2033)	4900	336	351	5,587
20-Year (2043)	7254	498	519	8,271
Build-out (~2044)	7505	515	537	8,557

It should be noted that the “other” ERUs account for churches, schools, and city owned and operated facilities.

It should also be noted that while townhome connections are included in the residential connections total, they use approximately one-third the amount of water of a typical residential home. According to Santa Clara City estimates, townhomes will also account for approximately one-third of future residential development.

Irrigation Connections

The City also has an irrigation water system that is used for city owned properties such as the parks, cemeteries, and the town hall. The Rhone Subdivision near the river comprising of Vernon Street and Old Farm Road is also metered for residential use. All other areas of the city that have access to the irrigation system are operated by the Santa Clara Field Canal Company. The system does not feed the entire city, so all other connections use the culinary water system for outdoor use.

The Canal Company provided a sample of 10 residential meter readings from 2021 comprising of some 0.25 acre lots and some 0.5 acre lots. The total number of Canal Company connections was obtained using provided record drawings and it was assumed all these connections were in service. The average usage from this sample was determined to be equal to 1 ERU. With this information the number of ERUs owned and metered by the city was identified. There are currently seven “Other” connections which consist of parks and government properties and 10 residential connections in the Rhone subdivision. The average 2021 usage in the Rhone subdivision was found to be less than the average Canal Company usage. To be conservative the Canal Company

SECTION II - SYSTEM USERS ANALYSIS

usage was used as the basis for 1 ERU. Table II.C-2 shows the anticipated number of ERUs at different points of the planning horizon.

Table II.C-2: Irrigation Water Connections

Year	ERUs				
	Residential (Metered by Canal Co.)	Residential (Metered by City)	Other (Metered by City)	Total (Metered by City)	Total
Present (2023)	643	4	123	127	770
10-Year (2033) Projects 1-5, Solace	643	348	175	523	1166
20- Year (2043) Black Desert, 4.0% growth rate	643	2043	260	2303	2946

D. HISTORICAL WATER USAGE

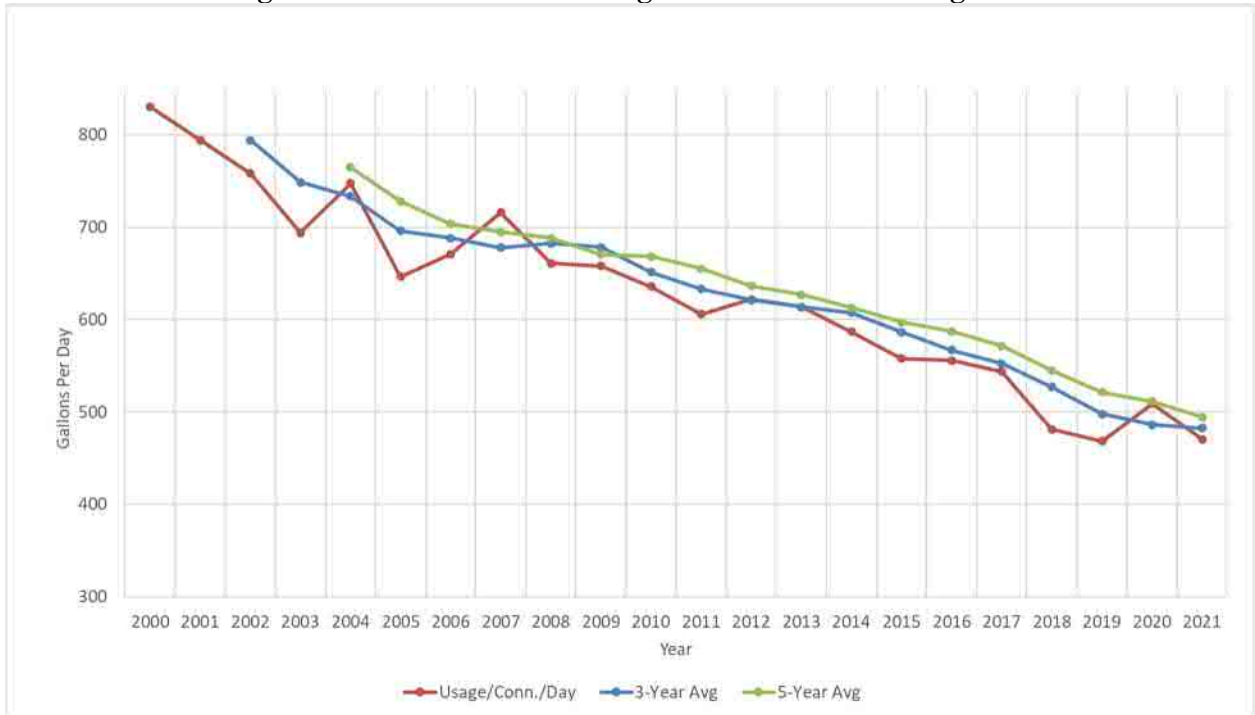
Culinary Usage

Culinary water usage data was also provided by the city for analysis. We were given total yearly water meter usage data from 2000 to 2021. The data has been tabulated and analyzed to determine usage trends for the city including the average usage per connection for the past 10, 5, and 3, years. The results of this analysis have been summarized in Table II.D-1 and Figure II.D-1.

Table II D-1: Average Culinary Water Usage

Residential	10 year Average	5 year Average	3 year Average
Usage (gallons)	475,287,750	500,683,800	510,887,333
Connections	2,386	2,781	2,900
Usage Per Connection (gal/year)	202,346	180,564	176,178
Daily Usage Per Connection (gal/day)	554	495	483
Commercial			
Usage (gallons)	14,430,000	22,314,800	27,273,667
Connections	54	36	39
Usage Per Connection (gal/year)	363,175	603,006	690,236
Daily Usage Per Connection (gal/day)	995	1,652	1,891
Equivalent Residential Unit	1.93	3.36	4.00
Non-Residential ERUs	76	125	155
Other			
Usage (gallons)	47,457,250	43,359,000	42,548,667
Connections	38	46	48
Usage Per Connection (gal/year)	1,573,890	940,419	897,140
Daily Usage Per Connection (gal/day)	4,312	2,576	2,458
Equivalent Residential Unit	7.54	5.21	5.00
Non-Residential ERUs	235	241	243
Total ERUs	2,696	3,147	3,297

Figure II. D-1: Santa Clara Average Residential Water Usage



The usage numbers presented above represent all uses of the culinary system, including outdoor usage for those who do not have irrigation access.

Typical trends in the area show that water usage per ERU has been trending down due to conservation efforts from individuals and usage rate structures promoting conservation. It has been found that Santa Clara usage has been trending down at a rate of approximately 2.5% each year on average.

The 3-year average of **483 gallons per ERU per day** from 2019-2021 shown in Table II.D-1 above will be used in this analysis for the estimated 2023 usage. Following this conservative estimate, future usage will decrease each year by the historic -2.5% trend for the next five years followed by a 0.5% reduction every five years following (resulting in 2.0% in 2027, 1.5% in 2032, etc.).

Water usage also varies significantly throughout the year. During winter months, water usage typically goes down as outside watering becomes unnecessary. Peak water usage generally corresponds to summer months when outdoor watering is at its peak. To remain consistent with common practice, the peak demand for this report will use a peaking factor of 2.0 to result in a peak day demand of **966 gallons per day** for 2023.

Irrigation Usage

Irrigation water usage was provided by the city for the city metered residential and City Owned (Other) connections for the year 2021. The Canal Company provided meter data for 10 of their connections, which ended up being higher than the 10 residential city metered connections by approximately 2.6 times. Because of this it was assumed each future residential connection will have the same average usage as the existing canal company metered residential connections rather than the existing city metered connections. The data has been analyzed to determine usage trends for the city including the average usage per connection. The results of this analysis have been summarized in Table II.D-2.

Table II D-2: Irrigation Water Usage

Canal Company Residential (Based on Sample)	2,021
Usage (gallons)	222,705,751
Connections	643
Usage Per Connection (gal/year)	346,354
Daily Usage Per Connection (gal/day)	949
City Owned Residential	
Usage (gallons)	1,312,000
Connections	10
Usage Per Connection (gal/year)	131,200
Daily Usage Per Connection (gal/day)	359
Equivalent Residential Unit	0.38
ERUs	4
City Owned "Other"	
Usage (gallons)	42,542,000
Connections	7
Usage Per Connection (gal/year)	6,077,429
Daily Usage Per Connection (gal/day)	16,650
Equivalent Residential Unit	17.55
Non-Residential ERUs	123
Total Irrigation ERUs (City Owned/Metered)	127
Total Irrigation ERUs	770

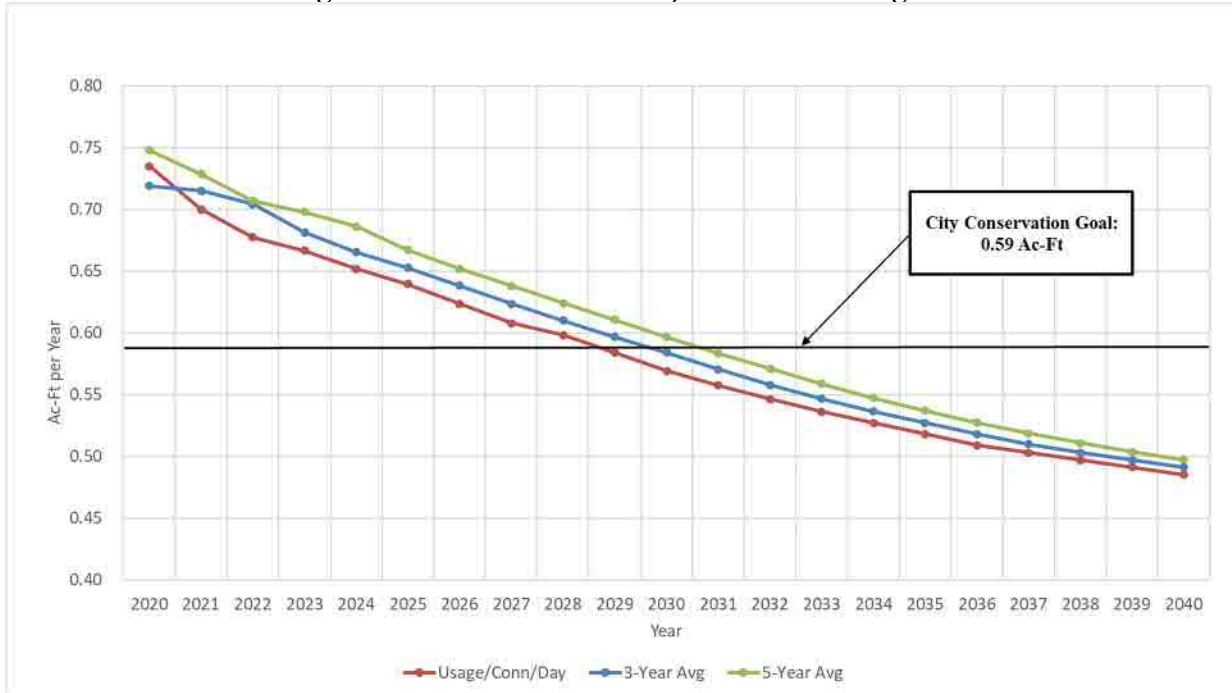
The average usage per residential connection is calculated to be **949 gallons per day**. This value is an average based on the number of active connections metered by the canal company in 2021. Future usage is assumed to follow the same negative trend of 2.5% as the culinary system.

Water usage also varies significantly throughout the year. During winter months, water usage typically goes down as outside watering becomes unnecessary. Peak water usage generally corresponds to summer months when outdoor watering is at its peak. To remain consistent with common practice, the peak demand for this report will use a peaking factor of 2.0 to result in a peak day demand of **1,898 gallons per day** for current irrigation water ERUs.

Combined Usage

The city has a goal to conserve usage to 0.59 ac-ft per connection per year for all culinary and irrigation usage. The 3-year average shows the current total usage to be 0.71 ac-ft per connection per year. With the population growth projection of 4.0% and the usage decrease of 2.5% for the next five years followed by a 0.5% reduction every five years following (resulting in a 2.0% in 2027, 1.5% in 2032, etc.), it is estimated the city goal should be reached by 2030. This is shown in Figure II.D-2 below.

Figure II. D-2: Santa Clara Projected Future Usage



The usage numbers presented above represent all uses of the culinary and irrigation systems, indoor and outdoor.

III. WATER RIGHTS ANALYSIS

A. EXISTING WATER RIGHT

The existing Santa Clara City water rights are identified in Table III.A-1 below. The water rights are listed according to number, source, and flow and separated between Culinary and irrigation sources. Santa Clara currently has an agreement with St. George City in regard to the Springs as a source. St. George has access to the springs for irrigation use, and in return Santa Clara receives a credit to access St. George culinary rights equal to the amount St. George uses in irrigation from the springs. St. George pulls from WR #81-742 and so the flow is not included in the total for this analysis.

Table III.A-1: Santa Clara Water Rights

Culinary Water Rights		Flow		
W.R. #	Source	gpm	cfs	AcFt.
81-782	Snow Canyon Compact	224.4	0.50	362.0
81-973	Snow Canyon Compact	439.8	0.98	709.5
81-893	Snow Canyon Wells # 6 & 7	897.6	2.00	1447.9
81-4123	Snow Canyon Wells # 6 & 7	1.7	0.00	2.7
81-4225	Snow Canyon Wells # 6 & 7	12.4	0.03	20.0
81-4226	Snow Canyon Wells # 6 & 7	5.2	0.01	8.4
	WCWCD Regional Supply Agreement			
Sub Total		1,581.2	3.5	2,550.6
81-149	Sheep Spring (Not in Use)	8.1	0.02	13.0
81-741	Miller, Beecham & Gray Springs (Not in Use)	54.7	0.12	88.3
81-742	Miller, Beecham & Gray Springs (St. George Agreement: Not Included in Total)	25.1	0.06	40.5
81-1061	Miller Springs (Not in Use)	4.9	0.01	8.0
Sub Total		67.7	0.2	109.3
Total Culinary		1581.2	3.52	2659.8
Secondary Water Rights		Flow		
W.R. #	Source	gpm	cfs	AcFt.
81-1496	J. Ross Hurst Entrada Well (Irrigation)	16.3	0.04	26.2
81-4189	Rex Jackson Sunbrook Well (Irrigation)	58.9	0.13	95.0
81-497	Crystal Lakes Sunbrook Well (Irrigation)	74.4	0.17	120.0
81-475	Ralph Hafen Well (Irrigation)	4.7	0.01	7.6
81-4184	McDermitt Well	93.0	0.21	150.0
Sub Total		247.2	0.6	398.8
	Irrigation Company 24 Shares (McDermitt)	0.0	0.00	96.0
	Irrigation Company 25.25 Shares (Santa Clara)	0.0	0.00	101.0
Sub Total		0.0	0.0	197.0
Total Secondary		247.2	0.6	595.8

The city currently participates in the Washington County Water Conservancy District (WCWCD) Regional Water Supply Agreement (RWSA) as a solution for additional culinary water sources. The city also has an agreement with the Santa Clara Field Canal Company as a solution for

additional irrigation water sources. Both agreements provide the mechanism for water to be supplied if there is not enough water right or source necessary for growth.

B. EXISTING REQUIRED CULINARY WATER RIGHT

The State of Utah Public Administrative Rules for Public Drinking Water Systems, R309-510, states that a community should have adequate water right to supply each culinary ERU with 400 gallons per day for indoor water use, plus an amount for outdoor use as dictated by irrigated acreage and a consumptive use value obtained from the State guidelines. If adequate data exists, the provider is allowed to substitute historical usage data instead. The city historical average usage of 483 gallons per day per ERU will be used in this plan.

By multiplying the average water usage per ERU in the City by the number of existing ERUs, the current required amount of water rights can be determined as shown in Table III.B-1.

Table III.B-1: Current Required Water Right

Average Demand (Total Use)				
3,775 ERU's X	$\frac{483 \text{ gpd} \times \text{hr}}{\text{ERU min.}}$	=	1,266	gpm
3,775 ERU's X	$\frac{483 \text{ gpd} \times \text{Acft.}}{\text{ERU gal}}$	=	2,042	Acft
Total Required Water Right			2,042	Acft
Existing Culinary System Water Right Surplus			618	Acft
			315	gpm

The existing water right surplus or deficit is determined by subtracting the current required water right demand of 2,042 ac-ft from the total available water right of 2,660 ac-ft, which yields a surplus of 618 ac-ft. The district currently has access to enough water rights to supply all of its existing culinary ERUs.

C. PROJECTED REQUIRED CULINARY WATER RIGHT

The projected amount of required water rights at the end of the 10-year planning period and at build-out can also be calculated by substituting the projected number of ERUs into the calculation for the current number of ERUs as shown in Table III.C-1 and Table III.C-2.

SECTION III – WATER RIGHTS ANALYSIS

Table III.C-1: Projected 10-Year Required Water Right

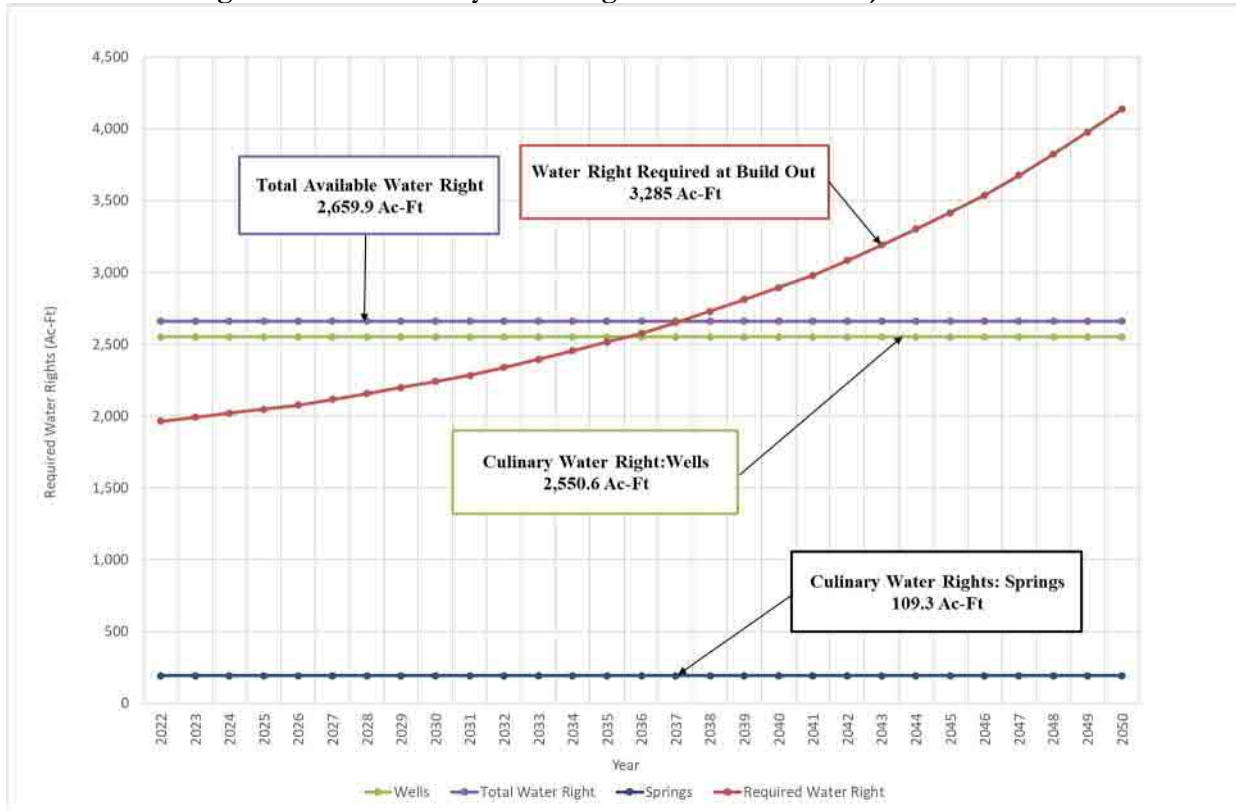
Average Demand (Total Use)				
5,587 ERU's X	$\frac{383 \text{ gpd X hr}}{\text{ERU min.}}$	=	1,485	gpm
5,587 ERU's X	$\frac{383 \text{ gpd X Acft.}}{\text{ERU gal}}$	=	2,396	Acft
Total Required Water Right			2,396	Acft 1,485 gpm
Existing Culinary System Water Right Surplus			264	Acft 96 gpm

Table III.C-2: Projected Build-Out Year Required Water Right

Average Demand (Total Use)				
8,557 ERU's X	$\frac{343 \text{ gpd X hr}}{\text{ERU min.}}$	=	2,036	gpm
8,557 ERU's X	$\frac{343 \text{ gpd X Acft.}}{\text{ERU gal}}$	=	3,285	Acft
Total Required Water Right			3,285	Acft 2,036 gpm
Existing Culinary System Water Right Deficit			(734)	Acft (455) gpm

The projected water right surplus or deficit is determined by subtracting the projected required water right from the total available water right. The 10-year projection results in a surplus of 264 ac-ft, and the build-out projection results in a deficit of 734 ac-ft. Figure III.C-1 shows the projected culinary water right demands vs. the City's existing available water right resources throughout the planning period.

Figure III.C-1: Culinary Water Right Resources vs. Projected Demand



D. EXISTING REQUIRED IRRIGATION WATER RIGHTS

Most of the irrigation system in Santa Clara is owned and operated by the Canal Company. Because of this, the city water rights will only need to service the connections owned by the city. By multiplying the average water usage per ERU in the City by the number of existing ERUs, the current required amount of water rights can be determined as shown in Table III.D-1.

Table III.D-1: Current Required Water Right

Average Demand (Total Use)				
127 ERU's X	$\frac{949 \text{ gpd} \times \text{hr}}{\text{ERU min.}}$	=	83 gpm	
127 ERU's X	$\frac{949 \text{ gpd} \times \text{Acft.}}{\text{ERU gal}}$	=	135 Acft	
Total Required Water Right			135 Acft	83 gpm
Existing Culinary System Water Right Surplus			461 Acft	164 gpm

The existing water right surplus or deficit is determined by subtracting the current required water right demand of 135 ac-ft from the total available water right of 596 ac-ft, which yields a surplus

of 461 ac-ft. The district currently has access to enough water rights to supply all of its existing ERUs.

E. PROJECTED REQUIRED IRRIGATION WATER RIGHTS

The projected amount of required water rights at the end of the 10-year planning period and at the end of the 20-year planning period can also be calculated by substituting the projected number of ERUs into the calculation for the current number of ERUs as shown in Table III.E-1 and Table III.E-2.

Table III.E-1: Projected 10-Year Required Water Right

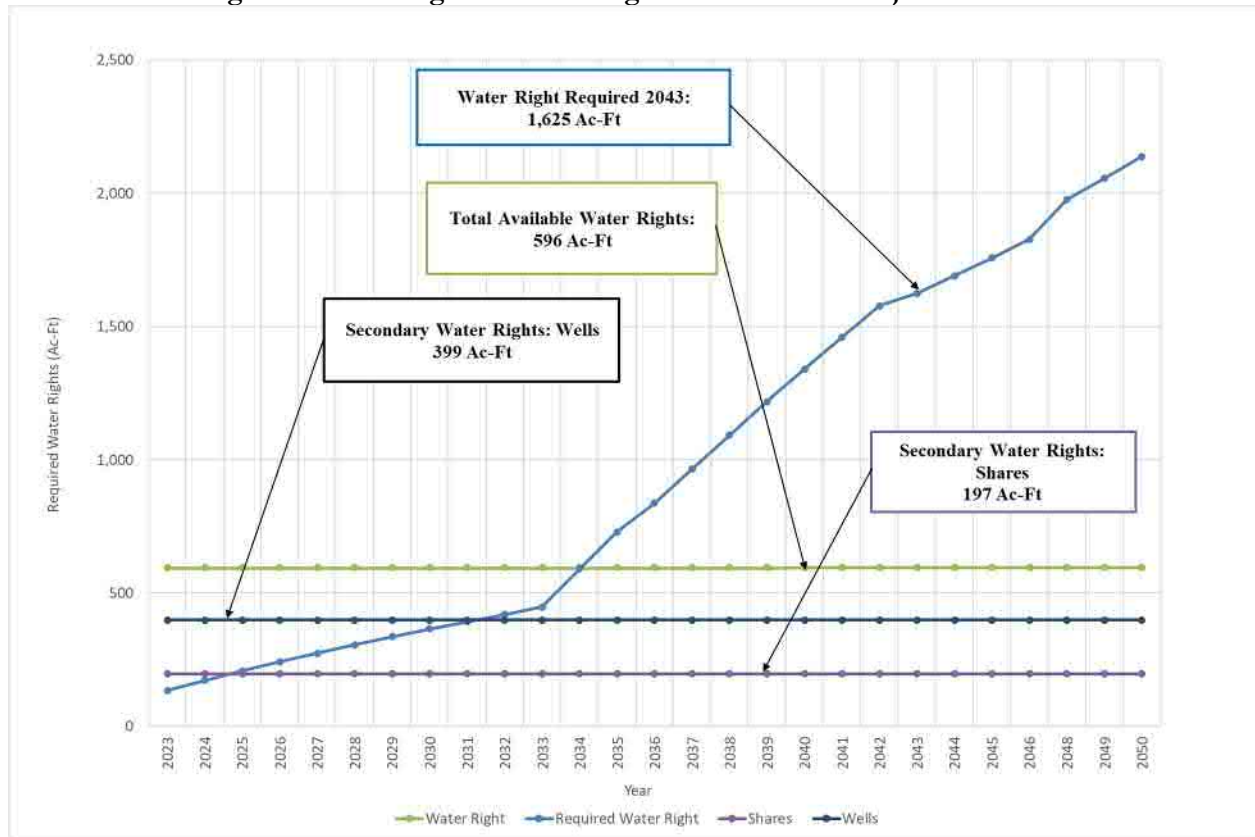
Average Demand (Total Use)				
523 ERU's X	$\frac{764 \text{ gpd X hr}}{\text{ERU min.}}$	=	278	gpm
523 ERU's X	$\frac{764 \text{ gpd X Acft.}}{\text{ERU gal}}$	=	448	Acft
Total Required Water Right			448	Acft
Existing Culinary System Water Right Surplus			148	Acft
			(30)	gpm

Table III.E-2: Projected 20- Year Required Water Right

Average Demand (Total Use)				
2,303 ERU's X	$\frac{630 \text{ gpd X hr}}{\text{ERU min.}}$	=	1,008	gpm
2,303 ERU's X	$\frac{630 \text{ gpd X Acft.}}{\text{ERU gal}}$	=	1,625	Acft
Total Required Water Right			1,625	Acft
Existing Culinary System Water Right Deficit			(1,029)	Acft
			(760)	gpm

The projected water right surplus or deficit is determined by subtracting the projected required water right from the total available water right. The 10-year projection results in a surplus of 148 ac-ft, and the 20-year projection results in a deficit of 1,029 ac-ft. Figure III.C-1 shows the projected irrigation water right demands vs. the City's existing available water right resources throughout the planning period.

Figure III.C-1: Irrigation Water Right Resources vs. Projected Demand



F. RECOMMENDED IRRIGATION WATER RIGHT IMPROVEMENTS

Culinary Recommendation

The projections in this analysis show that the City does not have sufficient water rights to meet the needs of customers over the next 20 years and through the projected year of build-out. However, the RWSA in place provides additional water to the city if needed. It is recommended that Santa Clara City protect all existing water rights not currently being used in their system. It is not in the scope of this report to derive specific recommendations for each individual right or provide detailed analysis of protections or strategies. However, a recent Water Right Report was performed, and the recommendations listed have been included below. Further consultations with a water rights professional to make sure that all the water rights and agreements are protected is recommended.

- WR #81-782: Update the Title from “Town of Santa Clara” to “City of Santa Clara”
- WR #81-973: Update the Title from “Town of Santa Clara” to “City of Santa Clara”
- WR #81-149: Update the Title from “Town of Santa Clara” to “City of Santa Clara”
- WR #81-741: Update the Title from “Town of Santa Clara” to “City of Santa Clara” and have the state update and correct flow rate error

- WR #81-742: Update the Title from “Town of Santa Clara” to “City of Santa Clara” and Proof of Beneficial Use
- WR #81-1061: Update the Title from “Town of Santa Clara” to “City of Santa Clara”

Irrigation Recommendation

The projections in this analysis show that the City has sufficient water rights to meet the needs of customers over the next 10 years if the well water rights are accessed. If the 49.25 shares are the only water rights utilized there are not sufficient water rights to meet the needs of the customers once city projects and planned developments are completed. If the City exceeds its water shares they can purchase water from the irrigation company, but it is recommended that the city obtain additional shares to mitigate the need for this. An opinion of probable cost for purchasing shares to cover growth has been included in the appendix of this report.

It is also recommended that Santa Clara City protect all existing water rights not currently being used in their system. It is not in the scope of this report to derive specific recommendations for each individual right or provide detailed analysis of protections or strategies. However, a recent Water Right Report was performed, and the recommendations listed have been included below. Further consultations with a water rights professional to make sure that all the water rights and agreements are protected is recommended.

- WR #81-475: File a change application for municipal use
- WR #81-497: File a change application for municipal use
- WR #81-1496: File a change application for municipal use
- WR #81-4184: Proof of Beneficial Use is past due
- WR #81-4189: File a change application for municipal use

IV. WATER SOURCE CAPACITY ANALYSIS

A. EXISTING CULINARY WATER SOURCE CAPACITY

To analyze source capacity, all available culinary water sources must first be identified. The City has several shared wells and an agreement that only allows them to have 24.7% of the capacity. Well flows were provided by the city and the total flow incorporating this percentage gives Santa Clara 2,662 gpm of source capacity as shown in Table IV.A-1 below.

Table IV.A-1: Santa Clara Culinary Water Source Capacity

Shared Wells	Total Flow	Santa Clara's 24.7%	
	gpm	CFS	gpm
Snow Canyon #3a	530	0.292	131
Snow Canyon #2	600	0.330	148
Snow Canyon #3	430	0.237	106
Snow Canyon #4	500	0.275	124
Snow Canyon #5	215	0.118	53
Sub-total Shared Wells =		1.252	562
Santa Clara Owned Sources		CFS	gpm
Snow Canyon Well #6		2.005	900
Snow Canyon Well #7		1.114	500
Regional Water Line / Wash. County water district ?		1.560	700
Sub-total Santa Clara Owned Water =		4.679	2,100
Total Culinary Water Source=		5.931	2,662

B. EXISTING REQUIRED CULINARY WATER SOURCE CAPACITY

The State of Utah Public Administrative Rules for Public Drinking Water Systems, R309-510, states that a water system should have an adequate water source capacity to supply peak day demand. This is implied to be twice the amount of average day demand. Doubling the historical usage results in a peak day demand of 966 gpd/ERU.

By multiplying the peak day culinary water usage per ERU by the number of existing ERUs, the existing required culinary water source capacity was determined. This calculation is shown below in Table IV.B-1.

Table IV.B-1: Current Required Culinary Water Source Capacity

Required Indoor/Outdoor Source					
3,775	ERU's	X	966	gpd	X
			ERU	24 hr	X
				1 day	X
				1 hr	
					= 2,532 gpm
Total Required Source Capacity					2,532 gpm
Existing Culinary System Source Capacity Surplus					130 gpm

SECTION IV – WATER SOURCE CAPACITY ANALYSIS

The existing source capacity surplus or deficit is determined by subtracting the existing required source capacity of 2,532 gpm from the total available source capacity of 2,662 gpm (as limited by the water right and well share agreement), which yields a surplus of 130 gpm.

C. PROJECTED REQUIRED CULINARY WATER SOURCE CAPACITY

The projected amount of required source capacity at the end of the 10-year planning period and at build-out is determined from the same information and calculations explained in Part B, except the projected number of culinary water ERUs is substituted into the calculations for the current number of ERUs as shown in Table IV.C-1 and Table IV.C-2.

Table IV.C-1: Projected 10-Year Required Culinary Water Source Capacity

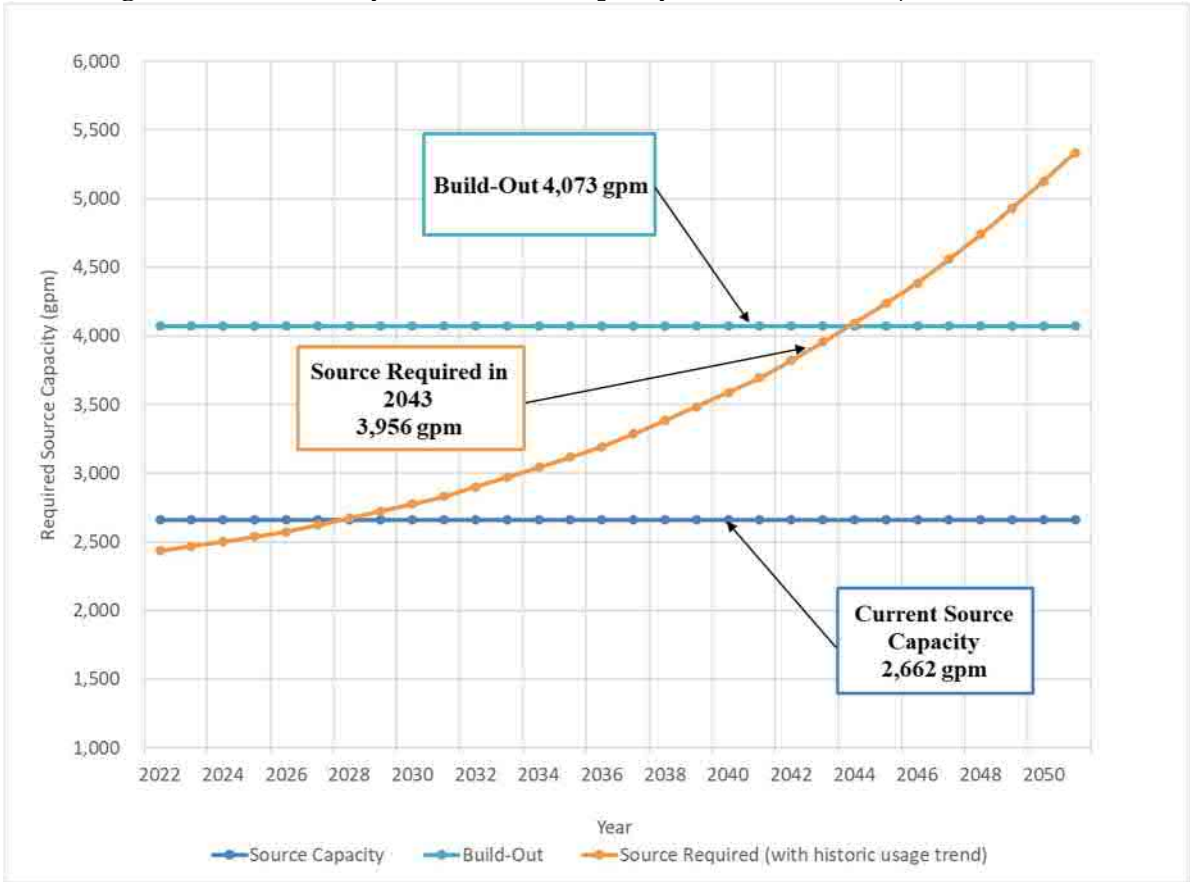
Required Indoor/Outdoor Source					
5,587	ERU's	X	$\frac{766 \text{ gpd}}{\text{ERU}}$	X $\frac{1 \text{ day}}{24 \text{ hr}}$	X $\frac{1 \text{ hr}}{60 \text{ min.}}$
					= 2,971 gpm
Total Required Source Capacity					2,971 gpm
Existing Culinary System Source Capacity Deficit					(309) gpm

Table IV.C-2: Projected Build-out Required Culinary Water Source Capacity

Required Indoor/Outdoor Source					
8,557	ERU's	X	$\frac{685 \text{ gpd}}{\text{ERU}}$	X $\frac{1 \text{ day}}{24 \text{ hr}}$	X $\frac{1 \text{ hr}}{60 \text{ min.}}$
					= 4,073 gpm
Total Required Source Capacity					4,073 gpm
Existing Culinary System Source Capacity Deficit					(1,411) gpm

The projected source capacity surplus or deficit is determined by subtracting the projected required source capacity from the total available source capacity. The 10-year projection results in a deficit of 309 ac-ft, and the build-out projection results in a deficit of 1,411 ac-ft. Figure IV.C-1 shows the projected culinary water source capacity demands vs. the City's existing available source capacity resources throughout the planning period.

Figure IV.C-1: Culinary Water Source Capacity Resources vs. Projected Demands



D. RECOMMENDED CULINARY WATER SOURCE CAPACITY IMPROVEMENTS

The projections in this analysis show that the City does not have sufficient source capacity to meet the needs of customers over the next 20 years and through the projected year of build-out. It is recommended that the city drill and equip a new well to increase their source capacity.

V. WATER STORAGE CAPACITY ANALYSIS

A. EXISTING CULINARY WATER STORAGE CAPACITY

To analyze storage capacity, all available culinary water storage must first be identified. The existing storage facilities consist of three concrete tanks. The total storage is 4,100,000 gallons as shown in Table V.A-1 below.

Table V.A-1: Santa Clara Culinary Water Storage Capacity

Existing Storage Capacity:	
Snow Canyon Compact tanks	600,000 gal.
Concrete tank at Snow Canyon	2,500,000 gal.
South Hills Tank	1,000,000 gal.
Total Existing Capacity =	4,100,000 gal.

B. EXISTING REQUIRED CULINARY WATER STORAGE CAPACITY

Water storage capacity requirements are found in the State of Utah Administrative Rules for Public Drinking Water Systems, R309-510. These regulations require storage for a community's culinary water system to meet one full day's use requirement for all water connections, plus the required fire flows for a minimum of one hour.

As shown in previous sections, the average water use per ERU is 483 gallons per day of culinary water for indoor and outdoor use. Storage requirements for fire protection vary slightly from community to community. In general, fire flow requirements are set by the local Fire Chief or are based on building size and type of construction. The Statewide minimum fire flow is 1,000 gpm for dwellings under 3,600 square feet and 1,500 gpm for larger dwellings. Based on the varying size of homes in the city a fire flow of 1,250 gpm will be used. Based on this information, the current required storage capacity is calculated as shown in Table V.B-1.

Table V.B-1: Current Required Culinary Water Storage Capacity

Required Culinary Water Storage Capacity									
	483	gpd	X	3,775	ERU	=	1,823,140	gpd	
	ERU								
1,250	gpm	X	60	min	X	2 hr	=	150,000	gal.
	1					hr			
Total Existing Required Storage							1,973,140	gal.	
Total Existing Capacity							4,100,000	gal.	
Existing Capacity Surplus							2,126,860	gal.	

SECTION V – WATER STORAGE CAPACITY ANALYSIS

The existing water storage capacity surplus or deficit is determined by subtracting the current required water storage capacity of 1,973,140 gallons from the total available water storage capacity of 4,100,000 gallons, which yields an existing surplus of 2,126,860 gallons.

C. PROJECTED REQUIRED CULINARY WATER STORAGE CAPACITY

The projected required culinary water storage capacity at the end of the 10-year planning period and build-out are determined from the same factors explained previously, but the projected number of culinary water ERUs is inserted into the calculations as shown in Table V.C-1 and Table V.C-2.

Table V.C-1: Projected 10-Year Required Culinary Water Storage Capacity

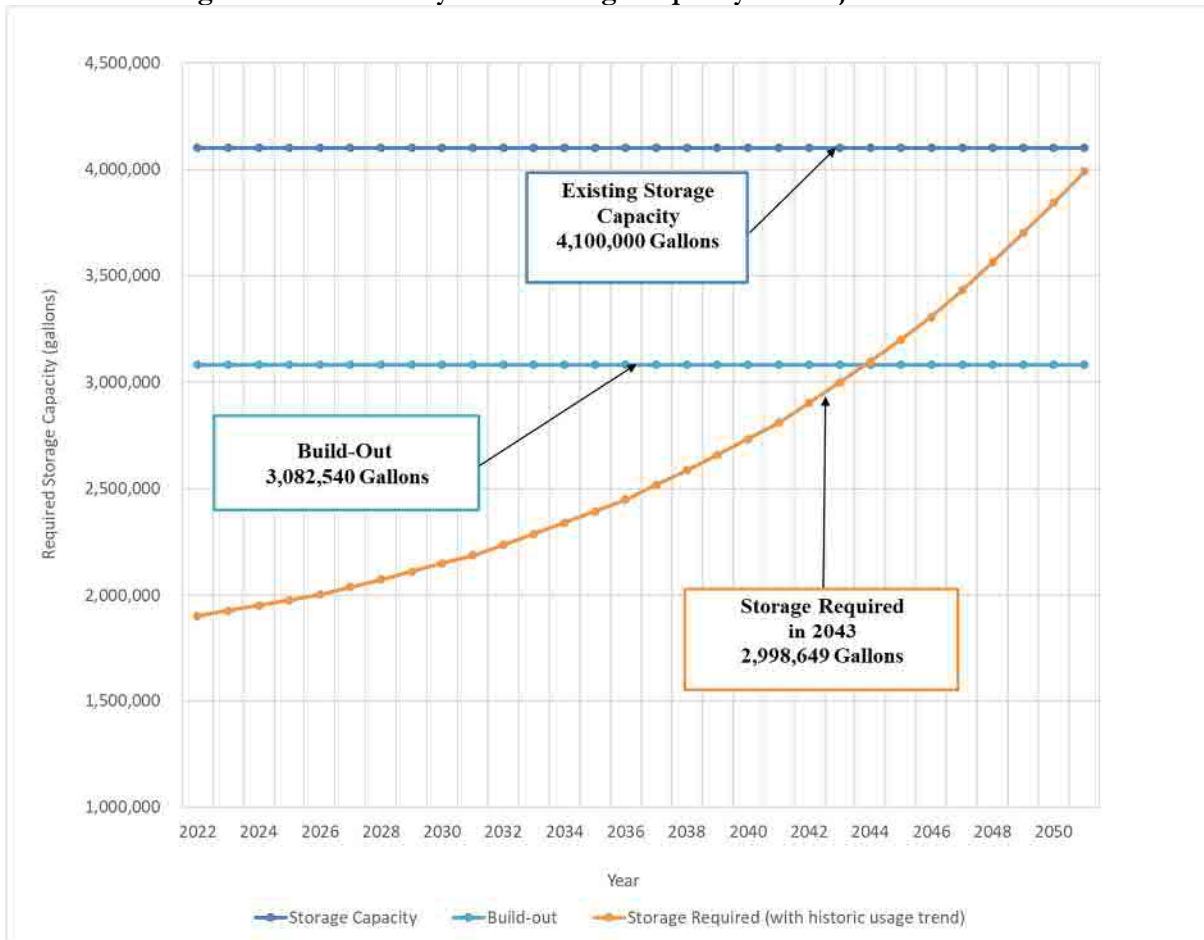
Required Culinary Water Storage Capacity						
	383 gpd	X	5,587 ERU	=		2,138,823 gpd
	ERU					
1,250 gpm	X	60 min	X	2 hr	=	150,000 gal.
		1 hr				
Total Existing Required Storage						2,288,823 gal.
Total Existing Capacity						4,100,000 gal.
Existing Capacity Surplus						1,811,177 gal.

Table V.C-2: Projected Build-out Required Culinary Water Storage Capacity

Required Culinary Water Storage Capacity						
	343 gpd	X	8,557 ERU	=		2,932,540 gpd
	ERU					
1,250 gpm	X	60 min	X	2 hr	=	150,000 gal.
		1 hr				
Total Required Storage						3,082,540 gal.
Total Existing Capacity						4,100,000 gal.
Future Capacity Surplus						1,017,460 gal.

The projected water storage capacity surplus or deficit is determined by subtracting the projected required water storage capacity. The 10-year projection results in a surplus of 1,811,177 gallons, and the build-out projections results in a surplus of 1,017,460 gallons. Figure V.C-1 shows the projected culinary water storage capacity demands vs. the City's existing available storage capacity resources throughout the planning period.

Figure V.C-1: Culinary Water Storage Capacity vs. Projected Demands



The district has adequate storage for emergency fire flow and average flows for the 20-year planning horizon and until estimated year of build-out.

D. EXISTING ELEVATION CONSTRAINTS

It should be mentioned that, based on minimum pressure requirements at the service connections, the existing tanks have limitations on the development elevations that the tanks can serve. Currently the areas in Santa Clara’s zoning map designated for future development do not raise any concerns. However, if the “South Hills” area currently zoned as “Open Space” is ever developed this area will require a new tank to accommodate the higher elevation.

E. RECOMMENDED CULINARY WATER STORAGE CAPACITY IMPROVEMENTS

The projections in this analysis show that the City has sufficient storage capacity to meet the needs of customers until build-out. It is recommended that the city continue to watch usage trends and population growth and prepare accordingly.

VI. WATER TREATMENT REQUIREMENTS

A. GENERAL REQUIREMENTS

Santa Clara City currently does not chlorinate its culinary water as it is already chlorinated by the Snow Canyon Compact. However, the tank facility in the South Hills was designed with the capability to generate and dose water in the tank with sodium hypochlorite should the chlorine level in the tank drop below acceptable levels.

The Snow Canyon Compact wells currently provide water that exceeds the maximum arsenic levels allowed by the E.P.A. for drinking water. The current practice is to treat this water as necessary by dilution with WCWCD Regional Water at the approximate ratio of 63:37 compact water to regional water and mixing with water from Wells 6 and 7. There are no plans to modify this procedure; however, the City of St. George has recently completed an arsenic treatment plant for the Gunlock Well Fields. This may provide an additional treated source for exchange or mixing. There are treatment options available if necessary.

B. RECOMMENDED WATER TREATMENT FACILITY IMPROVEMENTS

No additional water treatment is anticipated with the City's current system. However, continued vigilance is recommended to ensure that the chlorine residual is maintained at various points in the system. Should the water need a chlorine residual, there are several options that the city can consider. One option is to add a sodium hypochlorite plant to generate the chlorine onsite, which can then be injected into the system.

VII. WATER DISTRIBUTION SYSTEM ANALYSIS

A. EXISTING CULINARY DISTRIBUTION SYSTEM ANALYSIS

The State of Utah Administrative Rules for Public Drinking Water Systems, R309-510, require distribution systems to be sized to supply peak instantaneous flows, while maintaining a minimum system pressure of 30 psi. The rule also requires that distribution systems are able to supply peak day flows plus fire flows for a minimum of 1 hour, while maintaining a minimum system pressure of 20 psi. The system also needs to provide peak day flows while maintaining a minimum system pressure of 40 psi. As a general guideline, it is recommended that the system be able to provide a minimum static pressure of 50 psi at every point in the distribution system.

The indoor peak instantaneous demand equation (see Table VII.A-1) is found in the State of Utah Public Administrative Rules for Drinking Water Systems, R309-510. This rule also provides a flow requirement of 9.8 gpm per irrigated acre for use in determining the outdoor peak instantaneous demand. By taking a representative sample of homes/yards in Santa Clara and averaging the area of irrigated landscaping, an average area of 0.13 irrigated acres per ERU was determined and used to estimate the outdoor peak instantaneous demand. The number of outdoor ERUs represents the estimated number of existing ERUs using culinary water for irrigation. This was done by subtracting the number of irrigation ERUs from the total culinary ERUs.

Table VII.A-1: Current Required Distribution Demands

Indoor Peak Instantaneous Demand:					
Q=	10.8 X N ^{.64}	N= Number of ERU's			
Q=	10.8 X (3775) ^{.64}				
Q=				=	2,102 gpm
Outdoor Peak Instantaneous Demand:					
	2,937 ERU X	0.13 acre	9.8 gpm	=	3,742 gpm
		ERU	irr. acre		
Current Peak Instantaneous Demand				=	5,844 gpm
Peak Day Demand & Fire Flow					
3,775 ERU's X	966 gpd X	1 day	1 hr	=	2532 gpm
	ERU	24 hr	60 min.		
Fire Flow				=	1,250 gpm
Current Peak Day Demand + Fire Flow				=	3,782 gpm

As previously discussed, the peak day demand is twice the average amount of historical usage, or 966 gpd/ERU. The State regulation for fire flow requires a minimum of 1,000 gpm, but the City

SECTION VII – WATER DISTRIBUTION SYSTEM ANALYSIS

has identified 1,250 gpm as a goal for all hydrants throughout the City and therefore 1,250 gpm has been used for this analysis. State regulations require all fire hydrants to be served from 8-inch diameter or larger pipelines unless it can be proven through the use of modeling that 6-inch lines are sufficient.

The existing Santa Clara culinary water distribution system has been modeled for these demands using the computer program infowater® by Innovyze®. The main network of Santa Clara City's distribution system appears to be providing good service to the majority of connections. At the existing peak day demand, the model shows that all the junctions in the system are able to produce the required fire flows while maintaining the minimum required pressure of 20 psi at all other connections. The system was capable of maintaining pressures of 30 psi at all nodes while experiencing peak instantaneous demands and 40 psi while experiencing peak day demands.

B. PROJECTED CULINARY DISTRIBUTION SYSTEM ANALYSIS

The projected distribution system analysis is performed using the same assumptions as in the existing system analysis, except that the projected number of ERUs in 2043 are inserted into the calculations. Table VII.B-1 subtracts the projected number of irrigation ERUs in 2043 without the irrigation recommended improvements and Table VII.B-2 subtracts the projected number of irrigation ERUs in 2043 with the recommended irrigation improvement projects. These recommendations have been made to aid in conservation and can be seen in the following section VIII.

Table VII.B-1: Projected 20-Year Required Distribution Demands without Irrigation Projects

Indoor Peak Instantaneous Demand:				
Q=	10.8 X N ^{.64}	N= Number of ERU's		
Q=	10.8 X 8,271 ^{.64}			
Q=		=	3,473	gpm
Outdoor Peak Instantaneous Demand:				
3,162 ERU. X	0.13 acre	X	9.8 gpm	= 4,028 gpm
	conn.		irr. acre	
Projected Peak Instantaneous Demand			=	7,501 gpm
Peak Day Demand & Fire Flow				
8,271 ERU's X	689 gpd X	1 day	1 hr	= 3,956 gpm
	ERU	24 hr	60 min.	
Fire Flow			=	1,250 gpm
Projected Peak Day Demand + Fire Flow			=	5,206 gpm

SECTION VII – WATER DISTRIBUTION SYSTEM ANALYSIS

Table VII.B-2: Projected 20-Year Required Distribution Demands with Irrigation Projects

Indoor Peak Instantaneous Demand:					
Q=	10.8 X N ^{.64}		N= Number of ERU's		
Q=	10.8 X 8,271 ^{.64}				
Q=				=	3,473 gpm
Outdoor Peak Instantaneous Demand:					
	2,714 ERU. X	0.13 acre X	9.8 gpm	=	3,457 gpm
		conn.	irr. acre		
Projected Peak Instantaneous Demand				=	6,930 gpm
Peak Day Demand & Fire Flow					
8,271 ERU's X	689 gpd X	1 day	1 hr	=	3,956 gpm
	ERU	24 hr	60 min.		
Fire Flow				=	1,250 gpm
Projected Peak Day Demand + Fire Flow				=	5,206 gpm

Modeling the future system without any improvements projected that the system is capable of maintaining pressures of 30 psi at all nodes while experiencing peak instantaneous demands and 40 psi while experiencing peak day demands. The system is also capable of providing the minimum required pressure of 20 psi while producing the required fire flow. However, there were areas in the system where pipe flow velocities are anticipated to be above 5 ft/s. Recommendations have been made to decrease flows in these areas.

A final model incorporating the recommended culinary distribution system improvements has also been created. This system was modeled using the projected 2043 system demands with and without irrigation improvements. With these modifications, the system will be able to meet all state requirements and protect pipes by decreasing velocity.

C. EXISTING IRRIGATION DISTRIBUTION SYSTEM ANALYSIS

Unlike Culinary water systems, there are no State irrigation system requirements regarding pressure. However, the same general guideline Sunrise recommends for culinary systems was used for the irrigation distribution system analysis. Namely, that the system be able to provide a minimum static pressure of 50 psi at every point in the distribution system.

The peak day demand, which is twice the average usage of 719 gpd/ERU has been used in this analysis and shown Table VII.C-1.

SECTION VII – WATER DISTRIBUTION SYSTEM ANALYSIS

Table VII.C-1: Current Required Distribution Demands

$$127 \text{ ERU's} \times \frac{1,898 \text{ gpd}}{\text{ERU}} \times \frac{1 \text{ day}}{24 \text{ hr}} \times \frac{1 \text{ hr}}{60 \text{ min.}} = 167 \text{ gpm}$$

The existing Santa Clara irrigation water distribution system has been modeled for these demands using the computer program infowater® by Innovyze®. The main network of Santa Clara City's distribution system appears to be providing sufficient service to all of the connections. At the existing average day demand and peak day demand, the model shows that all the junctions in the system are able to produce the recommended 50 psi.

D. PROJECTED IRRIGATION DISTRIBUTION SYSTEM ANALYSIS

The projected distribution system analysis is performed using the same assumptions as in the existing system analysis, except that the projected number of ERUs in 2043 are inserted into the calculations. The projected peak day demand is calculated in Table VII.D-1 below.

Table VII.D-1: Projected 20-Year Required Distribution Demands

$$2,303 \text{ ERU's} \times \frac{1,260 \text{ gpd}}{\text{ERU}} \times \frac{1 \text{ day}}{24 \text{ hr}} \times \frac{1 \text{ hr}}{60 \text{ min.}} = 2,015 \text{ gpm}$$

Modeling the future system with the included expansion projects shows that the system is capable of maintaining pressures of 50 psi at all nodes while experiencing peak demands. More infowater analysis information can be found in Appendix B.

E. RECOMMENDED DISTRIBUTION SYSTEM IMPROVEMENTS

In an effort to meet the State requirements for future demands and improve conservation efforts the following distribution system improvements are recommended. The recommendations exhibits are shown in Appendix A.

- New 12" line connecting North Hamblin Parkway to North Town Road
- 10" to 12" PRV Enlargement
- 12" Line to connect Wells 6/7 to the Snow Canyon Tank
- New 8" irrigation line along Riesling Avenue
- New of 8" irrigation line along Crestview Drive
- New 8" irrigation line to connect Villa Bonita subdivision
- New 8" line along North Town Road
- New 8" line along Sycamore Drive

VIII. SUMMARY OF RECOMMENDED SYSTEM IMPROVEMENTS

A. RECOMMENDED SYSTEM IMPROVEMENTS

Based on the findings from Sections III - VII, showing immediate system needs as well as requirements for growth projected over the next 20 years and build-out, it is recommended that the City proceed with a construction project to implement improvements as required to bring the system into conformance with State rules and maintain the same level of service. Table VIII.A-1 summarizes the recommended improvements.

Table VIII.A-1: Recommended System Improvements

RECOMMENDED WATER SYSTEM IMPROVEMENTS	
ANALYSIS	RECOMMENDED IMPROVEMENTS
1. Water Rights	Recommendations given in the Water Rights Report including: 1. Application changes 2. Title changes 3. Proof of Beneficial Use 4. State flow correction 5. Purchase additional Water Shares
2. Water Source Capacity	A new well
3. Water Storage Capacity	No Improvements
4. Water Treatment	Continue to monitor chlorine residual in system
5. Distribution System	1. New 12" line connecting North Hamblin Parkway to North Town Road 2. 10" to 12" PRV Enlargement 3. New 12" Line to connect Wells 6/7 to the Snow Canyon Tank 4. New 8" irrigation line along Riesling Avenue 5. New of 8" irrigation line along Crestview Drive 6. New 8" irrigation line to connect Villa Bonita subdivision 7. New 8" line along North Town Road 8. New 8" line along Sycamore Drive

B. PRELIMINARY ENGINEER’S OPINION OF PROBABLE COST

An Engineer’s Opinion of Probable Cost (EOPC) for the recommended water system improvements has been provided in Appendix D.

The EOPC includes all anticipated construction costs, contingency budgets, and all other normal project costs such as survey, administration, engineering, legal services, fiscal costs, rights-of-way, etc. A summary of the project cost estimates is included in Table VIII.B-1.

Table VIII.B-1: Project Cost Summary

Project Description	Total Cost
Culinary: Water Right Recommendations	\$ 18,000
Culinary: North Hamblin Pkwy to North Town Rd 12" Line	\$ 292,400
Culinary: 10" to 12" PRV Enlargement	\$ 208,550
Culinary: 12" Line Well Connection to Snow Canyon Tank	\$ 4,170,000
Culinary: New Well	\$ 2,114,350
Irrigation: Riesling Avenue 8" Line	\$ 136,140
Irrigation: Crestview Drive 8" Line	\$ 505,230
Irrigation: Villa Bonita 8" Line	\$ 99,900
Irrigation: North Town Road 8" Line	\$ 579,665
Irrigation: Sycamore Drive 8" Line	\$ 124,470
Irrigation: Claude Drive 8" Line	\$ 124,470
Irrigation: Additional Water Share Purchase	\$ 363,600
TOTAL PROJECT COSTS	\$ 8,736,775

C. PROPOSED FINANCING PLAN

The City plans to self-fund the proposed projects. Table VIII.C-1 outlines a sample financing scenario for the recommended improvements starting in fiscal year 2024/25. It is assumed that no grants will be received and that all projects will be completed within 14 years.

SECTION VIII – SUMMARY OF RECOMMENDED SYSTEM IMPROVEMENTS

TABLE VIII.C-1 PROPOSED FINANCING PLAN			
PROJECT COST 2024/25		\$	624,055
FY 2024/25 EXPENSES			
Proposed Funding:	Rate	Term in Yrs.	Principal
Self Participation			624,055
TOTAL PROJECT FUNDING:			\$624,055
EXPENSES: (First Year of New Debt Serv. Pmt.)			
Salaries, Wages, & Benefits (100's)			\$659,545
Materials & Supplies (200's)			\$444,095
Professional & Technical Services (300's)			\$51,577
Special Dept. Materials & Supplies (400's)			\$70,481
Other Charges (500's)			\$28,411
Capital Expenses (700's)			\$178,115
Others (900's)			\$658,344
Subtotal Operations and Maintenance:			\$2,090,567
EXISTING DEBT SERVICE	Not Impact Fee Eligible		
Debt Payment to Water District	58%		\$36,888
All other Debt			\$165,719
Subtotal Existing Annual Debt Service:			\$202,607
Renewal and Replacement Fund			\$156,349
GRAND TOTAL EXPENSES:			\$3,073,578
ANNUAL INCOME			
Other Operating Revenues			58,460.89
Interest Income			41,554.41
Connection Fees			36,885.00
Impact Fees			480,022.65
Total Number Of ERU's			3,926
Average Monthly Water User Rate/ERU (Without WCWCD Surcharge)			\$52.15
WCWCD Surcharge			\$1.75
Average Monthly Water User Rate/ERU (With WCWCD Surcharge)			\$53.90
TOTAL ANNUAL INCOME:			\$3,073,578

IX. WATER RATE ANALYSIS

A. GENERAL

Generally, water rates are a combination of base rates and overage rates wherein a base amount of water is provided for the base rate charge. The base rate is charged to all connections in the system whether or not water is used and should cover all fixed costs of the system. Overage rates are normally set to encourage water conservation but should always cover all variable costs of the system. The City has established the following service fee rate structures shown in Table IX.A-1 and Table IX.A-2:

Table IX.A-1: Existing Culinary Water Rates

Current Overage Rates (Per 1,000 Gallons)		Monthly Base Rate	
		Meter Size	\$/month
5001-9000	\$ 0.80	5/8" & 3/4"	\$ 32.00
9001-16000	\$ 1.33	1"	\$ 57.60
16001-23000	\$ 1.58	1-1/2"	\$ 128.00
23001-30000	\$ 2.02	2"	\$ 224.00
30001-45000	\$ 2.46	3"	\$ 512.00
45001-60000	\$ 3.02	4"	\$ 928.00
60001 & UP	\$ 3.65	6"	\$ 2,048.00

Table IX.A-2: Existing Irrigation Water Rates

Current Overage Rates (Per 1,000 Gallons)		Monthly Base Rate	
		Meter Size	\$/month
9000-16,000	\$ 0.74	All Meters	\$ 22.00
16,001-23,000	\$ 0.92		
23,000-30,000	\$ 1.23		
30,001 & UP	\$ 1.46		

B. AVERAGE RATE DETERMINATION FOR FY2024

Culinary Rate

Table IX.B-1 shows a method used to determine the average water rate per ERU which should be divided among all system customers. The table uses data for the year of the new debt service (2024) and uses the existing and new debt service as part of the equation.

Annual revenues must be sufficient to cover the expenses incurred by the construction, maintenance, and administration of the water system. These expenses could include items such as debt service, personnel services, operation & maintenance, insurance, and other supplies & expenses. It is strongly recommended that the city maintain a funded depreciation account or a replacement fund to provide the money necessary for replacement and repair of water department facilities and pipelines.

SECTION IX - WATER RATE ANALYSIS

Based on the calculations shown in Table VIII.C-1, the average water rate per residential connection (1 ERU) for any newly adopted rate structure for the year 2024 would need to be approximately \$52.15. It should be noted that this assumes that the system has grown to 3,926 ERUs and that the district has chosen to pursue construction of the proposed improvements. It is estimated that this rate would allow the city to pay the debt and operations costs associated with the culinary water system. The existing average monthly user rate revenue per residential connection in 2021 was calculated to be \$41.45 and determined to be insufficient to meet the \$52.15 per ERU that was calculated. A rate increase of \$10.70 is estimated to be needed to cover the anticipated expenses; however, rates should be looked at annually as expenses increase in a typical year.

Table IX.B-1: Culinary Fixed Rate Analysis

FIXED RATE ANALYSIS			
Estimated FY 2024 Expenses	Fixed	Variable	Total
Salaries, Wages, & Benefits (100's)	\$ 461,682	\$ 197,864	\$ 659,545
Materials & Supplies (200's)	\$ 310,867	\$ 133,229	\$ 444,095
Professional & Technical Services (300's)	\$ 36,104	\$ 15,473	\$ 51,577
Special Dept. Materials & Supplies (400's)	\$ 49,337	\$ 21,144	\$ 70,481
Other Charges (500's)	\$ 19,888	\$ 8,523	\$ 28,411
Capital Expenses (700's)	\$ 124,680	\$ 53,434	\$ 178,115
Others (900's)	\$ 460,841	\$ 197,503	\$ 658,344
EXISTING DEBT SERVICE	\$ -		
Debt Payment to Water District	\$ 36,888	\$ -	\$36,888
All other Debt	\$ 165,719	\$ -	\$165,719
	\$ -		
NEW DEBT SERVICE	\$ -		
Division of Water Resources	\$ -	\$ -	\$ -
Revenue Bond Reserves 10%	\$ -	\$ -	\$ -
Estimated FY 2024 Revenue (Excluding User Fees)			
Other Operating Revenues	\$ 40,923	\$ 17,538	\$ 58,461
Connection Fees	\$ 9,221	\$ 27,664	\$ 36,885
Impact Fees	\$ 120,006	\$ 360,017	\$ 480,023
Interest Income	\$ 10,589	\$ 31,767	\$ 42,356
Total Expenses:	\$ 2,165,248	\$ 908,330	\$ 3,073,578
Total Revenue:	\$ 180,738	\$ 436,986	\$ 617,724
Total Projected System ERUs in FY2024	3,926		3,926
Monthly Cost/ERU in FY2024	<u>\$42.15</u>	<u>\$10.01</u>	<u>\$52.15</u>

Irrigation Rate

A similar method to determine culinary water rates was used for irrigation. However, all the proposed projects for the irrigation system have been included as culinary projects because they minimize future culinary outdoor usage. Because of this, the only costs incorporated in the irrigation system rate determination is an anticipated cost of \$50,000 for maintaining and operating the system. This value was assumed based on comparison of the city culinary system expenses and size in relation to the irrigation system size. Because the usage between residential and “other” connections is so different in the irrigation system, rates were also determined based on connection type rather than ERUs. This is shown in Table IX.B-2 below.

Table IX.B-2: Irrigation Fixed Rate Analysis

FIXED RATE ANALYSIS			
Estimated Annual Expenses FY			
2023/24	Fixed	Variable	Total
Operating Expenses	\$ 40,000	\$ 10,000	\$50,000
Project Cost	\$ -	\$ -	\$ -
Renewal and Replacement Fund	\$ -	\$ 2,500	\$2,500
Total Expenses:	\$ 40,000	\$ 12,500	\$ 52,500
Estimated Annual Revenue FY 2023/24			
Residential Connections			54
"Other" Connections			8
Monthly Cost/Res Connection	<u>\$17.15</u>	<u>\$5.36</u>	<u>\$22.51</u>
Monthly Cost/"Other" Connection	<u>\$300.93</u>	<u>\$94.04</u>	<u>\$394.97</u>

C. BASE AND OVERAGE RATE DETERMINATION

This study includes separating the average user rate into base and overage rates and investigates possible rate structures that would promote conservation and work hand-in-hand with drought management policies. In order to determine a base and overage schedule, the projected expenses of the water system for 2024 have been separated into fixed and variable expenses (Table IX.B-1). It is recommended that the base rate should cover the fixed expenses of the system. Tables IX.B-1 and XI.B-2 above suggest possible scenarios for determining base and overage rates for the city. Fixed costs are covered by the base rate and variable costs are covered by the overage rates. This rate scenario simply identifies base and overage rates that should satisfy the revenue requirements based on estimated operation and maintenance (O&M) expenses and on projected water usage. The city is able to set the rate structure to any amount it deems to be fair. However, the rates should be such that the system remains financially viable. The city may decide to lower the base rate and increase variable costs in order to promote further conservation.

The city should have a rate schedule that will result in revenues that will provide the necessary culinary water system improvements as recommended in this Plan and maintain the current level of O&M. The base and overage rates should be examined each year to ensure that enough revenue is being generated to cover the expenses.

D. POSSIBLE RATE STRUCTURE

Culinary Rate Structure

Table IX.D-1 illustrates a possible rate structure based on the base and overage rates suggested in Section C and city council preference. This rate structure is designed to have an average bill of \$52.15+ per ERU each month. The average bill was determined using the average monthly water use of approximately 14,700 gallons which is based on the historical average usage of 483 gpd. The way to confirm that the average rate produced will cover annual expenses is to implement the structure and evaluate the results after a full year of use.

Calculations based on the City's financial data show that the proposed rate structures should provide an average rate revenue sufficient to sustain the system. It is recommended that, if in a given year there are excess funds generated by the existing rate, these funds be saved in an interest-bearing Renewal and Replacement account for expenditures on future projects.

Table IX.D-1: Possible Culinary Rate Structure with no Water Included

Proposed Overage Rates (Per 1,000 Gallons)		Monthly Base Rate		Average Rate Based on Usage
		Meter Size	\$/month	
0000-9000	\$ 0.92	5/8" & 3/4"	\$ 37.25	\$ 53.80
9001-16000	\$ 1.45	1"	\$ 62.85	\$ 225.65
16001-23000	\$ 1.70	1-1/2"	\$ 133.25	\$ 296.05
23001-30000	\$ 3.14	2"	\$ 229.25	\$ 463.67
30001-36000	\$ 3.58	3"	\$ 517.25	\$ 751.67
36001-& UP	\$ 4.14	4"	\$ 933.25	\$ 1,167.67

Irrigation Rate Structure

Tables IX.D-2 illustrates a possible rate structure based on the base and overage rates suggested in Section C and city council preference. The overage rate structures are stepped to promote conservation by charging a higher amount for excessive water usage. The structure has also been split by meter size. This was done to better monitor high users (classified as "other" ERUs) because one residential ERU is equivalent to 17.55 "other" ERUs and it is predicted that they will contribute to more than half of the ERUs, but only 10 actual meters by 2033. Because of this, the current average of \$313.52/month per "other" connection is not sufficient and will need to be increased to \$394.97/month.

Table IX.D-2: Possible Irrigation Rate Structure

Meter Size	Base Rate	Tiered Rate above Base (per 1,000 gal)	Gallon Range for Tiered Rate	Max Rate Per Range	Average Rate Based on Usage
3/4"-1"	\$ 20.00	\$ 0.25	0 to 5000	\$ 21.25	\$ 24.43
		\$ 0.50	5000 to 10000	\$ 23.75	
		\$ 0.75	10001 to 15000	\$ 27.50	
		\$ 1.00	15001 to 20000	\$ 32.50	
		\$ 1.25	20001 & UP	\$ 32.50 +	
1 1/2"	\$ 20.00	\$ 0.30	0 to 5000	\$ 21.50	\$ 309.00
		\$ 0.40	5000 to 10000	\$ 23.50	
		\$ 0.50	10001 to 15000	\$ 26.00	
		\$ 0.60	15001 to 20000	\$ 29.00	
		\$ 0.70	20001 & UP	\$ 29.00 +	
2"	\$ 22.00	\$ 0.30	0 to 10000	\$ 25.00	\$ 368.70
		\$ 0.40	10001 to 15000	\$ 27.00	
		\$ 0.50	15001 to 20000	\$ 29.50	
		\$ 0.60	20001 to 30000	\$ 35.50	
		\$ 0.70	30001 & UP	\$ 35.50 +	
3"	\$ 50.00	\$ 0.30	0 to 10000	\$ 53.00	\$ 396.70
		\$ 0.40	10001 to 15000	\$ 55.00	
		\$ 0.50	15001 to 20000	\$ 57.50	
		\$ 0.60	20001 to 30000	\$ 63.50	
		\$ 0.70	30001 & UP	\$ 63.50 +	
4"	\$ 100.00	\$ 0.30	0 to 10000	\$ 103.00	\$ 444.60
		\$ 0.40	10001 to 15000	\$ 105.00	
		\$ 0.50	15001 to 20000	\$ 107.50	
		\$ 0.60	20001 to 30000	\$ 113.50	
		\$ 0.70	30001 & UP	\$ 113.50 +	

Calculations based on the City's financial data show that the proposed rate structures should provide an average rate revenue sufficient to sustain the system. It is recommended that, if in a given year there are excess funds generated by the existing rate, these funds be saved in an interest-bearing Renewal and Replacement account for expenditures on future projects.

E. POSSIBLE DROUGHT RATE STRUCTURES

Culinary Drought Rate Structure

WCWCD has implemented a drought contingency plan consisting of 5 stages: Conserve, Caution, Concern, Crisis, and Catastrophic. Each of these stages represent increasing degrees of drought severity and identify how a city should act in each stage. For example, in the "Catastrophic" Stage all outdoor water usage should be halted, and indoor usage should be reduced by 30%. The "Conserve" stage is assumed to be the current Santa Clara stage and the proposed rate structure represents these efforts. Should the other 4 stages ever be implemented in the city the following rate structures are recommended. This will ensure the city still receives the necessary funds to maintain and operate the system even with the reduction in water usage.

SECTION IX - WATER RATE ANALYSIS

Table IX.E-1: Possible Culinary Drought Rate Structure- Caution Stage

Proposed Overage Rates (Per 1,000 Gallons)		Monthly Base Rate		Average Rate Based on Usage
		Meter Size	\$/month	
0000-9000	\$ 1.03	5/8" & 3/4"	\$ 37.25	\$ 52.18
9001-16000	\$ 1.56	1"	\$ 62.85	\$ 200.68
16001-23000	\$ 1.81	1-1/2"	\$ 133.25	\$ 271.08
23001-30000	\$ 3.25	2"	\$ 229.25	\$ 431.68
30001-36000	\$ 3.69	3"	\$ 517.25	\$ 719.68
36001-& UP	\$ 4.25	4"	\$ 933.25	\$ 1,135.68

Table IX.E-2: Possible Culinary Drought Rate Structure- Concern Stage

Proposed Overage Rates (Per 1,000 Gallons)		Monthly Base Rate		Average Rate Based on Usage
		Meter Size	\$/month	
0000-9000	\$ 1.35	5/8" & 3/4"	\$ 37.25	\$ 52.22
9001-16000	\$ 1.88	1"	\$ 62.85	\$ 174.51
16001-23000	\$ 2.13	1-1/2"	\$ 133.25	\$ 244.91
23001-30000	\$ 3.57	2"	\$ 229.25	\$ 397.12
30001-36000	\$ 4.01	3"	\$ 517.25	\$ 685.12
36001-& UP	\$ 4.57	4"	\$ 933.25	\$ 1,101.12

Table IX.E-3: Possible Culinary Drought Rate Structure- Crisis Stage

Proposed Overage Rates (Per 1,000 Gallons)		Monthly Base Rate		Average Rate Based on Usage
		Meter Size	\$/month	
0000-9000	\$ 2.57	5/8" & 3/4"	\$ 37.25	\$ 52.16
9001-16000	\$ 3.10	1"	\$ 62.85	\$ 123.09
16001-23000	\$ 3.35	1-1/2"	\$ 133.25	\$ 193.49
23001-30000	\$ 4.79	2"	\$ 229.25	\$ 316.21
30001-36000	\$ 5.23	3"	\$ 517.25	\$ 604.21
36001-& UP	\$ 5.79	4"	\$ 933.25	\$ 1,020.21

Table IX.E-4: Possible Culinary Drought Rate Structure- Catastrophic Stage

Proposed Overage Rates (Per 1,000 Gallons)		Monthly Base Rate		Average Rate Based on Usage
		Meter Size	\$/month	
0000-9000	\$ 3.93	5/8" & 3/4"	\$ 37.25	\$ 52.18
9001-16000	\$ 4.46	1"	\$ 62.85	\$ 124.53
16001-23000	\$ 4.71	1-1/2"	\$ 133.25	\$ 194.93
23001-30000	\$ 6.15	2"	\$ 229.25	\$ 311.85
30001-36000	\$ 6.59	3"	\$ 517.25	\$ 599.85
36001-& UP	\$ 7.15	4"	\$ 933.25	\$ 1,015.85

SECTION IX - WATER RATE ANALYSIS

Irrigation Drought Rate Structure

The irrigation rate structures recommended in a drought follow the same stages as the culinary system. The “Conserve” stage is assumed to be the current Santa Clara stage and the proposed rate structure represents these efforts. Should the other 4 stages ever be implemented in the city the following rate structures are recommended. This will ensure the city still receives the necessary funds to maintain and operate the system even with the reduction in water usage.

Table IX.E-5: Possible Irrigation Drought Rate Structure- Caution Stage

Meter Size	Base Rate	Tiered Rate above Base (per 1,000 gal)	Gallon Range for Tiered Rate	Max Rate Per Range	Average Rate Based on Usage
3/4" -1"	\$ 20.00	\$ 0.35	0 to 5000	\$ 21.75	\$ 23.97
		\$ 0.60	5000 to 10000	\$ 24.75	
		\$ 0.85	10001 to 15000	\$ 29.00	
		\$ 1.10	15001 to 20000	\$ 34.50	
		\$ 1.35	20001 & UP	\$ 34.50 +	
1 1/2"	\$ 20.00	\$ 0.40	0 to 5000	\$ 22.00	\$ 283.80
		\$ 0.50	5000 to 10000	\$ 24.50	
		\$ 0.60	10001 to 15000	\$ 27.50	
		\$ 0.70	15001 to 20000	\$ 31.00	
		\$ 0.80	20001 & UP	\$ 31.00 +	
2"	\$ 22.00	\$ 0.40	0 to 10000	\$ 26.00	\$ 338.34
		\$ 0.50	10001 to 15000	\$ 28.50	
		\$ 0.60	15001 to 20000	\$ 31.50	
		\$ 0.70	20001 to 30000	\$ 38.50	
		\$ 0.80	30001 & UP	\$ 38.50 +	
3"	\$ 50.00	\$ 0.40	0 to 10000	\$ 54.00	\$ 366.34
		\$ 0.50	10001 to 15000	\$ 56.50	
		\$ 0.60	15001 to 20000	\$ 59.50	
		\$ 0.70	20001 to 30000	\$ 66.50	
		\$ 0.80	30001 & UP	\$ 66.50 +	
4"	\$ 100.00	\$ 0.40	0 to 10000	\$ 104.00	\$ 414.42
		\$ 0.50	10001 to 15000	\$ 106.50	
		\$ 0.60	15001 to 20000	\$ 109.50	
		\$ 0.70	20001 to 30000	\$ 116.50	
		\$ 0.80	30001 & UP	\$ 116.50 +	

SECTION IX - WATER RATE ANALYSIS

Table IX.E-6: Possible Irrigation Drought Rate Structure- Concern Stage

Meter Size	Base Rate	Tiered Rate above Base (per 1,000 gal)	Gallon Range for Tiered Rate	Max Rate Per Range	Average Rate Based on Usage
3/4"-1"	\$ 20.00	\$ 0.50	0 to 5000	\$ 22.50	\$ 23.63
		\$ 0.75	5000 to 10000	\$ 26.25	
		\$ 1.00	10001 to 15000	\$ 31.25	
		\$ 1.25	15001 to 20000	\$ 37.50	
		\$ 1.50	20001 & UP	\$ 37.50 +	
1 1/2"	\$ 20.00	\$ 0.65	0 to 5000	\$ 23.25	\$ 279.60
		\$ 0.75	5000 to 10000	\$ 27.00	
		\$ 0.85	10001 to 15000	\$ 31.25	
		\$ 0.95	15001 to 20000	\$ 36.00	
		\$ 1.05	20001 & UP	\$ 36.00 +	
2"	\$ 22.00	\$ 0.65	0 to 10000	\$ 28.50	\$ 333.28
		\$ 0.75	10001 to 15000	\$ 32.25	
		\$ 0.85	15001 to 20000	\$ 36.50	
		\$ 0.95	20001 to 30000	\$ 46.00	
		\$ 1.05	30001 & UP	\$ 46.00 +	
3"	\$ 50.00	\$ 0.65	0 to 10000	\$ 56.50	\$ 361.28
		\$ 0.75	10001 to 15000	\$ 60.25	
		\$ 0.85	15001 to 20000	\$ 64.50	
		\$ 0.95	20001 to 30000	\$ 74.00	
		\$ 1.05	30001 & UP	\$ 74.00 +	
4"	\$ 100.00	\$ 0.65	0 to 10000	\$ 106.50	\$ 409.39
		\$ 0.75	10001 to 15000	\$ 110.25	
		\$ 0.85	15001 to 20000	\$ 114.50	
		\$ 0.95	20001 to 30000	\$ 124.00	
		\$ 1.05	30001 & UP	\$ 124.00 +	

Table IX.E-7: Possible Irrigation Drought Rate Structure- Crisis Stage

Meter Size	Base Rate	Tiered Rate above Base (per 1,000 gal)	Gallon Range for Tiered Rate	Max Rate Per Range	Average Rate Based on Usage
3/4"-1"	\$ 20.00	\$ 2.50	0 to 5000	\$ 32.50	\$ 22.75
		\$ 2.75	5000 to 10000	\$ 46.25	
		\$ 3.00	10001 to 15000	\$ 61.25	
		\$ 3.25	15001 to 20000	\$ 77.50	
		\$ 3.50	20001 & UP	\$ 77.50 +	
1 1/2"	\$ 20.00	\$ 5.00	0 to 5000	\$ 45.00	\$ 289.00
		\$ 5.50	5000 to 10000	\$ 72.50	
		\$ 6.00	10001 to 15000	\$ 102.50	
		\$ 6.50	15001 to 20000	\$ 135.00	
		\$ 7.00	20001 & UP	\$ 135.00 +	
2"	\$ 22.00	\$ 5.00	0 to 10000	\$ 72.00	\$ 338.70
		\$ 5.50	10001 to 15000	\$ 99.50	
		\$ 6.00	15001 to 20000	\$ 129.50	
		\$ 6.50	20001 to 30000	\$ 194.50	
		\$ 7.00	30001 & UP	\$ 194.50 +	
3"	\$ 50.00	\$ 5.00	0 to 10000	\$ 100.00	\$ 366.70
		\$ 5.50	10001 to 15000	\$ 127.50	
		\$ 6.00	15001 to 20000	\$ 157.50	
		\$ 6.50	20001 to 30000	\$ 222.50	
		\$ 7.00	30001 & UP	\$ 222.50 +	
4"	\$ 100.00	\$ 5.00	0 to 10000	\$ 150.00	\$ 414.60
		\$ 5.50	10001 to 15000	\$ 177.50	
		\$ 6.00	15001 to 20000	\$ 207.50	
		\$ 6.50	20001 to 30000	\$ 272.50	
		\$ 7.00	30001 & UP	\$ 272.50 +	

Table IX.E-8: Possible Irrigation Drought Rate Structure- Catastrophic Stage

Meter Size	Base Rate	Tiered Rate above Base (per 1,000 gal)	Gallon Range for Tiered Rate	Max Rate Per Range	Average Rate Based on Usage
3/4"-1"	\$ 22.50	\$ 2.50	0 to 5000	\$ 35.00	\$ 22.50
		\$ 2.75	5000 to 10000	\$ 48.75	
		\$ 3.00	10001 to 15000	\$ 63.75	
		\$ 3.25	15001 to 20000	\$ 80.00	
		\$ 3.50	20001 & UP	\$ 80.00 +	
1 1/2"	\$ 200.00	\$ 5.00	0 to 5000	\$ 225.00	\$ 200.00
		\$ 5.50	5000 to 10000	\$ 252.50	
		\$ 6.00	10001 to 15000	\$ 282.50	
		\$ 6.50	15001 to 20000	\$ 315.00	
		\$ 7.00	20001 & UP	\$ 315.00 +	
2"	\$ 250.00	\$ 5.00	0 to 10000	\$ 300.00	\$ 250.00
		\$ 5.50	10001 to 15000	\$ 327.50	
		\$ 6.00	15001 to 20000	\$ 357.50	
		\$ 6.50	20001 to 30000	\$ 422.50	
		\$ 7.00	30001 & UP	\$ 422.50 +	
3"	\$ 400.00	\$ 5.00	0 to 10000	\$ 450.00	\$ 400.00
		\$ 5.50	10001 to 15000	\$ 477.50	
		\$ 6.00	15001 to 20000	\$ 507.50	
		\$ 6.50	20001 to 30000	\$ 572.50	
		\$ 7.00	30001 & UP	\$ 572.50 +	
4"	\$ 500.00	\$ 5.00	0 to 10000	\$ 550.00	\$ 500.00
		\$ 5.50	10001 to 15000	\$ 577.50	
		\$ 6.00	15001 to 20000	\$ 607.50	
		\$ 6.50	20001 to 30000	\$ 672.50	
		\$ 7.00	30001 & UP	\$ 672.50 +	

The drought rate structures only change the overage rates from the proposed rate structure with the exception of the irrigation “Catastrophic” stage. This stage completely eliminates any outdoor usage, so changing overage rates would be ineffective and so Base rates were updated to ensure necessary funds can still be obtained.

F. SUMMARY

Based on the District’s financial data and the information presented in this Plan, the existing rates have been determined to be insufficient to meet the \$52.15 per culinary ERU and \$394.97 per irrigation “other” connection that is needed per the Financing Plan. A rate increase of \$10.70 and \$81.45, respectively, is estimated to be needed to cover the anticipated expenses. Water rates and fees should be reviewed by the city periodically to ensure that they keep up with inflation rates and increased costs for system maintenance. The Cash Flow Projection included in Appendix E assumes a yearly rate increase of 1.25% based on inflation.

The city does not have to adopt the amounts shown in the rate analysis. However, the rates suggested are calculated to be enough to ensure that the water fund remains viable while paying for the existing debt service and the projected debt based on the recommendations in this plan.

X. IMPACT FEES

A. IMPACT FEE

This report constitutes a capital fee facilities plan to determine the public facilities requirement to serve development resulting from new development activity. An impact fee that is charged by a community may be used to pay for the debt service associated with surplus capacity built into the system. The surplus capacity in the water system has been designed for growth, and for this reason, impact fees should pay for that portion of the debt service associated with the system surplus capacity. The impact fee should also be used to pay for the cost of improvements to the system that are required to support new growth as new connections are added to the system.

B. CULINARY & IRRIGATION COMBINED CALCULATION

The total cost that is eligible for the impact fee assessment is equal to the existing debt service from previous water improvements projects that can be attributed to new growth plus the portion of any planned water improvements project that will be constructed to accommodate new growth. The combined total cost that is due to new growth is divided by the projected number of new ERUs that will be added to the system within the service area.

Currently the system meets all requirements and community demands for a culinary system except for the Water Right analysis recommendations which are needed regardless of new growth. This means that all other improvements are recommended to benefit new growth and are therefore 100% impact fee eligible. The impact fee calculation resulting from culinary and irrigation projects being analyzed together can be found in Table X.B-1.

TABLE X.B-1
IMPACT FEE ANALYSIS FY2023/2024
WATER MASTER PLAN
SANTA CLARA CITY

22-May-23

EXISTING DEBT SERVICE

	P&I	% Eligible	% Water Dept.	Eligible
Debt Payment to Water District	\$ 1,272,000	58%		\$ 737,760
All other Debt	\$ 5,714,440	58%		\$ 3,314,375

Existing/Past Projects Impact Fee Eligible Costs: \$ 4,052,135

PROPOSED IMPROVEMENT PROJECTS

	Total Cost	% Eligible	Impact Fee Eligible
Culinary: Water Right Recommendations	\$ 18,000	0%	\$ -
Culinary: North Hamblin Pkwy to North Town Rd 1	\$ 292,400	100%	\$292,400
Culinary: 10" to 12" PRV Enlargement	\$ 208,550	100%	\$208,550
Culinary: 12" Line Well Connection to Snow Canyon	\$ 4,170,000	100%	\$4,170,000
Culinary: New Well	\$ 2,114,350	100%	\$2,114,350
Irrigation: Riesling Avenue 8" Line	\$ 136,140	100%	\$136,140
Irrigation: Crestview Drive 8" Line	\$ 505,230	100%	\$505,230
Irrigation: Villa Bonita 8" Line	\$ 99,900	100%	\$99,900
Irrigation: North Town Road 8" Line	\$ 579,665	100%	\$579,665
Irrigation: Sycamore Drive 8" Line	\$ 124,470	100%	\$124,470
Irrigation: Claude Drive 8" Line	\$ 124,470	100%	\$124,470
Irrigation: Additional Water Share Purchase	\$ 363,600	100%	\$363,600

Total Estimated New Project Cost \$ 8,736,775 99.8% \$ 8,718,775

% Of New Projects Cost Due to New Growth \$ 8,718,775
Impact Fee Eligible Cost \$ 8,718,775

No. of ERUs (2023/2024) 3,775
 20-Year Projected ERUs 7,953
 No. of New ERUs Due to Growth 4,178

Total Impact Fee Eligible Cost \$ 12,770,910

Maximum Water Impact Fee = Total Eligible Cost / New ERU's \$ 3,056.75 /ERU.

Proposed Water Impact Fee for Santa Clara (2023/2024) = \$ 3,057 /ERU.

WCWCD Impact Fee (2023) \$ 8,417 /ERU.

Total Potential Culinary Water Impact Fee (2023) \$ 11,474 /ERU.

Meter Size	X-Sectional Area (in ²)	% Area Increase	Impact Fee
3/4"	0.44	0%	\$ 3,057
1"	0.79	80%	\$ 5,489
1 1/2"	1.77	302%	\$ 12,297
2"	3.14	614%	\$ 21,816
3"	7.07	1507%	\$ 49,120
4"	12.57	2757%	\$ 87,333
6"	28.27	6325%	\$ 196,412

P:\Santa Clara City\08401 Water & Irrigation IFFPA & IFA\06 Design\Financial- Culinary.xlsx\Impact Fee

Table X.B-1 shows that the maximum impact fee that the city may assess each new ERU is \$3,057. The current fee is \$1,973, resulting in a potential increase of \$1,084.

New Connections will also pay an additional WCWCD fee, currently \$8,417 for a total of \$11,474.

It is important to note that these impact fees are for the improvements suggested in Section VII and do not provide for the district to design and build anything beyond the proposed projects.

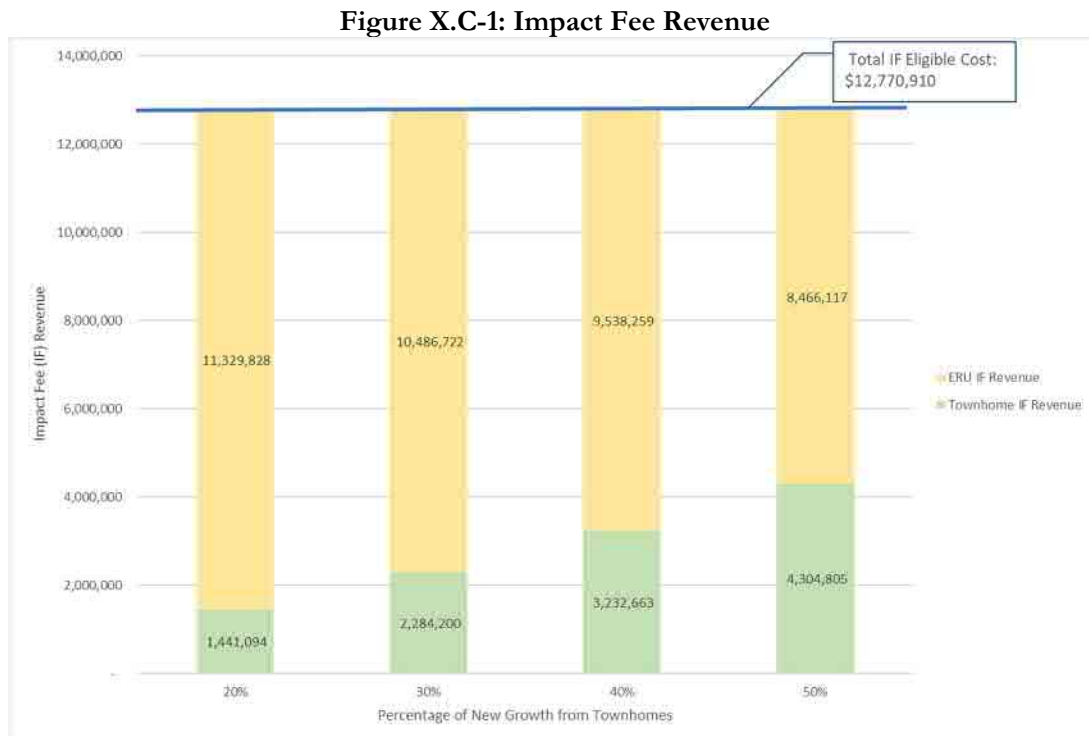
All new additions to the system will need to be considered in the impact fee calculations. Otherwise, the developer should be required to make the improvements.

C. VARYING IMPACT FEE CALCULATION

Because water usage traditionally varies based on the size and type of the residential unit, the city requested further analysis of impact fee dues based on different dwelling unit impact, specifically townhomes, apartments, and single-family usage based on square footage.

Townhome Impact Fee Analysis

As stated in Section II.C, townhomes use one-third the amount of water of a typical residential unit. Because of this, it may seem reasonable to charge a new townhome less in impact fees than an average ERU. To ensure impact fees for a traditional ERU and a townhome are both fair, while still covering the necessary total of \$12,770,910 as shown in Table X.B-1, calculations based on usage and growth ratios were performed. Figure X.C-1 below presents these results.



Santa Clara City provided estimations of future townhome development. These values incorporated with zoning densities suggested an estimated 30% of new growth may be due to townhomes. If this is the case, the city could charge a maximum impact fee of \$1,823 per townhome and \$3,585 per traditional ERU. If the city chooses to charge a different impact fee for townhomes and ERUs instead of the base maximum per ERU presented in Table X.B-1 of \$3,057, it is recommended that the city reevaluate fees should townhome growth vary from estimates or if future townhome usage increases. The City is free to charge less than the maximum in either scenario if it decides to do so but should ensure that collected impact fees are sufficient to cover future culinary water system impacts due to growth.

Apartment Complex Impact Fee Analysis

Usage data was not obtained for apartment buildings, but estimated usage should be provided by developers before city approval. This usage can then be used to identify how many ERUs the complex will account for. For example, if the developer estimates a total usage of 15,000 gpd one would simply divide this by the average usage of 483 gpd to find that this complex is equivalent to approximately 31 ERUs. Therefore, they should be charged 31 times the traditional ERU impact fee. Table X.C-2 shows some theoretical fees assuming 200 gpd per unit using this method.

Table X.C-2: Example Apartment Impact Fee

With ERU IF of \$3,057					With ERU IF of \$3,585 (due to Townhome IF)				
Number of Units	Example Usage per Unit (gpd)	Usage for Complex (gpd)	ERUs	Impact Fee	Number of Units	Example Usage per Unit (gpd)	Usage for Complex (gpd)	ERUs	Impact Fee
10	*200	2,000	4.14	\$ 12,658	10	*200	2,000	4.14	\$ 14,845
25	*200	5,000	10.35	\$ 31,646	25	*200	5,000	10.35	\$ 37,112
50	*200	10,000	20.70	\$ 63,292	50	*200	10,000	20.70	\$ 74,224
75	*200	15,000	31.06	\$ 94,938	75	*200	15,000	31.06	\$ 111,335
100	*200	20,000	41.41	\$ 126,584	100	*200	20,000	41.41	\$ 148,447
150	*200	30,000	62.11	\$ 189,876	150	*200	30,000	62.11	\$ 222,671

* Usage per apartment unit is an estimate, actual apartment gpd calculations will be submitted by developer and used to calculate impact fee.

Square Footage Impact Fee Analysis

City staff have estimated the average residential unit to be approximately 2,200 square feet. This is what has been identified as one ERU for this report. Because usage may vary depending on dwelling unit size, the city requested potential varying fees based on square footage. The city can consider charging new developments based on the equivalent proportion to the average ERU. For example, if a new home is 10% smaller than the average 2,200 square feet, they may qualify for a 10% reduction in impact fees. Table X.C-3 shows some potential fees based on varying home sizes.

Table X.C-3: Square Footage Impact Fee

With ERU IF of \$3,057					With ERU IF of \$3,585 (due to Townhome IF)				
Size (sf)	Average Size (sf)	Percent +/-	Reduction/ Increase	Impact Fee	Size (sf)	Average Size (sf)	Percent +/-	Reduction/ Increase	Impact Fee
1,400	2,200	36.4%	\$ 1,112	\$ 1,945	1,400	2,200	36.4%	\$ 1,304	\$ 1,753
1,600	2,200	27.3%	\$ 834	\$ 2,223	1,600	2,200	27.3%	\$ 978	\$ 2,079
1,800	2,200	18.2%	\$ 556	\$ 2,501	1,800	2,200	18.2%	\$ 652	\$ 2,405
2,000	2,200	9.1%	\$ 278	\$ 2,779	2,000	2,200	9.1%	\$ 326	\$ 2,731
2,200	2,200	0.0%	\$ -	\$ 3,057	2,200	2,200	0.0%	\$ -	\$ 3,057
2,400	2,200	-9.1%	\$ (278)	\$ 3,335	2,400	2,200	-9.1%	\$ (326)	\$ 3,383
2,600	2,200	-18.2%	\$ (556)	\$ 3,613	2,600	2,200	-18.2%	\$ (652)	\$ 3,709
2,800	2,200	-27.3%	\$ (834)	\$ 3,891	2,800	2,200	-27.3%	\$ (978)	\$ 4,035
3,000	2,200	-36.4%	\$ (1,112)	\$ 4,169	3,000	2,200	-36.4%	\$ (1,304)	\$ 4,361

Using a square footage method to compare dwellings does not account for different lot sizes. The city does have ordinances in place to restrict the amount of water that can be used per household; however, it should be noted that some variability in usage will occur due to lot sizing.

D. IRRIGATION INCENTIVIZED CALCULATION

The previous calculations charge users the same impact fee whether or not they are connected to irrigation. To incentivize new users to connect to irrigation, additional potential impact fee calculations have been performed. This was done by using the percent of the total project cost attributed to irrigation infrastructure as an impact fee reduction percentage. Table X.D-1 below shows this reduction would be 22.2%.

Table X.D-1: Infrastructure Breakdown

Project Description	Total Cost	Impact Fee Eligible (%)	Impact Fee Eligible Cost
Irrigation Project Costs	\$ 1,933,475	100%	\$ 1,933,475
Culinary Project Costs	\$ 6,803,300	99.7%	\$ 6,785,300
Total Project Costs	\$ 8,736,775	99.8%	\$ 8,718,775
% Irrigation Infrastructure	22.1%		22.2%
% Culinary Infrastructure	77.9%		77.8%

To incorporate this reduction while still ensuring the total fee of \$12,770,910 is covered this reduction of 22.2% was applied to the ERU's that could have both irrigation and culinary connections with the recommended irrigation system improvements. The maximum impact fee for those with both a culinary and irrigation connection and those with just culinary was found to be \$2,689 and \$3,456, respectively. Table X.D-2 below shows this analysis.

TABLE X.D-2
IMPACT FEE ANALYSIS FY2023/2024
WATER MASTER PLAN
SANTA CLARA CITY

23-May-23

No. of Water ERUs (2023/2024)	3,775
20-Year Water Projected ERUs	7,953
No. of New Water ERUs Due to Growth	4,178
No. of Irrigation Incentivized ERUs (2023/2024)	127
20-Year Projected Irrigation Incentivized ERUs	2,303
No. of New Irrigation Incentivized Due to Growth	2,176
No. of Water ERUs (2023/2024)	3,648
20-Year Water Projected ERUs	5,650
No. of New Water ERUs Due to Growth	2,002
Total Impact Fee Eligible Cost	\$ 12,770,910
Maximum Water Impact Fee = Total Eligible Cost / Total New ERU's	\$ 3,057 /ERU.
Maximum Irrigation Reduced Impact Fee (22.2%)	\$ 2,689 /ERU.
Maximum Water Impact Fee without Reduction	\$ 3,456 /ERU.
WCWCD Impact Fee (2023)	\$ 8,417 /ERU.
Total Potential Culinary Water Impact Fee (2023)	\$ 11,873 /ERU.

Meter Size	X-Sectional Area (in ²)	% Area Increase	Impact Fee
3/4"	0.44	0%	\$ 3,456
1"	0.79	80%	\$ 6,206
1 1/2"	1.77	302%	\$ 13,904
2"	3.14	614%	\$ 24,666
3"	7.07	1507%	\$ 55,538
4"	12.57	2757%	\$ 98,743
6"	28.27	6325%	\$ 222,073

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It is important to note that these impact fees are for the improvements suggested in Section VII and do not provide for the district to design and build anything beyond the proposed projects.

All new additions to the system will need to be considered in the impact fee calculations. Otherwise, the developer should be required to make the improvements.

E. IMPACT FEE CERTIFICATION

The Impact Fee Certification is included as Appendix F.

F. IMPACT FEE RELATED ITEMS

There are a few items related to Impact Fees that City council should keep in mind when planning for, collecting, and expending Impact Fees.

Generally, it is a good idea to update this plan at least every five years, or more frequently if occasion arises.

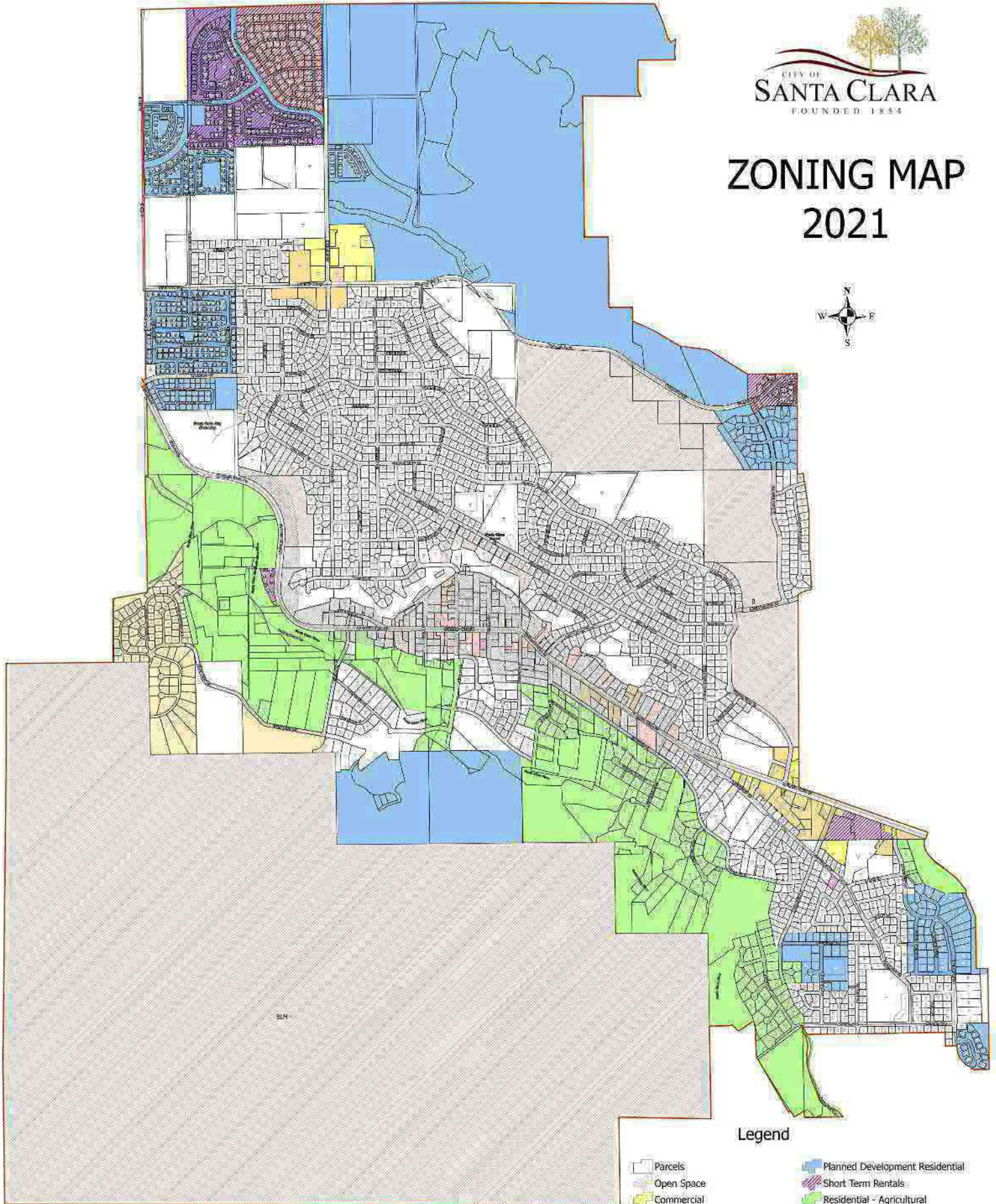
Council members should be made aware that, in conformance with Utah Code 11-36a-602, Impact Fees can generally only be expended for a system improvement that is identified in the Impact Fee Facilities Plan and that is for the specific public facility type for which the fee was collected (i.e. transportation impact fees cannot be used for water or sewer projects). Also, Impact Fees in Utah must be expended or encumbered for a permissible use within six years of their receipt unless 11-36a-602(2)(b) applies.

City Council members should also ensure that proper accounting of the Impact Fees occurs (track each fee in and out). See Utah Code 11-36a-601.

APPENDIX A

MAPS

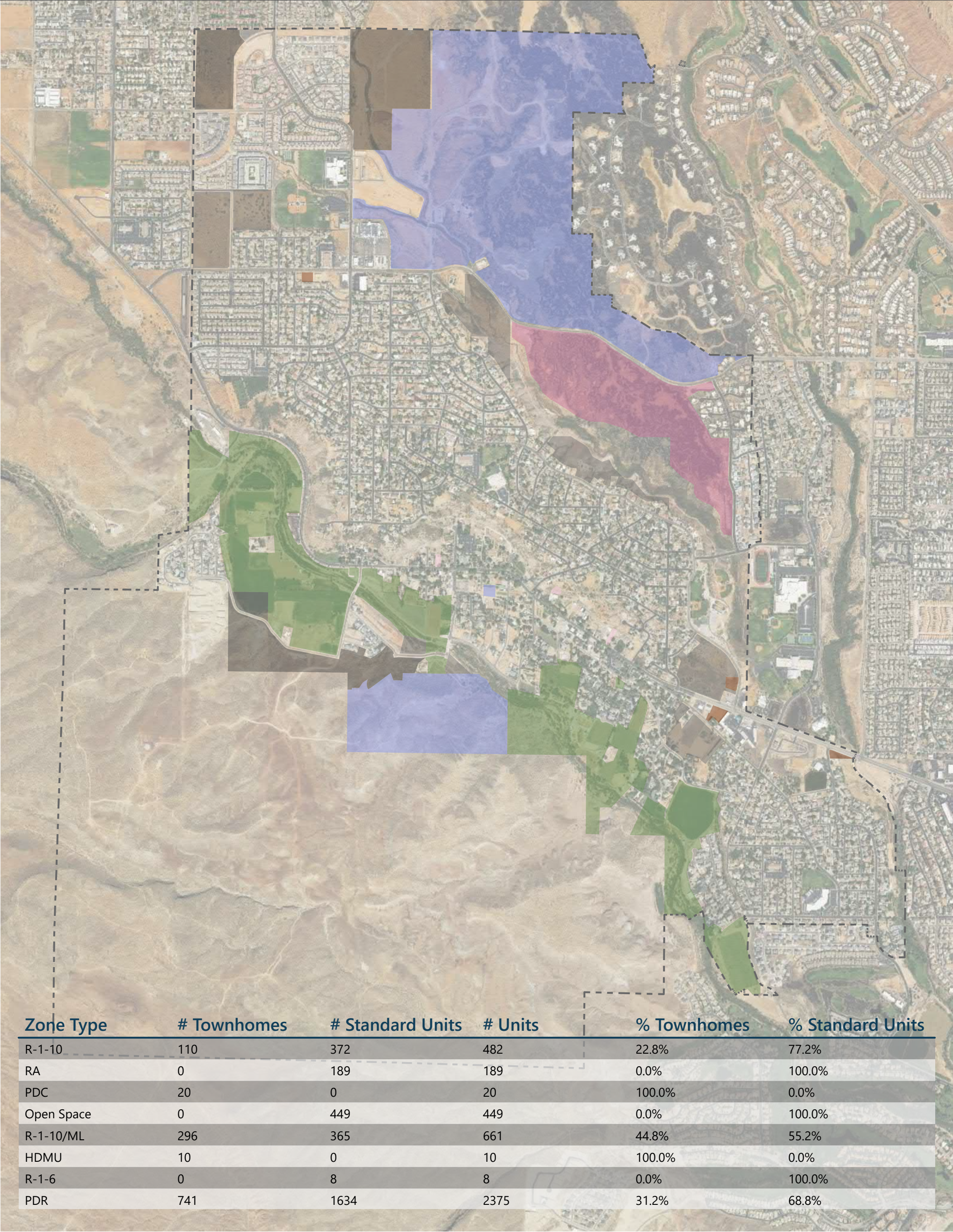
ZONING MAP 2021



Legend

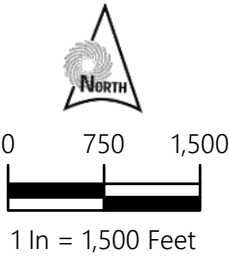
- | | |
|----------------------------------|---------------------------------|
| Parcels | Planned Development Residential |
| Open Space | Short Term Rentals |
| Commercial | Residential - Agricultural |
| Historical District Overlay Zone | Residential - Single Family |
| Multi Family - Residential | Mixed Lot Size |
| Mixed Use | Municipal Boundary |
| Planned Development Commercial | |

POTENTIAL FUTURE DEVELOPMENT



Zone Type	# Townhomes	# Standard Units	# Units	% Townhomes	% Standard Units
R-1-10	110	372	482	22.8%	77.2%
RA	0	189	189	0.0%	100.0%
PDC	20	0	20	100.0%	0.0%
Open Space	0	449	449	0.0%	100.0%
R-1-10/ML	296	365	661	44.8%	55.2%
HDMU	10	0	10	100.0%	0.0%
R-1-6	0	8	8	0.0%	100.0%
PDR	741	1634	2375	31.2%	68.8%

MAP LEGEND

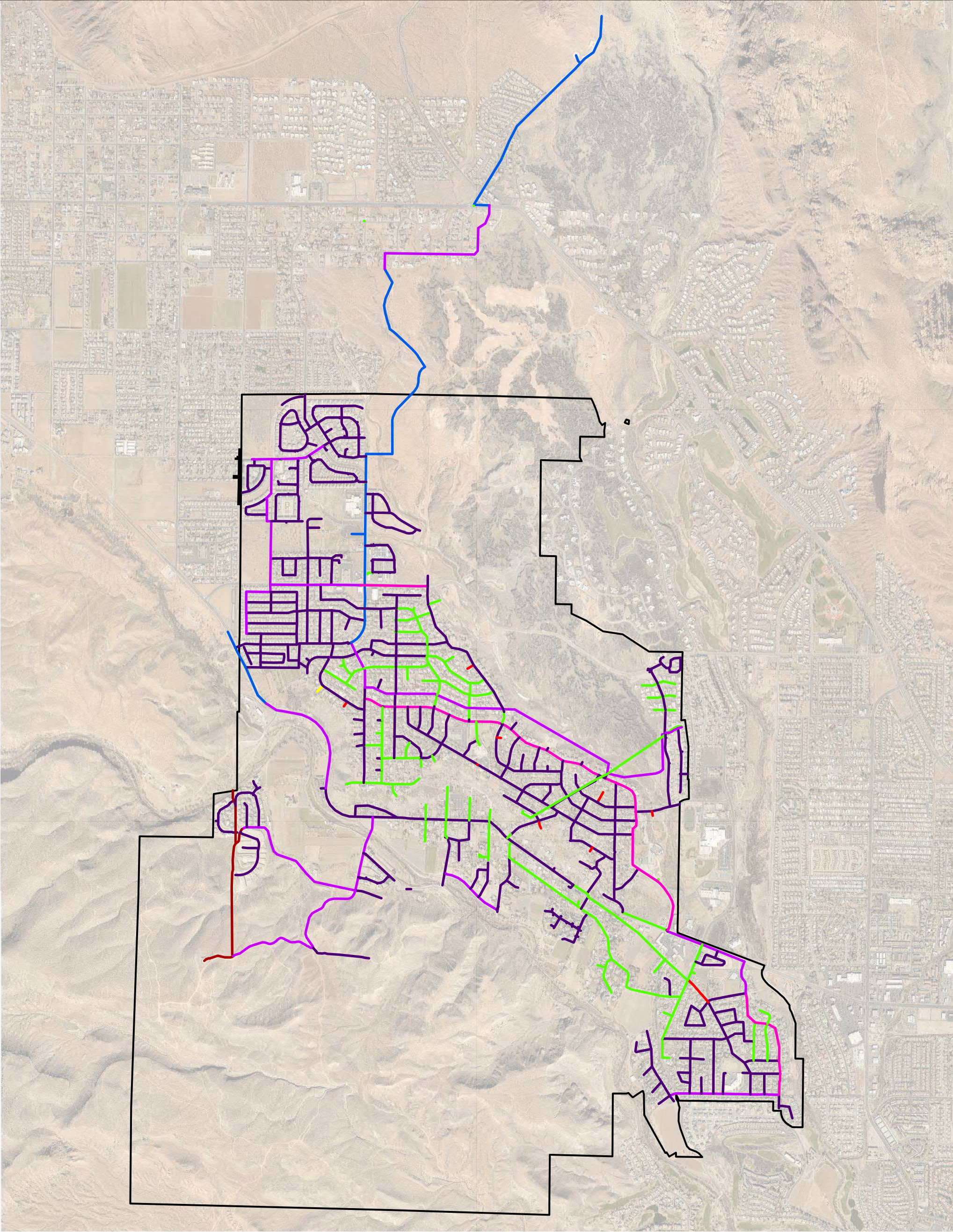


- OS - OPEN SPACE
- HDMU - HISTORIC DISTRICT/MIXED USE
- PDC - PLANNED DEVELOPMENT COMMERCIAL
- PDR - PLANNED DEVELOPMENT RESIDENTIAL
- RA - RESIDENTIAL AGRICULTURE

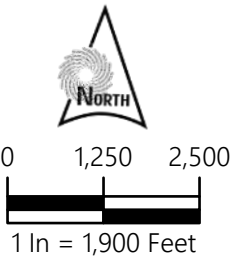
- R-1-6 - SINGLE-FAMILY RESIDENTIAL
- R-1-10 - SINGLE-FAMILY RESIDENTIAL
- R-1-10/ML - MIXED LOT SIZE
- Santa Clara City Boundary



EXISTING SANTA CLARA WATER SYSTEM

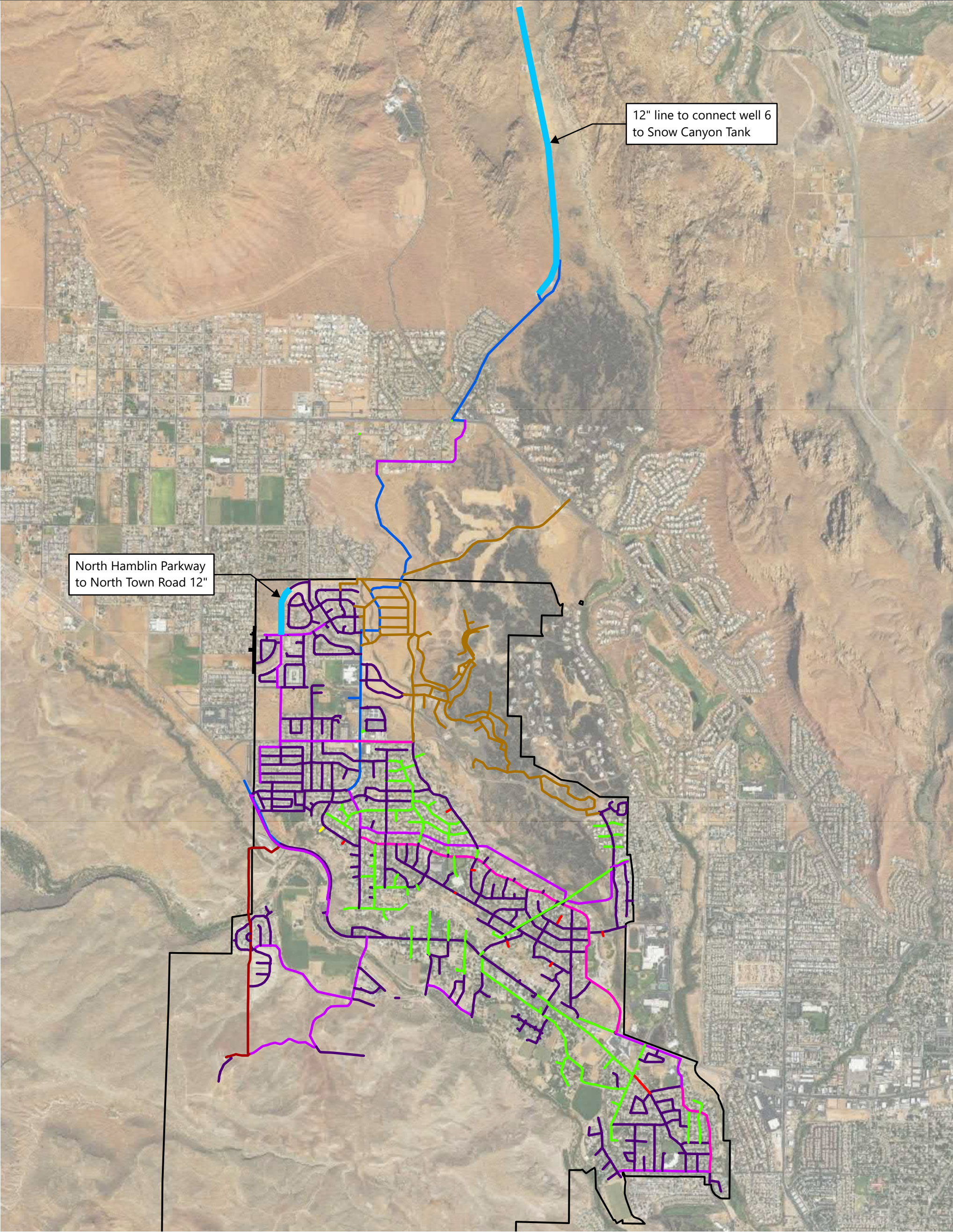


MAP LEGEND



- Water Mains
- 2"
 - 4"
 - 6"
 - 8"
 - 10"
 - 12"
 - 16"
 - 20"
 - Unknown
 - City Boundary

PROPOSED FUTURE PROJECTS



MAP LEGEND



0 1,250 2,500
1 in = 2,250 Feet

Water Mains

- 2"
- 4"
- 6"
- 8"
- 10"
- 12"

- 16"
- 20"
- Unknown
- Proposed Future Projects
- Developer Proposed
- City Boundary



Map Date: 3/8/2023

Existing Santa Clara Irrigation System

N



City Boundary

DIAMETER

- 2
- 4
- 6
- 8
- 10
- 12
- 16
- 24

0 0.15 0.3 0.6 0.9 1.2 Miles

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

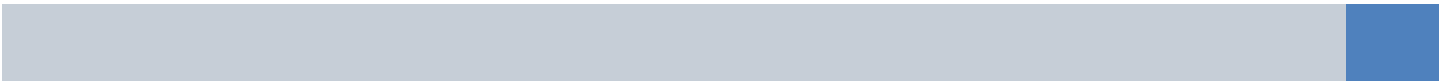
Future Santa Clara Irrigation System



-  City Boundary
-  Canal Company Owned
-  Santa Clara Owned
-  St. George Owned
-  Developer Proposed
-  Santa Clara Proposed

0 0.125 0.25 0.5 0.75 1 Miles

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



APPENDIX B

INFOWATER® ANALYSIS

Average Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
1	☐	J-100FH	4.11	2,876.00	3,041.25	71.60
2	☐	J-101	4.11	2,865.00	3,094.67	99.51
3	☐	J-102FH	4.11	2,868.00	3,094.80	98.27
4	☐	J-103FH	4.11	2,871.00	3,094.85	96.99
5	☐	J-104	4.11	2,839.00	3,041.71	87.83
6	☐	J-105FH	4.11	2,875.00	3,094.90	95.28
7	☐	J-106FH	4.11	2,877.00	3,094.70	94.33
8	☐	J-107FH	4.11	2,936.00	3,096.14	69.39
9	☐	J-108	4.11	2,876.00	3,094.80	94.81
10	☐	J-109FH	4.11	2,875.00	3,094.85	95.26
11	☐	J-10FH	4.11	2,741.00	2,934.30	83.76
12	☐	J-110	4.11	2,879.00	3,094.90	93.55
13	☐	J-111	4.11	2,899.50	3,094.99	84.70
14	☐	J-112	4.11	2,879.00	3,094.99	93.59
15	☐	J-113	4.11	2,885.00	3,095.22	91.09
16	☐	J-114FH	4.11	2,885.50	3,095.01	90.78
17	☐	J-115	4.11	2,885.00	3,095.01	91.00
18	☐	J-116FH	4.11	2,881.00	3,095.68	93.02
19	☐	J-117	4.11	2,897.00	3,095.04	85.81
20	☐	J-118FH	4.11	2,891.00	3,095.20	88.48
21	☐	J-119FH	4.11	2,889.00	3,095.36	89.42
22	☐	J-11FH	4.11	2,740.00	2,934.20	84.15
23	☐	J-12	4.11	2,766.00	2,934.51	73.02
24	☐	J-120	4.11	2,887.00	3,095.56	90.37
25	☐	J-1208	4.11	2,822.00	3,043.12	95.81
26	☐	J-121	4.11	2,878.00	3,095.88	94.41
27	☐	J-1210	3.54	2,760.00	3,212.46	196.05
28	☐	J-122FH	4.11	2,880.00	3,095.98	93.58
29	☐	J-123	4.11	2,870.00	3,095.88	97.87
30	☐	J-124	4.11	2,892.00	3,095.59	88.22
31	☐	J-125	4.11	2,892.00	3,095.59	88.22
32	☐	J-1254	3.54	3,000.00	3,166.00	71.93
33	☐	J-1268	3.54	3,200.00	3,298.26	42.57
34	☐	J-1269	3.54	3,200.00	3,300.95	43.74
35	☐	J-126FH	4.11	2,901.00	3,095.70	84.37
36	☐	J-127	4.11	2,901.00	3,095.81	84.41
37	☐	J-1273	4.11	2,823.00	3,212.45	168.75
38	☐	J-128FH	4.11	2,935.00	3,096.14	69.82
39	☐	J-129	4.11	2,899.00	3,095.54	85.16
40	☐	J-13	4.11	2,751.00	3,040.66	125.51
41	☐	J-130	4.11	2,932.00	3,096.14	71.12
42	☐	J-131FH	4.11	2,901.00	3,095.36	84.22
43	☐	J-132FH	4.11	2,925.00	3,096.13	74.15
44	☐	J-133FH	4.11	2,903.00	3,095.17	83.27
45	☐	J-134FH	4.11	2,927.00	3,096.13	73.29
46	☐	J-135	4.11	2,905.00	3,095.06	82.35
47	☐	J-136FH	4.11	2,910.00	3,094.96	80.15
48	☐	J-137	4.11	2,901.00	3,094.96	84.04
49	☐	J-138FH	4.11	2,902.00	3,094.96	83.61
50	☐	J-139FH	4.11	2,877.00	3,094.97	94.44

Average Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
51	☐	J-140	4.11	2,885.00	3,094.85	90.93
52	☐	J-141FH	4.11	2,900.00	3,094.85	84.43
53	☐	J-142	4.11	2,885.00	3,094.85	90.93
54	☐	J-143FH	4.11	2,890.00	3,094.80	88.74
55	☐	J-144FH	4.11	2,897.00	3,094.68	85.65
56	☐	J-145FH	4.11	2,889.00	3,094.68	89.12
57	☐	J-146	4.11	2,888.00	3,094.67	89.55
58	☐	J-147FH	4.11	2,891.00	3,094.66	88.25
59	☐	J-148	4.11	2,908.00	3,094.81	80.94
60	☐	J-149FH	4.11	2,905.00	3,094.67	82.18
61	☐	J-14FH	4.11	2,750.00	2,935.00	80.16
62	☐	J-150	4.11	2,909.00	3,094.67	80.45
63	☐	J-151FH	4.11	2,893.00	3,094.67	87.38
64	☐	J-152	4.11	2,874.00	3,041.24	72.46
65	☐	J-153FH	4.11	2,892.50	3,094.61	87.58
66	☐	J-154	4.11	2,892.00	3,094.61	87.79
67	☐	J-155	4.11	2,894.00	3,094.59	86.91
68	☐	J-156FH	4.11	2,894.00	3,094.59	86.91
69	☐	J-157	4.11	2,870.00	3,094.54	97.29
70	☐	J-158FH	4.11	2,900.00	3,094.59	84.31
71	☐	J-159	4.11	2,896.00	3,094.58	86.04
72	☐	J-15FH	4.11	2,753.00	2,934.99	78.86
73	☐	J-160FH	4.11	2,903.50	3,094.59	82.80
74	☐	J-161FH	4.11	2,897.00	3,094.57	85.61
75	☐	J-162FH	4.11	2,880.00	3,094.50	92.94
76	☐	J-163	4.11	2,885.00	3,094.43	90.75
77	☐	J-164FH	4.11	2,910.00	3,094.66	80.01
78	☐	J-165FH	4.11	2,915.00	3,094.63	77.83
79	☐	J-166	4.11	2,915.00	3,094.62	77.83
80	☐	J-167FH	4.11	2,909.00	3,094.82	80.51
81	☐	J-168FH	4.11	2,917.00	3,094.83	77.05
82	☐	J-169FH	4.11	2,921.00	3,096.13	75.88
83	☐	J-16FH	4.11	2,640.00	2,935.32	127.96
84	☐	J-170FH	4.11	2,917.00	3,095.68	77.42
85	☐	J-171	4.11	2,916.00	3,094.62	77.39
86	☐	J-172	4.11	2,909.00	3,094.82	80.51
87	☐	J-173FH	4.11	2,920.00	3,094.34	75.54
88	☐	J-174	4.11	2,921.00	3,094.34	75.11
89	☐	J-175FH	4.11	2,915.00	3,093.78	77.46
90	☐	J-176	4.11	2,915.00	3,093.78	77.46
91	☐	J-177FH	4.11	2,929.00	3,094.93	71.90
92	☐	J-178	4.11	2,920.00	3,094.92	75.79
93	☐	J-179	4.11	2,920.00	3,094.95	75.81
94	☐	J-17FH	4.11	2,638.00	2,935.31	128.82
95	☐	J-18	4.11	2,637.00	2,935.31	129.26
96	☐	J-180	4.11	2,933.00	3,094.87	70.14
97	☐	J-181	4.11	2,915.00	3,094.63	77.83
98	☐	J-182	4.11	2,915.00	3,094.44	77.75
99	☐	J-183FH	4.11	2,915.00	3,094.44	77.75
100	☐	J-184FH	4.11	2,915.00	3,092.99	77.12

Average Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
101	☐	J-185	4.11	2,920.00	3,093.90	75.35
102	☐	J-186FH	4.11	2,910.00	3,094.65	80.01
103	☐	J-187	4.11	2,915.00	3,095.09	78.03
104	☐	J-188	4.11	2,909.00	3,094.32	80.30
105	☐	J-189FH	4.11	2,915.00	3,093.67	77.42
106	☐	J-191	4.11	2,915.00	3,095.12	78.04
107	☐	J-192	4.11	2,910.00	3,095.13	80.22
108	☐	J-193FH	4.11	2,917.00	3,095.12	77.18
109	☐	J-194	4.11	2,917.00	3,094.53	76.93
110	☐	J-195	4.11	2,916.50	3,094.53	77.14
111	☐	J-196	4.11	2,909.00	3,094.48	80.37
112	☐	J-197	4.11	2,908.00	3,094.48	80.80
113	☐	J-198FH	4.11	2,900.00	3,094.44	84.25
114	☐	J-199	4.11	2,902.00	3,094.37	83.35
115	☐	J-19FH	4.11	2,636.00	2,935.31	129.69
116	☐	J-1FH	4.11	2,720.00	2,934.25	92.83
117	☐	J-2	4.11	2,720.00	2,934.25	92.83
118	☐	J-200	4.11	2,895.00	3,094.45	86.42
119	☐	J-201	4.11	2,890.00	3,094.43	88.58
120	☐	J-202	4.11	2,892.00	3,094.42	87.71
121	☐	J-203	4.11	2,883.00	3,094.41	91.61
122	☐	J-204FH	4.11	2,880.00	3,094.43	92.91
123	☐	J-205	4.11	2,885.00	3,094.36	90.72
124	☐	J-206	4.11	2,890.00	3,094.36	88.55
125	☐	J-207	4.11	2,883.00	3,094.36	91.58
126	☐	J-208	4.11	2,939.00	3,094.87	67.54
127	☐	J-209	4.11	2,825.00	3,048.10	96.67
128	☐	J-20FH	4.11	2,745.00	2,936.82	83.12
129	☐	J-21	4.11	2,745.00	2,936.55	83.00
130	☐	J-210	4.11	2,937.00	3,095.80	68.81
131	☐	J-211FH	4.11	2,830.00	3,048.10	94.50
132	☐	J-212FH	4.11	2,824.00	3,048.10	97.10
133	☐	J-213	4.11	2,825.00	3,051.04	97.94
134	☐	J-214FH	4.11	2,835.00	3,051.04	93.61
135	☐	J-215FH	4.11	2,825.00	3,051.04	97.94
136	☐	J-216	4.11	2,830.00	3,054.20	97.15
137	☐	J-217	4.11	2,830.00	3,055.96	97.91
138	☐	J-218FH	4.11	2,838.00	3,054.20	93.68
139	☐	J-219	4.11	2,830.00	3,054.20	97.14
140	☐	J-22	4.11	2,920.00	3,094.71	75.70
141	☐	J-220	4.11	2,924.00	3,094.39	73.83
142	☐	J-221FH	4.11	2,748.00	2,937.13	81.95
143	☐	J-222FH	4.11	2,732.00	2,937.39	89.00
144	☐	J-223	4.11	2,720.00	2,937.12	94.08
145	☐	J-224	4.11	2,750.00	2,937.54	81.26
146	☐	J-225FH	4.11	2,752.00	2,937.69	80.46
147	☐	J-226	4.11	2,740.00	2,937.67	85.65
148	☐	J-227FH	4.11	2,845.00	3,041.24	85.03
149	☐	J-228	4.11	2,755.00	2,937.69	79.16
150	☐	J-229FH	4.11	2,753.00	2,937.91	80.12

Average Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
151	☐	J-23	4.11	2,751.00	3,040.98	125.65
152	☐	J-230	4.11	2,755.00	2,937.91	79.26
153	☐	J-231	4.11	2,750.00	2,937.92	81.43
154	☐	J-232FH	4.11	2,755.00	2,938.15	79.36
155	☐	J-233	4.11	2,750.00	2,937.97	81.45
156	☐	J-234	4.11	2,770.00	2,938.15	72.86
157	☐	J-235FH	4.11	2,765.00	2,938.46	75.16
158	☐	J-236	4.11	2,768.00	2,938.46	73.86
159	☐	J-237	4.11	2,765.00	2,938.46	75.16
160	☐	J-238	4.11	2,778.00	2,938.72	69.64
161	☐	J-24	4.11	2,800.00	3,041.04	104.44
162	☐	J-240	4.11	2,778.00	2,938.76	69.66
163	☐	J-241	4.11	2,780.00	2,938.64	68.74
164	☐	J-242	4.11	2,760.00	2,939.48	77.77
165	☐	J-243	4.11	2,924.00	3,094.65	73.94
166	☐	J-244	4.11	2,770.00	2,939.48	73.44
167	☐	J-245	4.11	2,770.00	2,939.48	73.44
168	☐	J-246	4.11	2,878.00	3,041.24	70.73
169	☐	J-247FH	4.11	2,857.50	3,041.24	79.62
170	☐	J-248	4.11	2,920.00	3,093.41	75.14
171	☐	J-249	4.11	2,920.00	3,093.25	75.07
172	☐	J-250FH	4.11	2,750.00	2,937.97	81.45
173	☐	J-251	4.11	2,750.00	2,937.95	81.44
174	☐	J-252	4.11	2,750.00	2,937.94	81.43
175	☐	J-253	4.11	2,745.00	2,937.94	83.60
176	☐	J-254	4.11	2,735.00	2,936.24	87.20
177	☐	J-255FH	4.11	2,728.00	2,936.23	90.22
178	☐	J-256	4.11	2,728.00	2,936.22	90.22
179	☐	J-257	4.11	2,725.00	2,934.25	90.67
180	☐	J-258FH	4.11	2,735.00	2,934.18	86.30
181	☐	J-259	4.11	2,735.00	2,934.15	86.29
182	☐	J-25FH	4.11	2,758.00	3,041.02	122.63
183	☐	J-26	4.11	2,760.00	3,041.02	121.76
184	☐	J-260FH	4.11	2,735.00	2,934.14	86.29
185	☐	J-261	4.11	2,735.00	2,934.14	86.29
186	☐	J-262	4.11	2,735.00	2,934.13	86.28
187	☐	J-263	4.11	2,720.00	2,934.13	92.78
188	☐	J-264	4.11	2,710.00	2,934.11	97.11
189	☐	J-265	4.11	2,700.00	2,934.04	101.41
190	☐	J-266FH	4.11	2,700.00	2,934.04	101.41
191	☐	J-267FH	4.11	2,751.00	2,934.62	79.56
192	☐	J-268	4.11	2,700.00	2,934.07	101.42
193	☐	J-269FH	4.11	2,700.00	2,934.07	101.42
194	☐	J-27	4.11	2,770.00	3,041.05	117.44
195	☐	J-270FH	4.11	2,700.00	2,934.11	101.44
196	☐	J-271FH	4.11	2,735.00	2,934.14	86.29
197	☐	J-272	4.11	2,824.00	3,043.49	95.11
198	☐	J-273FH	4.11	2,705.00	2,934.15	99.29
199	☐	J-274FH	4.11	2,705.00	2,934.16	99.29
200	☐	J-275FH	4.11	2,785.00	3,040.86	110.86

Average Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
201	☐	J-277	4.11	2,920.00	3,093.67	75.25
202	☐	J-278FH	4.11	2,740.00	2,934.42	84.24
203	☐	J-279FH	4.11	2,730.00	2,934.35	88.54
204	☐	J-28	4.11	2,807.00	3,041.16	101.46
205	☐	J-280FH	4.11	2,741.00	2,934.33	83.77
206	☐	J-281FH	4.11	2,703.00	2,934.16	100.16
207	☐	J-282	4.11	2,720.00	2,934.17	92.80
208	☐	J-283FH	4.11	2,715.00	2,934.17	94.97
209	☐	J-284FH	4.11	2,720.00	2,934.21	92.82
210	☐	J-285	4.11	2,720.00	2,934.17	92.80
211	☐	J-286	4.11	2,720.00	2,934.21	92.82
212	☐	J-287	4.11	2,720.00	2,934.23	92.83
213	☐	J-288FH	4.11	2,720.00	2,934.17	92.80
214	☐	J-289	4.11	2,720.00	2,934.18	92.81
215	☐	J-290	4.11	2,720.00	2,934.18	92.81
216	☐	J-291FH	4.11	2,921.00	3,095.36	75.55
217	☐	J-292FH	4.11	2,705.00	2,934.16	99.30
218	☐	J-293FH	4.11	2,755.00	3,040.76	123.82
219	☐	J-294	4.11	2,913.00	3,100.10	81.07
220	☐	J-295	4.11	2,946.00	3,165.32	95.03
221	☐	J-296	3.54	2,990.00	3,165.43	76.01
222	☐	J-297FH	4.11	2,705.00	2,934.16	99.30
223	☐	J-298	4.11	2,760.00	2,939.15	77.63
224	☐	J-299	4.11	2,770.00	2,939.46	73.43
225	☐	J-29FH	4.11	2,815.00	3,041.24	98.03
226	☐	J-3	4.11	2,730.00	2,934.34	88.54
227	☐	J-300	4.11	2,915.00	3,093.67	77.42
228	☐	J-301FH	4.11	2,800.00	3,092.19	126.61
229	☐	J-302FH	4.11	2,705.00	2,934.16	99.30
230	☐	J-303FH	4.11	2,730.00	2,934.18	88.47
231	☐	J-304	3.54	3,000.00	3,165.83	71.85
232	☐	J-305FH	4.11	2,877.50	3,041.25	70.95
233	☐	J-306	4.11	2,877.50	3,094.71	94.12
234	☐	J-307FH	4.11	2,740.00	2,934.19	84.14
235	☐	J-308	3.54	3,042.00	3,089.00	20.37
236	☐	J-309	4.11	2,760.00	2,939.50	77.78
237	☐	J-30FH	4.11	2,816.00	3,041.32	97.63
238	☐	J-31	4.11	2,815.00	3,041.39	98.10
239	☐	J-310	4.11	2,930.00	3,095.62	71.76
240	☐	J-311	44.15	2,925.00	3,102.23	76.79
241	☐	J-312	4.11	2,870.00	3,096.79	98.27
242	☐	J-313	4.11	2,800.00	3,041.71	104.73
243	☐	J-314	4.11	2,780.00	3,041.77	113.42
244	☐	J-315FH	4.11	2,930.00	3,096.14	71.99
245	☐	J-316	4.11	2,843.00	3,041.24	85.90
246	☐	J-317FH	4.11	2,902.00	3,094.36	83.35
247	☐	J-318FH	4.11	2,922.00	3,093.35	74.25
248	☐	J-319FH	4.11	2,924.00	3,093.92	73.62
249	☐	J-32	4.11	2,800.00	3,041.66	104.71
250	☐	J-320	4.11	2,922.00	3,094.06	74.55

Average Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
251	☐	J-321FH	4.11	2,924.00	3,094.32	73.80
252	☐	J-322FH	4.11	2,936.00	3,095.28	69.02
253	☐	J-323FH	4.11	2,930.00	3,094.84	71.43
254	☐	J-324FH	4.11	2,926.00	3,094.65	73.08
255	☐	J-325FH	4.11	2,924.00	3,094.39	73.83
256	☐	J-326FH	4.11	2,928.00	3,094.48	72.14
257	☐	J-327FH	4.11	2,928.00	3,094.84	72.29
258	☐	J-328FH	4.11	2,933.00	3,094.95	70.17
259	☐	J-329FH	4.11	2,934.00	3,094.94	69.74
260	☐	J-330	4.11	2,934.00	3,094.84	69.69
261	☐	J-331	4.11	2,923.00	3,094.31	74.23
262	☐	J-333	4.11	2,885.00	3,094.36	90.72
263	☐	J-334	4.11	2,885.00	3,094.36	90.72
264	☐	J-335	4.11	2,745.00	2,936.88	83.14
265	☐	J-336	4.11	2,745.00	2,936.88	83.14
266	☐	J-33FH	4.11	2,820.00	3,041.45	95.96
267	☐	J-34	4.11	2,830.00	3,041.48	91.63
268	☐	J-35	4.11	2,827.00	3,041.35	92.88
269	☐	J-36	4.11	2,820.00	3,041.36	95.92
270	☐	J-37	4.11	2,825.00	3,041.30	93.72
271	☐	J-38FH	4.11	2,821.00	3,041.24	95.43
272	☐	J-39FH	4.11	2,836.00	3,041.32	88.97
273	☐	J-4	4.11	2,729.00	2,934.34	88.97
274	☐	J-40	4.11	2,839.00	3,041.32	87.66
275	☐	J-41	4.11	2,837.00	3,041.31	88.53
276	☐	J-42	4.11	2,835.00	3,041.28	89.38
277	☐	J-43	4.11	2,833.00	3,041.24	90.23
278	☐	J-44FH	4.11	2,805.00	3,041.16	102.33
279	☐	J-45	4.11	2,805.00	3,041.17	102.33
280	☐	J-46	4.11	2,780.00	3,041.16	113.16
281	☐	J-47	4.11	2,760.00	3,041.16	121.82
282	☐	J-48	4.11	2,780.00	3,041.16	113.16
283	☐	J-49	4.11	2,801.00	3,041.21	104.08
284	☐	J-5	4.11	2,751.00	2,934.45	79.49
285	☐	J-50	4.11	2,803.00	3,041.17	103.20
286	☐	J-51	4.11	2,800.00	3,041.21	104.51
287	☐	J-52	4.11	2,839.00	3,041.56	87.77
288	☐	J-53	4.11	2,842.00	3,041.46	86.43
289	☐	J-54	4.11	2,920.00	3,095.09	75.87
290	☐	J-55	4.11	2,842.00	3,041.45	86.42
291	☐	J-56	4.11	2,847.00	3,041.37	84.22
292	☐	J-57	4.11	2,850.00	3,041.37	82.92
293	☐	J-58	4.11	2,837.00	3,041.32	88.53
294	☐	J-59	4.11	2,860.00	3,092.00	100.52
295	☐	J-6	4.11	2,757.00	2,934.48	76.90
296	☐	J-61	4.11	2,847.00	3,041.31	84.19
297	☐	J-63FH	4.11	2,839.00	3,041.31	87.66
298	☐	J-64	4.11	2,839.00	3,041.28	87.65
299	☐	J-65	4.11	2,851.50	3,041.29	82.24
300	☐	J-66FH	4.11	2,847.00	3,041.27	84.18

Average Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
301	☐	J-67	4.11	2,842.00	3,041.27	86.34
302	☐	J-68FH	4.11	2,839.00	3,041.27	87.64
303	☐	J-69FH	4.11	2,839.00	3,041.25	87.63
304	☐	J-7	4.11	2,754.00	2,934.47	78.20
305	☐	J-70	4.11	2,837.00	3,041.25	88.50
306	☐	J-71	4.11	2,839.50	3,041.25	87.42
307	☐	J-73FH	4.11	2,830.00	3,041.24	91.53
308	☐	J-74	4.11	2,843.00	3,041.25	85.90
309	☐	J-75	4.11	2,845.00	3,041.25	85.04
310	☐	J-76	4.11	2,849.00	3,041.25	83.30
311	☐	J-77FH	4.11	2,914.00	3,096.40	79.04
312	☐	J-78	4.11	2,940.00	3,095.62	67.43
313	☐	J-79	4.11	2,842.00	3,041.24	86.33
314	☐	J-80FH	4.11	2,940.00	3,096.14	67.65
315	☐	J-81FH	4.11	2,841.00	3,041.24	86.76
316	☐	J-82	4.11	2,921.00	3,096.13	75.88
317	☐	J-83	4.11	2,760.00	2,937.54	76.93
318	☐	J-84	4.11	2,760.00	3,041.24	121.86
319	☐	J-85FH	4.11	2,849.50	3,041.26	83.09
320	☐	J-86	4.11	2,851.50	3,041.26	82.22
321	☐	J-87	4.11	2,852.00	3,041.26	82.01
322	☐	J-88	4.11	2,854.00	3,041.25	81.14
323	☐	J-89	4.11	2,857.00	3,041.27	79.84
324	☐	J-8FH	4.11	2,752.00	2,934.47	79.06
325	☐	J-9	4.11	2,757.00	2,934.49	76.91
326	☐	J-90	4.11	2,857.00	3,041.27	79.84
327	☐	J-91	4.11	2,857.00	3,041.26	79.84
328	☐	J-92	4.11	2,861.00	3,041.25	78.10
329	☐	J-93FH	4.11	2,858.00	3,041.25	79.40
330	☐	J-94	4.11	2,857.00	3,041.25	79.83
331	☐	J-95	4.11	2,863.50	3,041.25	77.02
332	☐	J-956	3.54	2,847.00	3,063.94	94.00
333	☐	J-958	3.54	2,856.00	3,067.09	91.46
334	☐	J-96	4.11	2,863.00	3,041.25	77.24
335	☐	J-97FH	4.11	2,936.00	3,096.14	69.39
336	☐	J-98	4.11	2,866.75	3,041.25	75.61
337	☐	J-99	4.11	2,866.50	3,041.25	75.72
338	☐	J1000	3.54	2,903.00	3,098.54	84.73
339	☐	J1002	3.54	2,892.00	3,098.46	89.46
340	☐	J1004	3.54	2,939.00	3,097.74	68.78
341	☐	J1006	3.54	2,937.00	3,097.73	69.65
342	☐	J1008	3.54	2,940.00	3,097.74	68.35
343	☐	J100FH	4.11	2,933.00	3,094.15	69.83
344	☐	J1010	3.54	2,941.00	3,097.74	67.91
345	☐	J1012	3.54	2,941.00	3,097.76	67.92
346	☐	J1014	3.54	2,942.00	3,097.76	67.49
347	☐	J1016	3.54	2,943.00	3,097.72	67.04
348	☐	J1018	3.54	2,940.00	3,097.74	68.35
349	☐	J1020	3.54	2,944.00	3,098.88	67.11
350	☐	J1022	3.54	2,947.00	3,098.88	65.81

Average Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
351	☐	J1024	3.54	2,941.00	3,098.88	68.41
352	☐	J1026	3.54	2,953.00	3,089.30	59.06
353	☐	J1028	3.54	2,868.00	3,089.30	95.89
354	☐	J102FH	4.11	2,936.00	3,095.40	69.07
355	☐	J1030	3.54	2,890.00	3,089.30	86.36
356	☐	J1032	3.54	2,873.00	3,089.30	93.72
357	☐	J1034	3.54	2,915.00	3,089.30	75.52
358	☐	J1036	3.54	2,761.00	2,934.49	75.17
359	☐	J1038	3.54	2,764.00	2,934.48	73.87
360	☐	J1040	3.54	2,764.00	2,934.49	73.87
361	☐	J1042	3.54	2,766.00	2,934.48	73.00
362	☐	J1044	3.54	2,768.00	2,934.48	72.14
363	☐	J1048	3.54	3,000.00	3,165.84	71.86
364	☐	J104FH	4.11	2,929.00	3,095.90	72.32
365	☐	J1050	3.54	2,861.00	3,212.44	152.28
366	☐	J1054	0.00	2,940.00	3,118.39	77.30
367	☐	J1056	0.00	2,929.50	3,099.67	73.73
368	☐	J1058	0.00	3,007.70	3,211.75	88.42
369	☐	J1062	0.00	3,000.00	3,165.43	71.68
370	☐	J1064	0.00	2,935.51	3,109.31	75.31
371	☐	J1068	3.54	3,138.90	3,166.00	11.74
372	☐	J106FH	4.11	2,923.00	3,095.89	74.91
373	☐	J108FH	4.11	2,921.00	3,096.24	75.93
374	☐	J10FH	4.11	2,845.00	3,058.51	92.51
375	☐	J110FH	4.11	2,914.00	3,096.10	78.91
376	☐	J112FH	4.11	2,934.00	3,094.78	69.67
377	☐	J114FH	4.11	2,932.00	3,094.82	70.55
378	☐	J116FH	4.11	2,925.00	3,095.34	73.81
379	☐	J118FH	4.11	2,929.00	3,094.47	71.70
380	☐	J12	4.11	2,845.00	3,058.73	92.61
381	☐	J120FH	4.11	2,930.00	3,094.68	71.36
382	☐	J122FH	4.11	2,930.00	3,094.76	71.39
383	☐	J124FH	4.11	2,922.00	3,095.53	75.19
384	☐	J126FH	32.49	2,899.00	3,096.55	85.60
385	☐	J128FH	4.11	2,902.00	3,095.81	83.98
386	☐	J130FH	32.49	2,881.00	3,096.70	93.46
387	☐	J132FH	4.11	2,887.00	3,095.95	90.54
388	☐	J134FH	4.11	2,894.00	3,095.63	87.37
389	☐	J136FH	4.11	2,898.00	3,095.55	85.60
390	☐	J138FH	4.11	2,924.00	3,095.09	74.13
391	☐	J140FH	4.11	2,920.00	3,095.08	75.86
392	☐	J142FH	4.11	2,923.00	3,094.95	74.51
393	☐	J144FH	4.11	2,808.00	3,092.19	123.14
394	☐	J146FH	4.11	2,810.00	3,092.20	122.28
395	☐	J148FH	4.11	2,816.00	3,092.20	119.68
396	☐	J14FH	4.11	2,845.00	3,058.11	92.34
397	☐	J150FH	4.11	2,868.00	3,091.91	97.02
398	☐	J152FH	4.11	2,932.00	3,093.26	69.87
399	☐	J154FH	4.11	2,929.00	3,094.06	71.52
400	☐	J156FH	4.11	2,929.00	3,094.11	71.54

Average Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
401	☐	J158FH	4.11	2,928.00	3,094.64	72.20
402	☐	J16	4.11	2,849.00	3,058.10	90.60
403	☐	J160FH	4.11	2,912.00	3,094.52	79.08
404	☐	J162FH	4.11	2,918.00	3,094.84	76.62
405	☐	J164FH	4.11	2,911.00	3,094.80	79.64
406	☐	J166FH	4.11	2,911.00	3,095.06	79.75
407	☐	J168FH	4.11	2,905.00	3,095.18	82.40
408	☐	J170FH	4.11	2,882.00	3,095.41	92.47
409	☐	J172FH	4.11	2,884.00	3,095.17	91.50
410	☐	J174FH	4.11	2,877.00	3,095.03	94.47
411	☐	J176FH	4.11	2,881.00	3,094.92	92.69
412	☐	J178FH	4.11	2,888.00	3,094.85	89.63
413	☐	J180FH	4.11	2,880.00	3,094.80	93.07
414	☐	J182FH	4.11	2,863.00	3,094.80	100.44
415	☐	J184FH	4.11	2,863.00	3,094.70	100.40
416	☐	J186	4.11	2,788.00	2,939.48	65.64
417	☐	J188FH	4.11	2,775.00	2,939.48	71.27
418	☐	J18FH	4.11	2,844.00	3,058.10	92.77
419	☐	J190FH	4.11	2,893.00	3,094.36	87.25
420	☐	J192FH	4.11	2,766.00	2,939.49	75.17
421	☐	J194FH	4.11	2,780.00	2,939.39	69.06
422	☐	J196FH	4.11	2,763.00	2,939.38	76.42
423	☐	J198FH	4.11	2,776.00	2,939.26	70.74
424	☐	J200FH	4.11	2,783.00	2,938.82	67.52
425	☐	J202FH	4.11	2,760.00	2,938.46	77.33
426	☐	J204FH	4.11	2,777.00	2,938.15	69.82
427	☐	J206FH	4.11	2,889.00	3,094.36	88.98
428	☐	J208FH	4.11	2,879.00	3,094.40	93.33
429	☐	J20FH	4.11	2,850.00	3,058.10	90.17
430	☐	J210FH	4.11	2,892.00	3,094.44	87.72
431	☐	J212FH	4.11	2,881.00	3,094.46	92.49
432	☐	J214FH	4.11	2,738.00	2,937.94	86.63
433	☐	J216FH	4.11	2,743.00	2,937.67	84.35
434	☐	J218FH	4.11	2,722.00	2,937.12	93.21
435	☐	J22	4.11	2,852.00	3,058.10	89.30
436	☐	J220FH	4.11	2,725.00	2,937.12	91.91
437	☐	J222FH	4.11	2,732.00	2,937.12	88.88
438	☐	J224	4.11	2,730.00	2,937.12	89.75
439	☐	J226FH	4.11	2,736.00	2,937.12	87.15
440	☐	J228FH	4.11	2,738.00	2,936.95	86.21
441	☐	J230FH	4.11	2,747.00	2,937.18	82.41
442	☐	J232FH	4.11	2,723.00	2,936.22	92.39
443	☐	J234FH	4.11	2,728.00	2,936.22	90.22
444	☐	J236FH	4.11	2,738.00	2,936.70	86.09
445	☐	J238FH	4.11	2,745.00	2,936.97	83.18
446	☐	J240FH	4.11	2,720.00	2,934.91	93.12
447	☐	J242FH	4.11	2,742.00	2,935.44	83.82
448	☐	J244FH	4.11	2,755.00	3,040.71	123.80
449	☐	J246FH	4.11	2,835.00	3,054.20	94.98
450	☐	J248FH	4.11	2,740.00	2,936.11	84.97

Average Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
451	☐	J24FH	4.11	2,842.00	3,058.10	93.64
452	☐	J250FH	4.11	2,749.00	2,936.65	81.31
453	☐	J252FH	4.11	2,743.00	2,936.18	83.70
454	☐	J254FH	4.11	2,743.00	2,936.04	83.65
455	☐	J256FH	4.11	2,804.00	3,041.18	102.77
456	☐	J258FH	4.11	2,778.00	3,041.16	114.03
457	☐	J260FH	4.11	2,797.00	3,041.11	105.77
458	☐	J262FH	4.11	2,796.00	3,041.04	106.18
459	☐	J264FH	4.11	2,799.00	3,041.00	104.86
460	☐	J266FH	4.11	2,812.00	3,041.24	99.33
461	☐	J268FH	4.11	2,810.00	3,041.22	100.19
462	☐	J26FH	4.11	2,849.00	3,058.10	90.60
463	☐	J270FH	4.11	2,807.00	3,041.16	101.46
464	☐	J272FH	4.11	2,824.00	3,041.38	94.19
465	☐	J274FH	4.11	2,804.00	3,041.42	102.87
466	☐	J276FH	4.11	2,818.00	3,041.24	96.73
467	☐	J278FH	4.11	2,824.00	3,041.28	94.15
468	☐	J28	4.11	2,922.00	3,093.67	74.39
469	☐	J280FH	4.11	2,819.00	3,041.29	96.32
470	☐	J282FH	4.11	2,841.00	3,041.43	86.85
471	☐	J284FH	4.11	2,843.00	3,041.35	85.94
472	☐	J286FH	4.11	2,844.00	3,041.28	85.48
473	☐	J288FH	4.11	2,849.00	3,041.26	83.31
474	☐	J290FH	4.11	2,794.00	3,041.24	107.13
475	☐	J292FH	4.11	2,856.00	3,041.24	80.27
476	☐	J294FH	4.11	2,845.00	3,041.25	85.03
477	☐	J296FH	4.11	2,843.00	3,041.25	85.90
478	☐	J298FH	4.11	2,852.00	3,041.25	82.00
479	☐	J300FH	4.11	2,875.00	3,041.24	72.03
480	☐	J302FH	4.11	2,871.00	3,041.24	73.76
481	☐	J304FH	4.11	2,872.00	3,041.24	73.33
482	☐	J306FH	4.11	2,864.00	3,041.25	76.80
483	☐	J308FH	4.11	2,858.00	3,041.25	79.40
484	☐	J310FH	4.11	2,752.00	2,934.40	79.03
485	☐	J312FH	4.11	2,739.00	2,934.21	84.59
486	☐	J314FH	4.11	2,743.00	2,934.34	82.91
487	☐	J316FH	4.11	2,734.00	2,934.27	86.78
488	☐	J318FH	4.11	2,720.00	2,934.21	92.82
489	☐	J320FH	4.11	2,716.00	2,934.19	94.54
490	☐	J322FH	4.11	2,721.00	2,934.19	92.38
491	☐	J324FH	4.11	2,727.00	2,934.20	89.78
492	☐	J326FH	4.11	2,729.00	2,934.19	88.91
493	☐	J328FH	4.11	2,736.00	2,934.16	85.86
494	☐	J330FH	4.11	2,727.00	2,934.16	89.76
495	☐	J332FH	4.11	2,736.00	2,934.17	85.87
496	☐	J334FH	4.11	2,739.00	2,934.18	84.57
497	☐	J336FH	4.11	2,733.00	2,934.29	87.22
498	☐	J338FH	4.11	2,725.00	2,934.22	90.65
499	☐	J340FH	4.11	2,739.00	2,934.29	84.62
500	☐	J342FH	4.11	2,728.00	2,934.36	89.41

Average Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
501	☐	J344FH	4.11	2,736.00	2,934.29	85.92
502	☐	J346FH	4.11	2,740.00	2,934.30	84.19
503	☐	J348FH	4.11	2,746.00	2,934.39	81.63
504	☐	J34FH	4.11	2,922.00	3,093.54	74.33
505	☐	J350FH	4.11	2,746.00	2,934.40	81.63
506	☐	J352FH	4.11	2,735.00	2,934.47	86.43
507	☐	J354FH	4.11	2,749.00	2,934.58	80.41
508	☐	J356FH	4.11	2,721.00	2,934.57	92.54
509	☐	J358FH	4.11	2,733.00	2,934.46	87.29
510	☐	J36	4.11	2,906.00	3,092.80	80.94
511	☐	J360FH	4.11	2,705.00	2,934.05	99.25
512	☐	J362FH	4.11	2,705.00	2,934.09	99.26
513	☐	J364FH	4.11	2,718.00	2,934.14	93.65
514	☐	J366FH	4.11	2,721.00	2,934.14	92.35
515	☐	J368FH	4.11	2,717.00	2,934.13	94.08
516	☐	J370FH	4.11	2,731.00	2,934.15	88.02
517	☐	J372FH	4.11	2,731.00	2,934.15	88.02
518	☐	J374FH	4.11	2,704.00	2,934.16	99.73
519	☐	J376FH	4.11	2,705.00	2,934.16	99.30
520	☐	J380FH	4.11	2,947.00	3,097.19	65.08
521	☐	J382FH	4.11	2,948.00	3,097.15	64.63
522	☐	J384FH	4.11	2,945.00	3,097.11	65.91
523	☐	J388	4.11	2,946.00	3,097.02	65.44
524	☐	J38FH	4.11	2,913.00	3,094.35	78.58
525	☐	J392	4.11	2,952.00	3,097.02	62.84
526	☐	J394	4.11	2,945.00	3,096.97	65.85
527	☐	J396	4.11	2,942.00	3,097.35	67.31
528	☐	J398FH	4.11	2,943.00	3,097.26	66.84
529	☐	J40	4.11	2,916.00	3,094.35	77.28
530	☐	J400	4.11	2,902.00	3,097.74	84.82
531	☐	J402FH	32.49	2,912.00	3,097.52	80.39
532	☐	J404FH	4.11	2,917.00	3,097.38	78.16
533	☐	J406FH	4.11	2,921.00	3,097.42	76.44
534	☐	J408	4.11	2,918.00	3,097.42	77.74
535	☐	J410FH	4.11	2,922.00	3,097.18	75.90
536	☐	J412FH	4.11	2,929.00	3,096.76	72.69
537	☐	J414	4.11	2,928.00	3,093.85	71.86
538	☐	J416FH	4.11	2,928.00	3,093.38	71.66
539	☐	J418FH	4.11	2,926.00	3,093.38	72.52
540	☐	J420FH	4.11	2,918.00	3,093.31	75.96
541	☐	J422FH	4.11	2,928.00	3,093.48	71.70
542	☐	J424FH	4.11	2,928.00	3,093.47	71.70
543	☐	J426FH	4.11	2,927.00	3,093.46	72.13
544	☐	J42FH	4.11	2,919.00	3,094.34	75.98
545	☐	J430	4.11	2,923.00	3,093.28	73.78
546	☐	J432	4.11	2,924.00	3,093.28	73.35
547	☐	J434FH	4.11	2,926.00	3,093.28	72.48
548	☐	J436	4.11	2,922.00	3,093.28	74.21
549	☐	J438	4.11	2,923.00	3,093.28	73.78
550	☐	J440FH	4.11	2,925.00	3,093.46	72.99

Average Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
551	☐	J442FH	4.11	2,926.00	3,093.42	72.54
552	☐	J444FH	4.11	2,930.00	3,094.08	71.10
553	☐	J446	4.11	2,909.00	3,093.12	79.78
554	☐	J448	4.11	2,923.00	3,093.31	73.80
555	☐	J44FH	4.11	2,918.00	3,094.35	76.41
556	☐	J450FH	4.11	2,918.00	3,099.05	78.45
557	☐	J452FH	32.49	2,915.00	3,098.43	79.48
558	☐	J454	4.11	2,841.00	3,041.25	86.77
559	☐	J456FH	4.11	2,706.00	2,934.02	98.80
560	☐	J458FH	4.11	2,709.00	2,934.02	97.50
561	☐	J46	4.11	2,896.00	3,094.36	85.95
562	☐	J460FH	4.11	2,713.00	2,934.02	95.77
563	☐	J462FH	4.11	2,713.00	2,934.02	95.77
564	☐	J464	4.11	2,711.00	2,934.02	96.64
565	☐	J466	4.11	2,707.00	2,934.02	98.37
566	☐	J468	4.11	2,712.00	2,934.02	96.20
567	☐	J470	4.11	2,712.00	2,934.03	96.21
568	☐	J472	4.11	2,712.00	2,934.02	96.20
569	☐	J474	4.11	2,712.00	2,934.02	96.20
570	☐	J476	3.54	2,815.00	3,085.36	117.15
571	☐	J478FH	4.11	2,816.00	3,085.45	116.75
572	☐	J48	4.11	2,900.00	3,094.45	84.26
573	☐	J480FH	4.11	2,796.00	3,086.12	125.71
574	☐	J482FH	63.98	2,796.00	3,086.87	126.03
575	☐	J484FH	4.11	2,811.00	3,087.65	119.87
576	☐	J486FH	4.11	2,840.00	3,088.73	107.77
577	☐	J488FH	4.11	2,820.00	3,088.78	116.46
578	☐	J490FH	4.11	2,818.00	3,088.84	117.36
579	☐	J492FH	4.11	2,820.00	3,088.90	116.52
580	☐	J494FH	63.98	2,818.00	3,088.88	117.37
581	☐	J496FH	4.11	2,815.00	3,089.09	118.76
582	☐	J500FH	4.11	2,823.00	3,089.28	115.38
583	☐	J508FH	4.11	2,847.00	3,089.31	104.99
584	☐	J50FH	4.11	2,695.00	2,934.16	103.63
585	☐	J510FH	4.11	2,856.00	3,089.35	101.11
586	☐	J512	4.11	2,872.00	3,089.35	94.18
587	☐	J514FH	4.11	2,869.00	3,089.39	95.49
588	☐	J516	4.11	2,867.00	3,089.40	96.37
589	☐	J518FH	4.11	2,865.00	3,089.44	97.25
590	☐	J52	4.11	2,742.00	2,934.29	83.32
591	☐	J522FH	4.11	2,824.00	3,089.28	114.95
592	☐	J524	4.11	2,815.00	3,089.24	118.83
593	☐	J526FH	4.11	2,840.00	3,089.33	108.04
594	☐	J528FH	4.11	2,854.00	3,089.39	102.00
595	☐	J532FH	4.11	2,858.00	3,089.46	100.29
596	☐	J534	4.11	2,860.00	3,089.48	99.43
597	☐	J536	778.30	2,914.00	3,085.35	74.25
598	☐	J538	0.00	3,052.00	2,888.57	-70.82
599	☐	J54	4.11	2,738.00	2,934.29	85.05
600	☐	J540	44.15	2,927.00	3,102.70	76.13

Average Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
601	☐	J542	0.00	3,125.00	2,888.57	-102.45
602	☐	J544	0.00	2,949.00	2,888.57	-26.19
603	☐	J546	3.54	2,760.00	3,212.46	196.05
604	☐	J548	3.54	2,760.00	3,212.45	196.05
605	☐	J550	3.54	2,760.00	3,212.44	196.04
606	☐	J552	3.54	2,760.00	3,212.44	196.04
607	☐	J554	3.54	2,760.00	3,212.45	196.05
608	☐	J556	3.54	2,760.00	3,212.45	196.05
609	☐	J558	3.54	2,760.00	3,212.45	196.05
610	☐	J560	4.11	2,875.00	3,094.66	95.18
611	☐	J562	3.54	2,865.00	3,094.67	99.52
612	☐	J564	4.11	2,820.00	3,041.24	95.86
613	☐	J566FH	4.11	2,922.00	3,099.88	77.08
614	☐	J568FH	4.11	2,928.00	3,099.61	74.36
615	☐	J56FH	4.11	2,740.00	2,934.23	84.16
616	☐	J570FH	4.11	2,929.00	3,099.61	73.93
617	☐	J572	4.11	2,939.00	3,099.21	69.42
618	☐	J574	4.11	2,937.00	3,099.34	70.34
619	☐	J576	4.11	2,942.00	3,099.18	68.10
620	☐	J578	4.11	2,940.00	3,099.05	68.92
621	☐	J580FH	4.11	2,939.00	3,099.05	69.35
622	☐	J582	4.11	2,922.00	3,099.85	77.06
623	☐	J584FH	4.11	2,842.00	3,089.06	107.05
624	☐	J586	4.11	2,865.00	3,089.30	97.19
625	☐	J588	4.11	2,857.00	3,089.31	100.66
626	☐	J58FH	4.11	2,734.00	2,934.20	86.75
627	☐	J590FH	4.11	2,833.00	3,089.05	110.95
628	☐	J594FH	4.11	2,826.00	3,089.05	113.98
629	☐	J596FH	4.11	2,803.00	3,088.88	123.87
630	☐	J60	4.11	2,728.00	2,934.19	89.34
631	☐	J600FH	4.11	2,846.00	3,089.35	105.44
632	☐	J602	4.11	2,846.00	3,089.35	105.44
633	☐	J604	4.11	2,945.00	3,099.10	66.77
634	☐	J606FH	4.11	2,950.00	3,099.01	64.57
635	☐	J608	4.11	2,943.00	3,099.10	67.64
636	☐	J610FH	4.11	2,936.00	3,099.56	70.87
637	☐	J612FH	4.11	2,931.00	3,099.73	73.11
638	☐	J614	4.11	2,931.00	3,099.62	73.06
639	☐	J616	44.15	2,933.00	3,099.58	72.18
640	☐	J618	3.54	3,143.00	3,169.29	11.39
641	☐	J62	4.11	2,723.00	2,934.19	91.51
642	☐	J620	4.11	2,865.00	3,041.25	76.37
643	☐	J622FH	4.11	2,826.00	3,043.12	94.08
644	☐	J624FH	4.11	2,835.00	3,043.11	90.18
645	☐	J626FH	4.11	2,805.00	3,042.60	102.95
646	☐	J630FH	4.11	2,825.00	3,043.11	94.51
647	☐	J634FH	4.11	2,831.00	3,043.11	91.91
648	☐	J638FH	4.11	2,790.00	3,042.28	109.31
649	☐	J64	4.11	2,742.00	2,934.18	83.27
650	☐	J640FH	4.11	2,930.00	3,099.57	73.47

Average Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
651	☐	J642FH	4.11	2,929.00	3,099.65	73.94
652	☐	J646FH	4.11	2,934.00	3,099.58	71.74
653	☐	J648FH	4.11	2,799.00	3,084.75	123.81
654	☐	J650FH	4.11	2,790.00	3,084.50	127.61
655	☐	J652FH	4.11	2,774.00	3,084.17	134.40
656	☐	J654FH	4.11	2,772.00	3,084.29	135.32
657	☐	J656FH	4.11	2,779.00	3,084.43	132.34
658	☐	J658FH	4.11	2,784.00	3,084.45	130.19
659	☐	J660FH	4.11	2,774.00	3,084.44	134.51
660	☐	J662FH	71.73	2,765.00	3,084.40	138.40
661	☐	J664FH	4.11	2,784.00	3,084.53	130.22
662	☐	J666FH	4.11	2,792.00	3,084.65	126.81
663	☐	J668	71.73	2,805.00	3,084.53	121.12
664	☐	J66FH	4.11	2,733.00	2,934.14	87.15
665	☐	J670	4.11	2,746.42	2,937.67	82.87
666	☐	J672FH	4.11	2,747.00	2,937.67	82.62
667	☐	J674	4.11	2,931.48	3,097.04	71.74
668	☐	J676FH	4.11	2,935.42	3,097.06	70.04
669	☐	J678FH	4.11	2,934.28	3,097.15	70.57
670	☐	J680FH	4.11	2,931.09	3,097.25	72.00
671	☐	J682	4.11	2,926.25	3,097.31	74.12
672	☐	J684FH	4.11	2,930.42	3,097.26	72.29
673	☐	J686FH	4.11	2,929.00	3,097.16	72.86
674	☐	J688	4.11	2,924.95	3,097.15	74.61
675	☐	J68FH	4.11	2,743.00	2,934.14	82.82
676	☐	J690	4.11	2,925.00	3,097.15	74.59
677	☐	J692FH	4.11	2,932.10	3,097.09	71.49
678	☐	J694	4.11	2,923.00	3,097.41	75.57
679	☐	J696	4.11	2,935.00	3,098.26	70.74
680	☐	J698	4.11	2,929.52	3,097.98	72.99
681	☐	J700FH	4.11	2,936.95	3,097.98	69.77
682	☐	J702	4.11	2,925.68	3,097.54	74.47
683	☐	J704FH	4.11	2,926.37	3,097.54	74.17
684	☐	J706FH	4.11	2,934.71	3,097.54	70.55
685	☐	J708FH	4.11	2,930.45	3,097.98	72.59
686	☐	J70FH	4.11	2,731.00	2,934.15	88.03
687	☐	J710FH	4.11	2,935.73	3,098.19	70.39
688	☐	J712	4.11	2,721.80	2,936.22	92.91
689	☐	J714FH	4.11	2,726.17	2,936.22	91.02
690	☐	J716	4.11	2,720.00	2,936.22	93.69
691	☐	J718FH	4.11	2,723.42	2,936.22	92.21
692	☐	J72	4.11	2,724.00	2,936.22	91.96
693	☐	J720FH	4.11	2,781.00	3,041.98	113.08
694	☐	J724	4.11	2,934.00	3,098.99	71.49
695	☐	J728	4.11	2,932.00	3,099.00	72.36
696	☐	J730FH	4.11	2,932.00	3,099.00	72.36
697	☐	J732	4.11	2,930.00	3,099.06	73.25
698	☐	J736	4.11	2,922.00	3,099.34	76.84
699	☐	J738FH	4.11	2,924.00	3,099.26	75.94
700	☐	J74	4.11	2,911.00	3,095.81	80.08

Average Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
701	☐	J740FH	4.11	2,916.00	3,099.54	79.53
702	☐	J742FH	4.11	2,938.00	3,098.87	69.71
703	☐	J744	4.11	2,942.00	3,098.70	67.90
704	☐	J746	4.11	2,944.00	3,098.91	67.12
705	☐	J748	44.15	2,950.00	3,098.89	64.51
706	☐	J750FH	4.11	2,941.00	3,098.90	68.42
707	☐	J752	44.15	2,946.00	3,098.88	66.24
708	☐	J754	4.11	2,944.00	3,098.90	67.12
709	☐	J756	4.11	2,948.00	3,099.01	65.43
710	☐	J758	4.11	2,952.00	3,099.01	63.70
711	☐	J76	4.11	2,886.00	3,096.12	91.05
712	☐	J774	4.11	2,738.00	2,934.14	84.99
713	☐	J776	4.11	2,736.00	2,934.14	85.86
714	☐	J778	4.11	2,771.00	3,084.35	135.78
715	☐	J780	4.11	2,770.00	3,084.35	136.21
716	☐	J782	4.11	2,812.00	3,041.40	99.40
717	☐	J784FH	4.11	2,774.00	3,084.19	134.40
718	☐	J786FH	4.11	2,781.00	3,041.94	113.06
719	☐	J788FH	4.11	2,921.00	3,096.13	75.88
720	☐	J78FH	4.11	2,932.00	3,095.92	71.03
721	☐	J790FH	4.11	2,926.00	3,099.10	75.01
722	☐	J792	44.15	2,943.00	3,097.80	67.08
723	☐	J794	403.93	2,907.00	3,103.56	85.17
724	☐	J796	43.58	2,889.00	3,098.43	90.75
725	☐	J798	67.62	2,955.00	3,084.73	56.21
726	☐	J800	0.00	2,913.00	3,084.67	74.39
727	☐	J802	4.11	2,774.00	2,940.15	71.99
728	☐	J804	4.11	2,799.00	3,084.92	123.89
729	☐	J806	0.00	2,757.00	3,084.40	141.86
730	☐	J80FH	4.11	2,925.00	3,095.88	74.04
731	☐	J814	3.54	2,981.00	3,212.48	100.30
732	☐	J816	3.54	2,963.00	3,099.01	58.93
733	☐	J818	3.54	2,954.00	3,099.01	62.83
734	☐	J820	0.00	2,960.45	3,204.14	105.59
735	☐	J822	0.00	2,966.52	3,207.90	104.59
736	☐	J824	0.00	2,980.76	3,210.29	99.46
737	☐	J826	0.00	2,987.71	3,210.07	96.35
738	☐	J828	0.00	2,996.13	3,210.50	92.88
739	☐	J82FH	4.11	2,917.00	3,095.78	77.47
740	☐	J830	0.00	2,995.21	3,210.38	93.23
741	☐	J832	0.00	2,990.88	3,210.19	95.03
742	☐	J834	0.00	3,009.18	3,211.69	87.75
743	☐	J836	0.00	3,002.40	3,210.38	90.12
744	☐	J838	3.54	3,004.53	3,211.88	89.84
745	☐	J840	0.00	2,944.90	3,209.06	114.46
746	☐	J842	0.00	2,940.71	3,209.06	116.28
747	☐	J844	0.00	2,968.00	3,210.17	104.93
748	☐	J846	0.00	2,967.45	3,210.15	105.16
749	☐	J848	0.00	2,961.29	3,210.09	107.81
750	☐	J84FH	4.11	2,922.00	3,095.78	75.30

Average Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
751	☐	J850	0.00	2,960.78	3,210.07	108.02
752	☐	J852	0.00	2,968.68	3,210.34	104.71
753	☐	J854	0.00	2,975.04	3,210.32	101.94
754	☐	J856	0.00	2,978.19	3,210.31	100.58
755	☐	J858	0.00	2,888.43	3,073.45	80.17
756	☐	J86	4.11	2,925.00	3,095.34	73.81
757	☐	J860	0.00	2,898.05	3,081.12	79.32
758	☐	J862	0.00	2,899.49	3,084.16	80.02
759	☐	J864	0.00	2,884.62	3,081.12	85.14
760	☐	J866	0.00	2,902.06	3,088.37	80.73
761	☐	J868	0.00	2,926.83	3,092.62	71.84
762	☐	J870	0.00	2,920.55	3,091.94	74.26
763	☐	J872	0.00	2,903.55	3,091.85	81.59
764	☐	J874	0.00	2,922.53	3,091.85	73.36
765	☐	J876	0.00	2,923.74	3,091.85	72.84
766	☐	J878	0.00	2,918.62	3,091.85	75.06
767	☐	J88	4.11	2,916.00	3,095.09	77.60
768	☐	J880	0.00	2,905.87	3,091.85	80.58
769	☐	J882	0.00	2,896.80	3,091.94	84.55
770	☐	J884	0.00	2,893.57	3,098.02	88.59
771	☐	J886	0.00	2,911.70	3,098.02	80.73
772	☐	J888	0.00	2,908.12	3,098.36	82.43
773	☐	J890	0.00	2,912.56	3,098.32	80.49
774	☐	J892	0.00	2,899.90	3,098.36	85.99
775	☐	J894	0.00	2,919.68	3,098.40	77.44
776	☐	J896	0.00	2,914.64	3,097.79	79.36
777	☐	J898	0.00	2,915.94	3,097.82	78.81
778	☐	J90	4.11	2,922.00	3,095.34	75.11
779	☐	J900	0.00	2,920.41	3,097.82	76.87
780	☐	J902	0.00	2,916.53	3,098.26	78.74
781	☐	J904	0.00	2,942.70	3,098.17	67.37
782	☐	J906	0.00	2,941.03	3,098.19	68.10
783	☐	J908	0.00	2,927.52	3,098.20	73.96
784	☐	J910	0.00	2,938.15	3,098.20	69.35
785	☐	J912	0.00	2,933.82	3,098.20	71.23
786	☐	J914	0.00	2,941.49	3,098.20	67.90
787	☐	J916	0.00	2,940.75	3,098.20	68.22
788	☐	J918	0.00	2,962.00	3,098.17	59.00
789	☐	J920	0.00	2,963.07	3,098.17	58.54
790	☐	J922	0.00	2,951.49	3,098.17	63.56
791	☐	J924	0.00	2,964.29	3,098.17	58.01
792	☐	J926	0.00	2,943.69	3,098.17	66.94
793	☐	J928	0.00	2,951.57	3,098.17	63.52
794	☐	J92FH	4.11	2,948.00	3,094.99	63.69
795	☐	J930	0.00	2,951.82	3,098.17	63.41
796	☐	J932	0.00	2,948.36	3,098.17	64.91
797	☐	J934	0.00	2,944.53	3,098.17	66.57
798	☐	J936	0.00	2,942.91	3,098.17	67.28
799	☐	J938	0.00	2,918.30	3,103.21	80.12
800	☐	J940	0.00	2,926.09	3,103.21	76.74

Average Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
801	☐	J942	3.54	2,907.00	3,098.85	83.13
802	☐	J944	0.00	2,929.59	3,209.06	121.10
803	☐	J946	3.54	2,983.37	3,211.95	99.04
804	☐	J948	3.54	2,946.00	3,118.39	74.70
805	☐	J94FH	4.11	2,950.00	3,095.84	63.19
806	☐	J950	0.00	2,937.89	3,116.36	77.33
807	☐	J952	0.00	2,939.75	3,119.05	77.69
808	☐	J954	3.54	2,847.00	3,062.25	93.27
809	☐	J960	3.54	2,851.00	3,065.05	92.75
810	☐	J962	3.54	2,855.00	3,066.61	91.69
811	☐	J964	3.54	2,861.00	3,068.66	89.98
812	☐	J966	3.54	2,861.00	3,070.00	90.56
813	☐	J968	3.54	2,915.00	3,100.10	80.21
814	☐	J96FH	4.11	2,941.00	3,095.06	66.76
815	☐	J970	3.54	2,924.00	3,099.87	76.20
816	☐	J972	3.54	2,917.00	3,100.55	79.53
817	☐	J974	3.54	2,919.00	3,100.11	78.48
818	☐	J976	3.54	2,926.00	3,099.87	75.34
819	☐	J978	3.54	2,934.00	3,103.51	73.45
820	☐	J980	3.54	2,934.00	3,103.40	73.40
821	☐	J982	3.54	2,928.00	3,103.13	75.88
822	☐	J984	3.54	2,944.00	3,113.94	73.63
823	☐	J986	3.54	2,923.00	3,107.98	80.15
824	☐	J988	3.54	2,921.00	3,105.33	79.87
825	☐	J98FH	4.11	2,936.00	3,094.42	68.65
826	☐	J990	3.54	2,916.00	3,104.03	81.47
827	☐	J992	3.54	2,923.00	3,103.54	78.23
828	☐	J994	3.54	2,946.00	3,119.05	74.98
829	☐	J996	3.54	2,910.00	3,098.97	81.88
830	☐	J998	3.54	2,908.00	3,098.46	82.52

Peak Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
1	☐	J-100FH	8.25	2,876.00	2,995.23	51.66
2	☐	J-101	8.25	2,865.00	3,028.74	70.95
3	☐	J-102FH	8.25	2,868.00	3,036.53	73.03
4	☐	J-103FH	8.25	2,871.00	3,037.36	72.08
5	☐	J-104	8.25	2,839.00	2,987.87	64.51
6	☐	J-105FH	8.25	2,875.00	3,037.98	70.62
7	☐	J-106FH	8.25	2,877.00	3,032.56	67.40
8	☐	J-107FH	8.25	2,936.00	3,046.41	47.84
9	☐	J-108	8.25	2,876.00	3,036.63	69.60
10	☐	J-109FH	8.25	2,875.00	3,037.43	70.38
11	☐	J-10FH	8.25	2,741.00	2,930.90	82.28
12	☐	J-110	8.25	2,879.00	3,037.98	68.88
13	☐	J-111	8.25	2,899.50	3,038.73	60.33
14	☐	J-112	8.25	2,879.00	3,038.72	69.21
15	☐	J-113	8.25	2,885.00	3,040.61	67.43
16	☐	J-114FH	8.25	2,885.50	3,039.68	66.80
17	☐	J-115	8.25	2,885.00	3,039.67	67.02
18	☐	J-116FH	8.25	2,881.00	3,041.87	69.71
19	☐	J-117	8.25	2,897.00	3,039.97	61.95
20	☐	J-118FH	8.25	2,891.00	3,040.67	64.85
21	☐	J-119FH	8.25	2,889.00	3,041.29	65.99
22	☐	J-11FH	8.25	2,740.00	2,930.55	82.56
23	☐	J-12	8.25	2,766.00	2,932.79	72.27
24	☐	J-120	8.25	2,887.00	3,041.80	67.08
25	☐	J-1208	8.25	2,822.00	2,989.07	72.39
26	☐	J-121	8.25	2,878.00	3,042.28	71.18
27	☐	J-1210	7.10	2,760.00	3,155.99	171.58
28	☐	J-122FH	8.25	2,880.00	3,042.48	70.40
29	☐	J-123	8.25	2,870.00	3,042.28	74.65
30	☐	J-124	8.25	2,892.00	3,041.94	64.97
31	☐	J-125	8.25	2,892.00	3,041.94	64.97
32	☐	J-1254	7.10	3,000.00	3,165.47	71.70
33	☐	J-1268	7.10	3,200.00	3,300.58	43.58
34	☐	J-1269	7.10	3,200.00	3,300.99	43.76
35	☐	J-126FH	8.25	2,901.00	3,042.41	61.27
36	☐	J-127	8.25	2,901.00	3,042.49	61.31
37	☐	J-1273	8.25	2,823.00	3,149.17	141.33
38	☐	J-128FH	8.25	2,935.00	3,046.38	48.26
39	☐	J-129	8.25	2,899.00	3,041.81	61.88
40	☐	J-13	8.25	2,751.00	2,978.68	98.65
41	☐	J-130	8.25	2,932.00	3,046.35	49.55
42	☐	J-131FH	8.25	2,901.00	3,041.30	60.79
43	☐	J-132FH	8.25	2,925.00	3,046.16	52.50
44	☐	J-133FH	8.25	2,903.00	3,040.86	59.73
45	☐	J-134FH	8.25	2,927.00	3,046.16	51.63
46	☐	J-135	8.25	2,905.00	3,040.39	58.67
47	☐	J-136FH	8.25	2,910.00	3,039.75	56.22
48	☐	J-137	8.25	2,901.00	3,039.68	60.09
49	☐	J-138FH	8.25	2,902.00	3,039.68	59.66
50	☐	J-139FH	8.25	2,877.00	3,039.58	70.45

Peak Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
51	☐	J-140	8.25	2,885.00	3,037.67	66.15
52	☐	J-141FH	8.25	2,900.00	3,037.67	59.65
53	☐	J-142	8.25	2,885.00	3,037.52	66.09
54	☐	J-143FH	8.25	2,890.00	3,037.06	63.72
55	☐	J-144FH	8.25	2,897.00	3,034.57	59.61
56	☐	J-145FH	8.25	2,889.00	3,033.55	62.63
57	☐	J-146	8.25	2,888.00	3,034.45	63.46
58	☐	J-147FH	8.25	2,891.00	3,033.46	61.73
59	☐	J-148	8.25	2,908.00	3,038.10	56.37
60	☐	J-149FH	8.25	2,905.00	3,034.98	56.32
61	☐	J-14FH	8.25	2,750.00	2,931.23	78.53
62	☐	J-150	8.25	2,909.00	3,035.49	54.81
63	☐	J-151FH	8.25	2,893.00	3,034.90	61.48
64	☐	J-152	8.25	2,874.00	3,001.37	55.19
65	☐	J-153FH	8.25	2,892.50	3,034.24	61.42
66	☐	J-154	8.25	2,892.00	3,034.24	61.63
67	☐	J-155	8.25	2,894.00	3,034.81	61.01
68	☐	J-156FH	8.25	2,894.00	3,034.88	61.04
69	☐	J-157	8.25	2,870.00	3,034.89	71.45
70	☐	J-158FH	8.25	2,900.00	3,035.24	58.60
71	☐	J-159	8.25	2,896.00	3,035.24	60.33
72	☐	J-15FH	8.25	2,753.00	2,931.23	77.23
73	☐	J-160FH	8.25	2,903.50	3,035.55	57.22
74	☐	J-161FH	8.25	2,897.00	3,035.53	60.02
75	☐	J-162FH	8.25	2,880.00	3,035.00	67.16
76	☐	J-163	8.25	2,885.00	3,035.39	65.17
77	☐	J-164FH	8.25	2,910.00	3,036.41	54.77
78	☐	J-165FH	8.25	2,915.00	3,036.84	52.79
79	☐	J-166	8.25	2,915.00	3,037.76	53.19
80	☐	J-167FH	8.25	2,909.00	3,038.82	56.25
81	☐	J-168FH	8.25	2,917.00	3,039.45	53.06
82	☐	J-169FH	8.25	2,921.00	3,046.15	54.23
83	☐	J-16FH	8.25	2,640.00	2,930.68	125.95
84	☐	J-170FH	8.25	2,917.00	3,044.14	55.09
85	☐	J-171	8.25	2,916.00	3,038.09	52.90
86	☐	J-172	8.25	2,909.00	3,038.82	56.25
87	☐	J-173FH	8.25	2,920.00	3,038.12	51.18
88	☐	J-174	8.25	2,921.00	3,037.81	50.61
89	☐	J-175FH	8.25	2,915.00	3,039.46	53.93
90	☐	J-176	8.25	2,915.00	3,039.45	53.93
91	☐	J-177FH	8.25	2,929.00	3,045.79	50.60
92	☐	J-178	8.25	2,920.00	3,041.05	52.45
93	☐	J-179	8.25	2,920.00	3,041.31	52.56
94	☐	J-17FH	8.25	2,638.00	2,930.66	126.81
95	☐	J-18	8.25	2,637.00	2,930.66	127.24
96	☐	J-180	8.25	2,933.00	3,046.93	49.37
97	☐	J-181	8.25	2,915.00	3,042.48	55.24
98	☐	J-182	8.25	2,915.00	3,042.61	55.29
99	☐	J-183FH	8.25	2,915.00	3,042.61	55.29
100	☐	J-184FH	8.25	2,915.00	3,041.69	54.89

Peak Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
101	☐	J-185	8.25	2,920.00	3,043.23	53.40
102	☐	J-186FH	8.25	2,910.00	3,043.58	57.88
103	☐	J-187	8.25	2,915.00	3,041.13	54.65
104	☐	J-188	8.25	2,909.00	3,045.14	58.99
105	☐	J-189FH	8.25	2,915.00	3,051.58	59.18
106	☐	J-191	8.25	2,915.00	3,041.02	54.60
107	☐	J-192	8.25	2,910.00	3,040.96	56.74
108	☐	J-193FH	8.25	2,917.00	3,041.02	53.74
109	☐	J-194	8.25	2,917.00	3,036.55	51.80
110	☐	J-195	8.25	2,916.50	3,036.55	52.02
111	☐	J-196	8.25	2,909.00	3,036.39	55.20
112	☐	J-197	8.25	2,908.00	3,036.39	55.63
113	☐	J-198FH	8.25	2,900.00	3,036.30	59.06
114	☐	J-199	8.25	2,902.00	3,036.57	58.31
115	☐	J-19FH	8.25	2,636.00	2,930.66	127.67
116	☐	J-1FH	8.25	2,720.00	2,930.45	91.19
117	☐	J-2	8.25	2,720.00	2,930.45	91.19
118	☐	J-200	8.25	2,895.00	3,035.74	60.98
119	☐	J-201	8.25	2,890.00	3,035.67	63.12
120	☐	J-202	8.25	2,892.00	3,035.67	62.25
121	☐	J-203	8.25	2,883.00	3,035.65	66.14
122	☐	J-204FH	8.25	2,880.00	3,035.39	67.33
123	☐	J-205	8.25	2,885.00	3,036.00	65.43
124	☐	J-206	8.25	2,890.00	3,036.25	63.37
125	☐	J-207	8.25	2,883.00	3,035.97	66.28
126	☐	J-208	8.25	2,939.00	3,047.79	47.14
127	☐	J-209	8.25	2,825.00	2,991.89	72.31
128	☐	J-20FH	8.25	2,745.00	2,931.35	80.75
129	☐	J-21	8.25	2,745.00	2,931.02	80.60
130	☐	J-210	8.25	2,937.00	3,046.26	47.34
131	☐	J-211FH	8.25	2,830.00	2,991.89	70.15
132	☐	J-212FH	8.25	2,824.00	2,991.89	72.75
133	☐	J-213	8.25	2,825.00	2,998.90	75.35
134	☐	J-214FH	8.25	2,835.00	2,998.90	71.02
135	☐	J-215FH	8.25	2,825.00	2,998.90	75.35
136	☐	J-216	8.25	2,830.00	3,006.87	76.64
137	☐	J-217	8.25	2,830.00	3,011.54	78.66
138	☐	J-218FH	8.25	2,838.00	3,006.86	73.17
139	☐	J-219	8.25	2,830.00	3,006.86	76.63
140	☐	J-22	8.25	2,920.00	3,045.49	54.37
141	☐	J-220	8.25	2,924.00	3,049.66	54.45
142	☐	J-221FH	8.25	2,748.00	2,931.26	79.41
143	☐	J-222FH	8.25	2,732.00	2,931.60	86.49
144	☐	J-223	8.25	2,720.00	2,931.21	91.52
145	☐	J-224	8.25	2,750.00	2,931.41	78.60
146	☐	J-225FH	8.25	2,752.00	2,931.23	77.66
147	☐	J-226	8.25	2,740.00	2,931.15	82.82
148	☐	J-227FH	8.25	2,845.00	2,986.81	61.44
149	☐	J-228	8.25	2,755.00	2,931.23	76.36
150	☐	J-229FH	8.25	2,753.00	2,931.05	77.15

Peak Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
151	☐	J-23	8.25	2,751.00	2,981.08	99.69
152	☐	J-230	8.25	2,755.00	2,931.04	76.28
153	☐	J-231	8.25	2,750.00	2,931.00	78.43
154	☐	J-232FH	8.25	2,755.00	2,930.92	76.22
155	☐	J-233	8.25	2,750.00	2,930.94	78.40
156	☐	J-234	8.25	2,770.00	2,930.89	69.72
157	☐	J-235FH	8.25	2,765.00	2,930.80	71.84
158	☐	J-236	8.25	2,768.00	2,930.79	70.54
159	☐	J-237	8.25	2,765.00	2,930.78	71.83
160	☐	J-238	8.25	2,778.00	2,930.72	66.17
161	☐	J-24	8.25	2,800.00	2,982.78	79.20
162	☐	J-240	8.25	2,778.00	2,930.71	66.17
163	☐	J-241	8.25	2,780.00	2,930.28	65.11
164	☐	J-242	8.25	2,760.00	2,930.56	73.91
165	☐	J-243	8.25	2,924.00	3,047.15	53.36
166	☐	J-244	8.25	2,770.00	2,930.56	69.57
167	☐	J-245	8.25	2,770.00	2,930.56	69.57
168	☐	J-246	8.25	2,878.00	3,001.36	53.45
169	☐	J-247FH	8.25	2,857.50	2,994.38	59.31
170	☐	J-248	8.25	2,920.00	3,055.47	58.70
171	☐	J-249	8.25	2,920.00	3,056.40	59.10
172	☐	J-250FH	8.25	2,750.00	2,930.94	78.40
173	☐	J-251	8.25	2,750.00	2,930.95	78.41
174	☐	J-252	8.25	2,750.00	2,930.96	78.41
175	☐	J-253	8.25	2,745.00	2,930.95	80.57
176	☐	J-254	8.25	2,735.00	2,930.77	84.83
177	☐	J-255FH	8.25	2,728.00	2,930.72	87.84
178	☐	J-256	8.25	2,728.00	2,930.71	87.83
179	☐	J-257	8.25	2,725.00	2,930.46	89.02
180	☐	J-258FH	8.25	2,735.00	2,930.39	84.66
181	☐	J-259	8.25	2,735.00	2,930.31	84.63
182	☐	J-25FH	8.25	2,758.00	2,982.11	97.11
183	☐	J-26	8.25	2,760.00	2,982.11	96.24
184	☐	J-260FH	8.25	2,735.00	2,930.28	84.62
185	☐	J-261	8.25	2,735.00	2,930.28	84.61
186	☐	J-262	8.25	2,735.00	2,930.27	84.61
187	☐	J-263	8.25	2,720.00	2,930.24	91.10
188	☐	J-264	8.25	2,710.00	2,930.18	95.40
189	☐	J-265	8.25	2,700.00	2,929.92	99.63
190	☐	J-266FH	8.25	2,700.00	2,929.92	99.63
191	☐	J-267FH	8.25	2,751.00	2,934.42	79.48
192	☐	J-268	8.25	2,700.00	2,930.02	99.67
193	☐	J-269FH	8.25	2,700.00	2,930.02	99.67
194	☐	J-27	8.25	2,770.00	2,982.78	92.20
195	☐	J-270FH	8.25	2,700.00	2,930.18	99.74
196	☐	J-271FH	8.25	2,735.00	2,930.29	84.62
197	☐	J-272	8.25	2,824.00	2,989.28	71.62
198	☐	J-273FH	8.25	2,705.00	2,930.37	97.65
199	☐	J-274FH	8.25	2,705.00	2,930.38	97.66
200	☐	J-275FH	8.25	2,785.00	2,980.85	84.86

Peak Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
201	☐	J-277	8.25	2,920.00	3,051.58	57.02
202	☐	J-278FH	8.25	2,740.00	2,931.92	83.16
203	☐	J-279FH	8.25	2,730.00	2,931.41	87.27
204	☐	J-28	8.25	2,807.00	2,984.49	76.91
205	☐	J-280FH	8.25	2,741.00	2,931.00	82.33
206	☐	J-281FH	8.25	2,703.00	2,930.38	98.53
207	☐	J-282	8.25	2,720.00	2,930.45	91.19
208	☐	J-283FH	8.25	2,715.00	2,930.48	93.37
209	☐	J-284FH	8.25	2,720.00	2,930.66	91.28
210	☐	J-285	8.25	2,720.00	2,930.48	91.20
211	☐	J-286	8.25	2,720.00	2,930.67	91.28
212	☐	J-287	8.25	2,720.00	2,930.79	91.33
213	☐	J-288FH	8.25	2,720.00	2,930.46	91.19
214	☐	J-289	8.25	2,720.00	2,930.49	91.21
215	☐	J-290	8.25	2,720.00	2,930.49	91.21
216	☐	J-291FH	8.25	2,921.00	3,043.81	53.21
217	☐	J-292FH	8.25	2,705.00	2,930.42	97.67
218	☐	J-293FH	8.25	2,755.00	2,979.81	97.41
219	☐	J-294	8.25	2,913.00	3,045.00	57.19
220	☐	J-295	8.25	2,946.00	3,098.20	65.95
221	☐	J-296	7.10	2,990.00	3,109.24	51.67
222	☐	J-297FH	8.25	2,705.00	2,930.40	97.67
223	☐	J-298	8.25	2,760.00	2,930.63	73.93
224	☐	J-299	8.25	2,770.00	2,930.56	69.57
225	☐	J-29FH	8.25	2,815.00	2,985.03	73.67
226	☐	J-3	8.25	2,730.00	2,930.58	86.91
227	☐	J-300	8.25	2,915.00	3,051.58	59.18
228	☐	J-301FH	8.25	2,800.00	3,066.09	115.30
229	☐	J-302FH	8.25	2,705.00	2,930.40	97.67
230	☐	J-303FH	8.25	2,730.00	2,930.46	86.86
231	☐	J-304	7.10	3,000.00	3,149.64	64.84
232	☐	J-305FH	8.25	2,877.50	2,996.23	51.44
233	☐	J-306	8.25	2,877.50	3,030.10	66.12
234	☐	J-307FH	8.25	2,740.00	2,930.48	82.53
235	☐	J-308	7.10	3,042.00	3,086.44	19.25
236	☐	J-309	8.25	2,760.00	2,930.57	73.91
237	☐	J-30FH	8.25	2,816.00	2,985.59	73.48
238	☐	J-31	8.25	2,815.00	2,985.80	74.01
239	☐	J-310	8.25	2,930.00	3,047.22	50.79
240	☐	J-311	89.12	2,925.00	3,045.49	52.21
241	☐	J-312	8.25	2,870.00	3,043.90	75.35
242	☐	J-313	8.25	2,800.00	2,987.87	81.40
243	☐	J-314	8.25	2,780.00	2,985.79	89.17
244	☐	J-315FH	8.25	2,930.00	3,046.17	50.34
245	☐	J-316	8.25	2,843.00	2,986.81	62.31
246	☐	J-317FH	8.25	2,902.00	3,036.61	58.33
247	☐	J-318FH	8.25	2,922.00	3,055.27	57.75
248	☐	J-319FH	8.25	2,924.00	3,052.59	55.72
249	☐	J-32	8.25	2,800.00	2,985.79	80.50
250	☐	J-320	8.25	2,922.00	3,051.99	56.32

Peak Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
251	☐	J-321FH	8.25	2,924.00	3,050.31	54.73
252	☐	J-322FH	8.25	2,936.00	3,047.96	48.51
253	☐	J-323FH	8.25	2,930.00	3,048.75	51.46
254	☐	J-324FH	8.25	2,926.00	3,049.76	53.62
255	☐	J-325FH	8.25	2,924.00	3,050.71	54.90
256	☐	J-326FH	8.25	2,928.00	3,049.89	52.82
257	☐	J-327FH	8.25	2,928.00	3,049.16	52.50
258	☐	J-328FH	8.25	2,933.00	3,048.56	50.07
259	☐	J-329FH	8.25	2,934.00	3,048.53	49.63
260	☐	J-330	8.25	2,934.00	3,048.62	49.66
261	☐	J-331	8.25	2,923.00	3,050.31	55.16
262	☐	J-333	8.25	2,885.00	3,035.98	65.42
263	☐	J-334	8.25	2,885.00	3,035.98	65.42
264	☐	J-335	8.25	2,745.00	2,931.37	80.76
265	☐	J-336	8.25	2,745.00	2,931.37	80.76
266	☐	J-33FH	8.25	2,820.00	2,986.78	72.26
267	☐	J-34	8.25	2,830.00	2,987.04	68.05
268	☐	J-35	8.25	2,827.00	2,986.25	69.00
269	☐	J-36	8.25	2,820.00	2,986.23	72.03
270	☐	J-37	8.25	2,825.00	2,985.76	69.66
271	☐	J-38FH	8.25	2,821.00	2,985.25	71.17
272	☐	J-39FH	8.25	2,836.00	2,986.32	65.13
273	☐	J-4	8.25	2,729.00	2,930.58	87.35
274	☐	J-40	8.25	2,839.00	2,986.30	63.83
275	☐	J-41	8.25	2,837.00	2,986.38	64.73
276	☐	J-42	8.25	2,835.00	2,986.17	65.50
277	☐	J-43	8.25	2,833.00	2,985.72	66.17
278	☐	J-44FH	8.25	2,805.00	2,984.57	77.81
279	☐	J-45	8.25	2,805.00	2,984.84	77.93
280	☐	J-46	8.25	2,780.00	2,984.56	88.64
281	☐	J-47	8.25	2,760.00	2,984.56	97.30
282	☐	J-48	8.25	2,780.00	2,984.56	88.64
283	☐	J-49	8.25	2,801.00	2,985.27	79.84
284	☐	J-5	8.25	2,751.00	2,930.77	77.89
285	☐	J-50	8.25	2,803.00	2,984.84	78.79
286	☐	J-51	8.25	2,800.00	2,985.27	80.28
287	☐	J-52	8.25	2,839.00	2,987.75	64.45
288	☐	J-53	8.25	2,842.00	2,987.83	63.19
289	☐	J-54	8.25	2,920.00	3,042.71	53.17
290	☐	J-55	8.25	2,842.00	2,987.74	63.15
291	☐	J-56	8.25	2,847.00	2,988.80	61.44
292	☐	J-57	8.25	2,850.00	2,988.80	60.14
293	☐	J-58	8.25	2,837.00	2,986.80	64.91
294	☐	J-59	8.25	2,860.00	3,066.09	89.30
295	☐	J-6	8.25	2,757.00	2,931.05	75.42
296	☐	J-61	8.25	2,847.00	2,986.80	60.57
297	☐	J-63FH	8.25	2,839.00	2,986.80	64.04
298	☐	J-64	8.25	2,839.00	2,986.80	64.04
299	☐	J-65	8.25	2,851.50	2,989.76	59.91
300	☐	J-66FH	8.25	2,847.00	2,989.64	61.80

Peak Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
301	☐	J-67	8.25	2,842.00	2,987.98	63.25
302	☐	J-68FH	8.25	2,839.00	2,986.87	64.07
303	☐	J-69FH	8.25	2,839.00	2,986.65	63.98
304	☐	J-7	8.25	2,754.00	2,930.74	76.58
305	☐	J-70	8.25	2,837.00	2,985.87	64.51
306	☐	J-71	8.25	2,839.50	2,986.89	63.86
307	☐	J-73FH	8.25	2,830.00	2,984.38	66.89
308	☐	J-74	8.25	2,843.00	2,987.52	62.62
309	☐	J-75	8.25	2,845.00	2,987.66	61.81
310	☐	J-76	8.25	2,849.00	2,988.02	60.24
311	☐	J-77FH	8.25	2,914.00	3,044.43	56.52
312	☐	J-78	8.25	2,940.00	3,047.22	46.46
313	☐	J-79	8.25	2,842.00	2,985.55	62.20
314	☐	J-80FH	8.25	2,940.00	3,046.69	46.23
315	☐	J-81FH	8.25	2,841.00	2,986.23	62.93
316	☐	J-82	8.25	2,921.00	3,046.16	54.23
317	☐	J-83	8.25	2,760.00	2,931.41	74.27
318	☐	J-84	8.25	2,760.00	2,977.52	94.25
319	☐	J-85FH	8.25	2,849.50	2,990.75	61.21
320	☐	J-86	8.25	2,851.50	2,990.75	60.34
321	☐	J-87	8.25	2,852.00	2,991.94	60.64
322	☐	J-88	8.25	2,854.00	2,992.93	60.20
323	☐	J-89	8.25	2,857.00	2,991.28	58.18
324	☐	J-8FH	8.25	2,752.00	2,930.74	77.45
325	☐	J-9	8.25	2,757.00	2,931.23	75.49
326	☐	J-90	8.25	2,857.00	2,991.28	58.18
327	☐	J-91	8.25	2,857.00	2,991.98	58.49
328	☐	J-92	8.25	2,861.00	2,994.13	57.69
329	☐	J-93FH	8.25	2,858.00	2,992.93	58.47
330	☐	J-94	8.25	2,857.00	2,994.16	59.43
331	☐	J-95	8.25	2,863.50	2,995.18	57.06
332	☐	J-956	7.10	2,847.00	3,021.96	75.81
333	☐	J-958	7.10	2,856.00	3,024.47	73.00
334	☐	J-96	8.25	2,863.00	2,995.18	57.27
335	☐	J-97FH	8.25	2,936.00	3,046.45	47.86
336	☐	J-98	8.25	2,866.75	2,995.55	55.81
337	☐	J-99	8.25	2,866.50	2,995.55	55.92
338	☐	J1000	7.10	2,903.00	3,044.67	61.39
339	☐	J1002	7.10	2,892.00	3,044.51	66.08
340	☐	J1004	7.10	2,939.00	3,044.75	45.82
341	☐	J1006	7.10	2,937.00	3,044.75	46.69
342	☐	J1008	7.10	2,940.00	3,044.75	45.39
343	☐	J100FH	8.25	2,933.00	3,051.33	51.27
344	☐	J1010	7.10	2,941.00	3,044.75	44.95
345	☐	J1012	7.10	2,941.00	3,044.75	44.95
346	☐	J1014	7.10	2,942.00	3,044.75	44.52
347	☐	J1016	7.10	2,943.00	3,044.76	44.09
348	☐	J1018	7.10	2,940.00	3,044.75	45.39
349	☐	J1020	7.10	2,944.00	3,043.58	43.15
350	☐	J1022	7.10	2,947.00	3,043.59	41.85

Peak Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
351	☐	J1024	7.10	2,941.00	3,043.58	44.45
352	☐	J1026	7.10	2,953.00	3,075.75	53.19
353	☐	J1028	7.10	2,868.00	3,075.75	90.02
354	☐	J102FH	8.25	2,936.00	3,046.89	48.05
355	☐	J1030	7.10	2,890.00	3,075.75	80.48
356	☐	J1032	7.10	2,873.00	3,075.75	87.85
357	☐	J1034	7.10	2,915.00	3,075.75	69.65
358	☐	J1036	7.10	2,761.00	2,932.26	74.21
359	☐	J1038	7.10	2,764.00	2,932.36	72.95
360	☐	J1040	7.10	2,764.00	2,932.28	72.92
361	☐	J1042	7.10	2,766.00	2,932.33	72.07
362	☐	J1044	7.10	2,768.00	2,932.31	71.19
363	☐	J1048	7.10	3,000.00	3,150.49	65.21
364	☐	J104FH	8.25	2,929.00	3,044.99	50.26
365	☐	J1050	7.10	2,861.00	3,104.18	105.37
366	☐	J1054	0.00	2,940.00	3,089.20	64.65
367	☐	J1056	0.00	2,929.50	3,044.82	49.97
368	☐	J1062	0.00	3,000.00	3,109.24	47.33
369	☐	J1068	0.00	3,138.90	3,165.89	11.69
370	☐	J106FH	8.25	2,923.00	3,044.60	52.69
371	☐	J108FH	8.25	2,921.00	3,044.83	53.65
372	☐	J10FH	8.25	2,845.00	3,017.77	74.86
373	☐	J110FH	8.25	2,914.00	3,044.30	56.46
374	☐	J112FH	8.25	2,934.00	3,048.12	49.45
375	☐	J114FH	8.25	2,932.00	3,046.97	49.82
376	☐	J116FH	8.25	2,925.00	3,044.77	51.90
377	☐	J118FH	8.25	2,929.00	3,049.32	52.13
378	☐	J12	8.25	2,845.00	3,017.94	74.94
379	☐	J120FH	8.25	2,930.00	3,047.11	50.74
380	☐	J122FH	8.25	2,930.00	3,045.54	50.07
381	☐	J124FH	8.25	2,922.00	3,043.98	52.86
382	☐	J126FH	65.58	2,899.00	3,044.13	62.89
383	☐	J128FH	8.25	2,902.00	3,042.48	60.87
384	☐	J130FH	65.58	2,881.00	3,043.96	70.61
385	☐	J132FH	8.25	2,887.00	3,042.62	67.43
386	☐	J134FH	8.25	2,894.00	3,042.12	64.18
387	☐	J136FH	8.25	2,898.00	3,041.81	62.31
388	☐	J138FH	8.25	2,924.00	3,042.04	51.15
389	☐	J140FH	8.25	2,920.00	3,040.91	52.39
390	☐	J142FH	8.25	2,923.00	3,040.92	51.10
391	☐	J144FH	8.25	2,808.00	3,066.09	111.83
392	☐	J146FH	8.25	2,810.00	3,066.09	110.96
393	☐	J148FH	8.25	2,816.00	3,066.09	108.37
394	☐	J14FH	8.25	2,845.00	3,017.47	74.73
395	☐	J150FH	8.25	2,868.00	3,066.10	85.83
396	☐	J152FH	8.25	2,932.00	3,040.88	47.18
397	☐	J154FH	8.25	2,929.00	3,043.96	49.81
398	☐	J156FH	8.25	2,929.00	3,042.96	49.38
399	☐	J158FH	8.25	2,928.00	3,042.87	49.77
400	☐	J16	8.25	2,849.00	3,017.45	72.99

Peak Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
401	☐	J160FH	8.25	2,912.00	3,036.50	53.95
402	☐	J162FH	8.25	2,918.00	3,038.44	52.19
403	☐	J164FH	8.25	2,911.00	3,037.63	54.87
404	☐	J166FH	8.25	2,911.00	3,040.31	56.03
405	☐	J168FH	8.25	2,905.00	3,040.79	58.84
406	☐	J170FH	8.25	2,882.00	3,041.12	68.95
407	☐	J172FH	8.25	2,884.00	3,040.21	67.69
408	☐	J174FH	8.25	2,877.00	3,039.09	70.24
409	☐	J176FH	8.25	2,881.00	3,038.35	68.18
410	☐	J178FH	8.25	2,888.00	3,037.49	64.77
411	☐	J180FH	8.25	2,880.00	3,036.79	67.94
412	☐	J182FH	8.25	2,863.00	3,036.59	75.22
413	☐	J184FH	8.25	2,863.00	3,031.69	73.09
414	☐	J186	8.25	2,788.00	2,930.56	61.77
415	☐	J188FH	8.25	2,775.00	2,930.56	67.40
416	☐	J18FH	8.25	2,844.00	3,017.45	75.16
417	☐	J190FH	8.25	2,893.00	3,035.97	61.95
418	☐	J192FH	8.25	2,766.00	2,930.56	71.31
419	☐	J194FH	8.25	2,780.00	2,930.57	65.24
420	☐	J196FH	8.25	2,763.00	2,930.59	72.62
421	☐	J198FH	8.25	2,776.00	2,930.59	66.98
422	☐	J200FH	8.25	2,783.00	2,930.70	64.00
423	☐	J202FH	8.25	2,760.00	2,930.78	74.00
424	☐	J204FH	8.25	2,777.00	2,930.90	66.68
425	☐	J206FH	8.25	2,889.00	3,036.30	63.82
426	☐	J208FH	8.25	2,879.00	3,035.75	67.92
427	☐	J20FH	8.25	2,850.00	3,017.45	72.56
428	☐	J210FH	8.25	2,892.00	3,035.69	62.26
429	☐	J212FH	8.25	2,881.00	3,035.21	66.82
430	☐	J214FH	8.25	2,738.00	2,930.95	83.61
431	☐	J216FH	8.25	2,743.00	2,931.17	81.53
432	☐	J218FH	8.25	2,722.00	2,931.21	90.65
433	☐	J22	8.25	2,852.00	3,017.45	71.69
434	☐	J220FH	8.25	2,725.00	2,931.22	89.35
435	☐	J222FH	8.25	2,732.00	2,931.23	86.33
436	☐	J224	8.25	2,730.00	2,931.22	87.19
437	☐	J226FH	8.25	2,736.00	2,931.22	84.59
438	☐	J228FH	8.25	2,738.00	2,931.16	83.70
439	☐	J230FH	8.25	2,747.00	2,931.50	79.95
440	☐	J232FH	8.25	2,723.00	2,930.71	90.00
441	☐	J234FH	8.25	2,728.00	2,930.71	87.83
442	☐	J236FH	8.25	2,738.00	2,931.06	83.65
443	☐	J238FH	8.25	2,745.00	2,931.41	80.77
444	☐	J240FH	8.25	2,720.00	2,930.69	91.29
445	☐	J242FH	8.25	2,742.00	2,931.25	82.00
446	☐	J244FH	8.25	2,755.00	2,979.25	97.17
447	☐	J246FH	8.25	2,835.00	3,006.86	74.47
448	☐	J248FH	8.25	2,740.00	2,930.75	82.65
449	☐	J24FH	8.25	2,842.00	3,017.45	76.02
450	☐	J250FH	8.25	2,749.00	2,931.33	79.00

Peak Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
451	☐	J252FH	8.25	2,743.00	2,931.29	81.58
452	☐	J254FH	8.25	2,743.00	2,931.28	81.58
453	☐	J256FH	8.25	2,804.00	2,984.98	78.42
454	☐	J258FH	8.25	2,778.00	2,984.56	89.50
455	☐	J260FH	8.25	2,797.00	2,983.76	80.92
456	☐	J262FH	8.25	2,796.00	2,982.78	80.93
457	☐	J264FH	8.25	2,799.00	2,982.35	79.45
458	☐	J266FH	8.25	2,812.00	2,985.43	75.15
459	☐	J268FH	8.25	2,810.00	2,985.02	75.84
460	☐	J26FH	8.25	2,849.00	3,017.45	72.99
461	☐	J270FH	8.25	2,807.00	2,984.09	76.73
462	☐	J272FH	8.25	2,824.00	2,986.44	70.38
463	☐	J274FH	8.25	2,804.00	2,986.37	79.02
464	☐	J276FH	8.25	2,818.00	2,985.76	72.69
465	☐	J278FH	8.25	2,824.00	2,986.34	70.34
466	☐	J28	8.25	2,922.00	3,051.59	56.15
467	☐	J280FH	8.25	2,819.00	2,985.90	72.32
468	☐	J282FH	8.25	2,841.00	2,988.13	63.75
469	☐	J284FH	8.25	2,843.00	2,989.05	63.28
470	☐	J286FH	8.25	2,844.00	2,990.41	63.44
471	☐	J288FH	8.25	2,849.00	2,991.96	61.95
472	☐	J290FH	8.25	2,794.00	2,979.09	80.20
473	☐	J292FH	8.25	2,856.00	2,990.32	58.20
474	☐	J294FH	8.25	2,845.00	2,987.71	61.83
475	☐	J296FH	8.25	2,843.00	2,987.92	62.79
476	☐	J298FH	8.25	2,852.00	2,992.66	60.95
477	☐	J300FH	8.25	2,875.00	3,007.80	57.54
478	☐	J302FH	8.25	2,871.00	3,003.74	57.52
479	☐	J304FH	8.25	2,872.00	3,001.36	56.05
480	☐	J306FH	8.25	2,864.00	2,994.39	56.50
481	☐	J308FH	8.25	2,858.00	2,994.14	58.99
482	☐	J310FH	8.25	2,752.00	2,931.80	77.91
483	☐	J312FH	8.25	2,739.00	2,930.58	83.01
484	☐	J314FH	8.25	2,743.00	2,931.24	81.56
485	☐	J316FH	8.25	2,734.00	2,930.99	85.35
486	☐	J318FH	8.25	2,720.00	2,930.67	91.28
487	☐	J320FH	8.25	2,716.00	2,930.58	92.98
488	☐	J322FH	8.25	2,721.00	2,930.57	90.81
489	☐	J324FH	8.25	2,727.00	2,930.60	88.22
490	☐	J326FH	8.25	2,729.00	2,930.51	87.32
491	☐	J328FH	8.25	2,736.00	2,930.34	84.21
492	☐	J330FH	8.25	2,727.00	2,930.33	88.10
493	☐	J332FH	8.25	2,736.00	2,930.37	84.22
494	☐	J334FH	8.25	2,739.00	2,930.44	82.95
495	☐	J336FH	8.25	2,733.00	2,930.88	85.74
496	☐	J338FH	8.25	2,725.00	2,930.43	89.01
497	☐	J340FH	8.25	2,739.00	2,930.88	83.14
498	☐	J342FH	8.25	2,728.00	2,930.62	87.79
499	☐	J344FH	8.25	2,736.00	2,930.88	84.44
500	☐	J346FH	8.25	2,740.00	2,930.88	82.71

Peak Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
501	☐	J348FH	8.25	2,746.00	2,931.08	80.19
502	☐	J34FH	8.25	2,922.00	3,053.26	56.87
503	☐	J350FH	8.25	2,746.00	2,931.09	80.20
504	☐	J352FH	8.25	2,735.00	2,930.74	84.81
505	☐	J354FH	8.25	2,749.00	2,931.23	78.96
506	☐	J356FH	8.25	2,721.00	2,930.72	90.87
507	☐	J358FH	8.25	2,733.00	2,930.75	85.69
508	☐	J36	8.25	2,906.00	3,041.27	58.61
509	☐	J360FH	8.25	2,705.00	2,929.97	97.48
510	☐	J362FH	8.25	2,705.00	2,930.10	97.53
511	☐	J364FH	8.25	2,718.00	2,930.28	91.98
512	☐	J366FH	8.25	2,721.00	2,930.28	90.68
513	☐	J368FH	8.25	2,717.00	2,930.26	92.40
514	☐	J370FH	8.25	2,731.00	2,930.32	86.37
515	☐	J372FH	8.25	2,731.00	2,930.34	86.38
516	☐	J374FH	8.25	2,704.00	2,930.38	98.09
517	☐	J376FH	8.25	2,705.00	2,930.41	97.67
518	☐	J380FH	8.25	2,947.00	3,046.33	43.04
519	☐	J382FH	8.25	2,948.00	3,046.33	42.61
520	☐	J384FH	8.25	2,945.00	3,046.33	43.91
521	☐	J388	8.25	2,946.00	3,046.33	43.47
522	☐	J38FH	8.25	2,913.00	3,036.99	53.73
523	☐	J392	8.25	2,952.00	3,046.33	40.87
524	☐	J394	8.25	2,945.00	3,046.33	43.91
525	☐	J396	8.25	2,942.00	3,046.33	45.21
526	☐	J398FH	8.25	2,943.00	3,046.33	44.77
527	☐	J40	8.25	2,916.00	3,037.51	52.65
528	☐	J400	8.25	2,902.00	3,044.65	61.81
529	☐	J402FH	65.58	2,912.00	3,044.61	57.46
530	☐	J404FH	8.25	2,917.00	3,044.59	55.28
531	☐	J406FH	8.25	2,921.00	3,044.87	53.67
532	☐	J408	8.25	2,918.00	3,044.87	54.97
533	☐	J410FH	8.25	2,922.00	3,045.08	53.33
534	☐	J412FH	8.25	2,929.00	3,045.49	50.48
535	☐	J414	8.25	2,928.00	3,053.07	54.19
536	☐	J416FH	8.25	2,928.00	3,055.14	55.09
537	☐	J418FH	8.25	2,926.00	3,055.14	55.96
538	☐	J420FH	8.25	2,918.00	3,055.70	59.67
539	☐	J422FH	8.25	2,928.00	3,054.41	54.78
540	☐	J424FH	8.25	2,928.00	3,054.36	54.75
541	☐	J426FH	8.25	2,927.00	3,054.33	55.17
542	☐	J42FH	8.25	2,919.00	3,037.51	51.35
543	☐	J430	8.25	2,923.00	3,055.76	57.52
544	☐	J432	8.25	2,924.00	3,055.74	57.08
545	☐	J434FH	8.25	2,926.00	3,055.75	56.22
546	☐	J436	8.25	2,922.00	3,055.74	57.95
547	☐	J438	8.25	2,923.00	3,055.74	57.52
548	☐	J440FH	8.25	2,925.00	3,054.30	56.03
549	☐	J442FH	8.25	2,926.00	3,054.69	55.76
550	☐	J444FH	8.25	2,930.00	3,051.97	52.85

Peak Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
551	☐	J446	8.25	2,909.00	3,057.35	64.28
552	☐	J448	8.25	2,923.00	3,055.70	57.50
553	☐	J44FH	8.25	2,918.00	3,036.99	51.56
554	☐	J450FH	8.25	2,918.00	3,044.81	54.95
555	☐	J452FH	65.58	2,915.00	3,044.71	56.20
556	☐	J454	8.25	2,841.00	2,987.89	63.65
557	☐	J456FH	8.25	2,706.00	2,929.86	97.00
558	☐	J458FH	8.25	2,709.00	2,929.86	95.70
559	☐	J46	8.25	2,896.00	3,036.61	60.93
560	☐	J460FH	8.25	2,713.00	2,929.86	93.96
561	☐	J462FH	8.25	2,713.00	2,929.87	93.97
562	☐	J464	8.25	2,711.00	2,929.87	94.83
563	☐	J466	8.25	2,707.00	2,929.86	96.57
564	☐	J468	8.25	2,712.00	2,929.86	94.40
565	☐	J470	8.25	2,712.00	2,929.89	94.41
566	☐	J472	8.25	2,712.00	2,929.86	94.40
567	☐	J474	8.25	2,712.00	2,929.87	94.40
568	☐	J476	7.10	2,815.00	3,074.56	112.47
569	☐	J478FH	8.25	2,816.00	3,074.57	112.04
570	☐	J48	8.25	2,900.00	3,035.74	58.81
571	☐	J480FH	8.25	2,796.00	3,074.70	120.76
572	☐	J482FH	129.17	2,796.00	3,074.85	120.83
573	☐	J484FH	8.25	2,811.00	3,075.11	114.44
574	☐	J486FH	8.25	2,840.00	3,075.48	102.03
575	☐	J488FH	8.25	2,820.00	3,075.47	110.70
576	☐	J490FH	8.25	2,818.00	3,075.47	111.56
577	☐	J492FH	8.25	2,820.00	3,075.46	110.69
578	☐	J494FH	129.17	2,818.00	3,075.39	111.53
579	☐	J496FH	8.25	2,815.00	3,075.57	112.91
580	☐	J500FH	8.25	2,823.00	3,075.69	109.49
581	☐	J508FH	8.25	2,847.00	3,075.71	99.10
582	☐	J50FH	8.25	2,695.00	2,930.38	101.99
583	☐	J510FH	8.25	2,856.00	3,075.74	95.21
584	☐	J512	8.25	2,872.00	3,075.74	88.28
585	☐	J514FH	8.25	2,869.00	3,075.78	89.60
586	☐	J516	8.25	2,867.00	3,075.79	90.47
587	☐	J518FH	8.25	2,865.00	3,075.83	91.35
588	☐	J52	8.25	2,742.00	2,930.88	81.84
589	☐	J522FH	8.25	2,824.00	3,075.70	109.06
590	☐	J524	8.25	2,815.00	3,075.67	112.95
591	☐	J526FH	8.25	2,840.00	3,075.74	102.14
592	☐	J528FH	8.25	2,854.00	3,075.79	96.10
593	☐	J532FH	8.25	2,858.00	3,075.86	94.40
594	☐	J534	8.25	2,860.00	3,075.89	93.54
595	☐	J54	8.25	2,738.00	2,930.88	83.57
596	☐	J540	89.12	2,927.00	3,045.88	51.51
597	☐	J546	7.10	2,760.00	3,156.38	171.75
598	☐	J548	7.10	2,760.00	3,154.30	170.85
599	☐	J550	7.10	2,760.00	3,149.79	168.90
600	☐	J552	7.10	2,760.00	3,147.00	167.69

Peak Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
601	☐	J554	7.10	2,760.00	3,149.17	168.63
602	☐	J556	7.10	2,760.00	3,150.89	169.37
603	☐	J558	7.10	2,760.00	3,154.40	170.89
604	☐	J560	8.25	2,875.00	3,027.95	66.27
605	☐	J562	7.10	2,865.00	3,028.74	70.95
606	☐	J564	8.25	2,820.00	2,984.37	71.22
607	☐	J566FH	8.25	2,922.00	3,044.93	53.27
608	☐	J568FH	8.25	2,928.00	3,044.87	50.64
609	☐	J56FH	8.25	2,740.00	2,930.64	82.60
610	☐	J570FH	8.25	2,929.00	3,044.87	50.21
611	☐	J572	8.25	2,939.00	3,044.79	45.84
612	☐	J574	8.25	2,937.00	3,044.79	46.71
613	☐	J576	8.25	2,942.00	3,044.65	44.48
614	☐	J578	8.25	2,940.00	3,044.79	45.41
615	☐	J580FH	8.25	2,939.00	3,044.79	45.84
616	☐	J582	8.25	2,922.00	3,044.91	53.26
617	☐	J584FH	8.25	2,842.00	3,075.65	101.24
618	☐	J586	8.25	2,865.00	3,075.77	91.33
619	☐	J588	8.25	2,857.00	3,075.78	94.80
620	☐	J58FH	8.25	2,734.00	2,930.55	85.16
621	☐	J590FH	8.25	2,833.00	3,075.64	105.14
622	☐	J594FH	8.25	2,826.00	3,075.64	108.17
623	☐	J596FH	8.25	2,803.00	3,075.39	118.03
624	☐	J60	8.25	2,728.00	2,930.51	87.75
625	☐	J600FH	8.25	2,846.00	3,075.75	99.55
626	☐	J602	8.25	2,846.00	3,075.75	99.55
627	☐	J604	8.25	2,945.00	3,044.38	43.06
628	☐	J606FH	8.25	2,950.00	3,044.04	40.75
629	☐	J608	8.25	2,943.00	3,044.38	43.93
630	☐	J610FH	8.25	2,936.00	3,044.80	47.14
631	☐	J612FH	8.25	2,931.00	3,044.85	49.33
632	☐	J614	8.25	2,931.00	3,044.79	49.30
633	☐	J616	89.12	2,933.00	3,044.77	48.43
634	☐	J618	7.10	3,143.00	3,167.43	10.59
635	☐	J62	8.25	2,723.00	2,930.52	89.92
636	☐	J620	8.25	2,865.00	2,995.23	56.43
637	☐	J622FH	8.25	2,826.00	2,989.07	70.66
638	☐	J624FH	8.25	2,835.00	2,989.06	66.75
639	☐	J626FH	8.25	2,805.00	2,989.07	79.76
640	☐	J630FH	8.25	2,825.00	2,989.06	71.09
641	☐	J634FH	8.25	2,831.00	2,989.05	68.49
642	☐	J638FH	8.25	2,790.00	2,989.06	86.25
643	☐	J64	8.25	2,742.00	2,930.40	81.63
644	☐	J640FH	8.25	2,930.00	3,044.78	49.74
645	☐	J642FH	8.25	2,929.00	3,044.81	50.18
646	☐	J646FH	8.25	2,934.00	3,044.77	48.00
647	☐	J648FH	8.25	2,799.00	2,930.53	56.99
648	☐	J650FH	8.25	2,790.00	2,930.52	60.89
649	☐	J652FH	8.25	2,774.00	2,930.52	67.82
650	☐	J654FH	8.25	2,772.00	2,930.43	68.65

Peak Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
651	☐	J656FH	8.25	2,779.00	2,930.37	65.59
652	☐	J658FH	8.25	2,784.00	2,930.42	63.45
653	☐	J660FH	8.25	2,774.00	2,930.17	67.67
654	☐	J662FH	144.82	2,765.00	2,930.03	71.51
655	☐	J664FH	8.25	2,784.00	2,930.17	63.33
656	☐	J666FH	8.25	2,792.00	2,930.37	59.95
657	☐	J668	144.82	2,805.00	2,929.98	54.15
658	☐	J66FH	8.25	2,733.00	2,930.31	85.49
659	☐	J670	8.25	2,746.42	2,931.15	80.04
660	☐	J672FH	8.25	2,747.00	2,931.14	79.79
661	☐	J674	8.25	2,931.48	3,046.11	49.67
662	☐	J676FH	8.25	2,935.42	3,046.08	47.95
663	☐	J678FH	8.25	2,934.28	3,045.87	48.35
664	☐	J680FH	8.25	2,931.09	3,045.69	49.65
665	☐	J682	8.25	2,926.25	3,045.59	51.71
666	☐	J684FH	8.25	2,930.42	3,045.65	49.93
667	☐	J686FH	8.25	2,929.00	3,045.80	50.61
668	☐	J688	8.25	2,924.95	3,045.82	52.37
669	☐	J68FH	8.25	2,743.00	2,930.29	81.15
670	☐	J690	8.25	2,925.00	3,045.82	52.35
671	☐	J692FH	8.25	2,932.10	3,045.97	49.34
672	☐	J694	8.25	2,923.00	3,045.47	53.07
673	☐	J696	8.25	2,935.00	3,044.80	47.57
674	☐	J698	8.25	2,929.52	3,044.96	50.02
675	☐	J700FH	8.25	2,936.95	3,044.96	46.80
676	☐	J702	8.25	2,925.68	3,045.32	51.84
677	☐	J704FH	8.25	2,926.37	3,045.32	51.54
678	☐	J706FH	8.25	2,934.71	3,045.32	47.93
679	☐	J708FH	8.25	2,930.45	3,044.96	49.62
680	☐	J70FH	8.25	2,731.00	2,930.31	86.36
681	☐	J710FH	8.25	2,935.73	3,044.83	47.27
682	☐	J712	8.25	2,721.80	2,930.70	90.52
683	☐	J714FH	8.25	2,726.17	2,930.70	88.62
684	☐	J716	8.25	2,720.00	2,930.70	91.30
685	☐	J718FH	8.25	2,723.42	2,930.70	89.82
686	☐	J72	8.25	2,724.00	2,930.71	89.57
687	☐	J720FH	8.25	2,781.00	2,985.78	88.73
688	☐	J724	8.25	2,934.00	3,044.81	48.01
689	☐	J728	8.25	2,932.00	3,044.81	48.88
690	☐	J730FH	8.25	2,932.00	3,044.81	48.88
691	☐	J732	8.25	2,930.00	3,044.81	49.75
692	☐	J736	8.25	2,922.00	3,044.86	53.23
693	☐	J738FH	8.25	2,924.00	3,044.84	52.36
694	☐	J74	8.25	2,911.00	3,042.48	56.97
695	☐	J740FH	8.25	2,916.00	3,044.90	55.85
696	☐	J742FH	8.25	2,938.00	3,044.80	46.28
697	☐	J744	8.25	2,942.00	3,044.80	44.54
698	☐	J746	8.25	2,944.00	3,043.68	43.19
699	☐	J748	89.12	2,950.00	3,043.59	40.55
700	☐	J750FH	8.25	2,941.00	3,043.63	44.47

Peak Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
701	☐	J752	89.12	2,946.00	3,043.57	42.28
702	☐	J754	8.25	2,944.00	3,043.63	43.17
703	☐	J756	8.25	2,948.00	3,044.04	41.61
704	☐	J758	8.25	2,952.00	3,044.04	39.88
705	☐	J76	8.25	2,886.00	3,042.78	67.93
706	☐	J774	8.25	2,738.00	2,930.32	83.33
707	☐	J776	8.25	2,736.00	2,930.32	84.20
708	☐	J778	8.25	2,771.00	2,930.39	69.06
709	☐	J780	8.25	2,770.00	2,930.39	69.50
710	☐	J782	8.25	2,812.00	2,986.19	75.47
711	☐	J784FH	8.25	2,774.00	2,930.51	67.82
712	☐	J786FH	8.25	2,781.00	2,985.78	88.73
713	☐	J788FH	8.25	2,921.00	3,046.15	54.23
714	☐	J78FH	8.25	2,932.00	3,045.64	49.24
715	☐	J790FH	8.25	2,926.00	3,044.82	51.49
716	☐	J792	89.12	2,943.00	3,044.76	44.09
717	☐	J794	815.81	2,907.00	3,044.68	59.66
718	☐	J796	87.97	2,889.00	3,044.35	67.31
719	☐	J802	8.25	2,774.00	2,930.53	67.82
720	☐	J804	8.25	2,799.00	3,074.47	119.36
721	☐	J80FH	8.25	2,925.00	3,044.20	51.65
722	☐	J814	7.10	2,981.00	3,162.87	78.81
723	☐	J816	7.10	2,963.00	3,044.03	35.11
724	☐	J818	7.10	2,954.00	3,044.04	39.01
725	☐	J82FH	8.25	2,917.00	3,043.23	54.70
726	☐	J838	7.10	3,004.53	3,164.00	69.10
727	☐	J84FH	8.25	2,922.00	3,043.23	52.53
728	☐	J86	8.25	2,925.00	3,044.77	51.90
729	☐	J88	8.25	2,916.00	3,041.13	54.22
730	☐	J90	8.25	2,922.00	3,044.78	53.20
731	☐	J92FH	8.25	2,948.00	3,048.74	43.65
732	☐	J942	7.10	2,907.00	3,044.40	59.53
733	☐	J946	7.10	2,983.37	3,163.30	77.96
734	☐	J948	7.10	2,946.00	3,089.20	62.05
735	☐	J94FH	8.25	2,950.00	3,047.00	42.03
736	☐	J954	7.10	2,847.00	3,020.65	75.24
737	☐	J960	7.10	2,851.00	3,022.82	74.45
738	☐	J962	7.10	2,855.00	3,024.06	73.25
739	☐	J964	7.10	2,861.00	3,025.73	71.38
740	☐	J966	7.10	2,861.00	3,026.84	71.86
741	☐	J968	7.10	2,915.00	3,045.00	56.33
742	☐	J96FH	8.25	2,941.00	3,048.31	46.50
743	☐	J970	7.10	2,924.00	3,044.90	52.38
744	☐	J972	7.10	2,917.00	3,045.10	55.51
745	☐	J974	7.10	2,919.00	3,045.00	54.60
746	☐	J976	7.10	2,926.00	3,044.90	51.52
747	☐	J978	7.10	2,934.00	3,046.85	48.90
748	☐	J980	7.10	2,934.00	3,046.70	48.83
749	☐	J982	7.10	2,928.00	3,046.35	51.28
750	☐	J984	7.10	2,944.00	3,062.18	51.21

Peak Day Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
751	☐	J986	7.10	2,923.00	3,051.32	55.60
752	☐	J988	7.10	2,921.00	3,047.63	54.87
753	☐	J98FH	8.25	2,936.00	3,050.36	49.55
754	☐	J990	7.10	2,916.00	3,045.99	56.32
755	☐	J992	7.10	2,923.00	3,045.06	52.89
756	☐	J994	7.10	2,946.00	3,089.76	62.29
757	☐	J996	7.10	2,910.00	3,044.79	58.40
758	☐	J998	7.10	2,908.00	3,044.68	59.22

Peak Instantaneous Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
1	☐	J-100FH	9.23	2,876.00	2,996.53	52.23
2	☐	J-101	9.23	2,865.00	3,066.44	87.28
3	☐	J-102FH	9.23	2,868.00	3,071.35	88.11
4	☐	J-103FH	9.23	2,871.00	3,071.64	86.94
5	☐	J-104	9.23	2,839.00	2,997.06	68.49
6	☐	J-105FH	9.23	2,875.00	3,071.89	85.31
7	☐	J-106FH	9.23	2,877.00	3,069.94	83.60
8	☐	J-107FH	9.23	2,936.00	3,076.07	60.69
9	☐	J-108	9.23	2,876.00	3,071.37	84.65
10	☐	J-109FH	9.23	2,875.00	3,071.65	85.21
11	☐	J-10FH	9.23	2,741.00	2,930.24	82.00
12	☐	J-110	9.23	2,879.00	3,071.89	83.58
13	☐	J-111	9.23	2,899.50	3,072.22	74.84
14	☐	J-112	9.23	2,879.00	3,072.21	83.72
15	☐	J-113	9.23	2,885.00	3,073.14	81.52
16	☐	J-114FH	9.23	2,885.50	3,072.62	81.08
17	☐	J-115	9.23	2,885.00	3,072.62	81.29
18	☐	J-116FH	9.23	2,881.00	3,073.90	83.58
19	☐	J-117	9.23	2,897.00	3,072.77	76.16
20	☐	J-118FH	9.23	2,891.00	3,073.15	78.93
21	☐	J-119FH	9.23	2,889.00	3,073.50	79.94
22	☐	J-11FH	9.23	2,740.00	2,929.80	82.24
23	☐	J-12	9.23	2,766.00	2,932.46	72.13
24	☐	J-120	9.23	2,887.00	3,073.82	80.95
25	☐	J-1208	9.23	2,822.00	3,004.64	79.14
26	☐	J-121	9.23	2,878.00	3,074.18	85.01
27	☐	J-1210	9.23	2,760.00	3,106.87	150.30
28	☐	J-122FH	9.23	2,880.00	3,074.33	84.20
29	☐	J-123	9.23	2,870.00	3,074.18	88.47
30	☐	J-124	9.23	2,892.00	3,073.89	78.81
31	☐	J-125	9.23	2,892.00	3,073.89	78.81
32	☐	J-1254	9.23	3,000.00	3,162.99	70.62
33	☐	J-1268	9.23	3,200.00	3,301.00	43.76
34	☐	J-1269	9.23	3,200.00	3,301.00	43.76
35	☐	J-126FH	9.23	2,901.00	3,074.19	75.04
36	☐	J-127	9.23	2,901.00	3,074.26	75.07
37	☐	J-1273	9.23	2,823.00	3,007.70	80.03
38	☐	J-128FH	9.23	2,935.00	3,076.06	61.12
39	☐	J-129	9.23	2,899.00	3,073.82	75.75
40	☐	J-13	9.23	2,751.00	2,985.35	101.54
41	☐	J-130	9.23	2,932.00	3,076.05	62.42
42	☐	J-131FH	9.23	2,901.00	3,073.50	74.74
43	☐	J-132FH	9.23	2,925.00	3,075.99	65.42
44	☐	J-133FH	9.23	2,903.00	3,073.23	73.76
45	☐	J-134FH	9.23	2,927.00	3,075.99	64.56
46	☐	J-135	9.23	2,905.00	3,072.97	72.78
47	☐	J-136FH	9.23	2,910.00	3,072.64	70.47
48	☐	J-137	9.23	2,901.00	3,072.61	74.36
49	☐	J-138FH	9.23	2,902.00	3,072.60	73.92
50	☐	J-139FH	9.23	2,877.00	3,072.57	84.74

Peak Instantaneous Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
51	☐	J-140	9.23	2,885.00	3,071.73	80.91
52	☐	J-141FH	9.23	2,900.00	3,071.73	74.41
53	☐	J-142	9.23	2,885.00	3,071.67	80.89
54	☐	J-143FH	9.23	2,890.00	3,071.48	78.64
55	☐	J-144FH	9.23	2,897.00	3,070.27	75.08
56	☐	J-145FH	9.23	2,889.00	3,070.00	78.43
57	☐	J-146	9.23	2,888.00	3,070.12	78.91
58	☐	J-147FH	9.23	2,891.00	3,069.50	77.34
59	☐	J-148	9.23	2,908.00	3,071.84	70.99
60	☐	J-149FH	9.23	2,905.00	3,070.39	71.66
61	☐	J-14FH	9.23	2,750.00	2,930.70	78.30
62	☐	J-150	9.23	2,909.00	3,070.57	70.01
63	☐	J-151FH	9.23	2,893.00	3,070.33	76.84
64	☐	J-152	9.23	2,874.00	3,002.78	55.80
65	☐	J-153FH	9.23	2,892.50	3,069.74	76.80
66	☐	J-154	9.23	2,892.00	3,069.74	77.02
67	☐	J-155	9.23	2,894.00	3,069.94	76.23
68	☐	J-156FH	9.23	2,894.00	3,069.97	76.25
69	☐	J-157	9.23	2,870.00	3,069.95	86.64
70	☐	J-158FH	9.23	2,900.00	3,070.13	73.72
71	☐	J-159	9.23	2,896.00	3,070.13	75.45
72	☐	J-15FH	9.23	2,753.00	2,930.70	77.00
73	☐	J-160FH	9.23	2,903.50	3,070.30	72.27
74	☐	J-161FH	9.23	2,897.00	3,070.26	75.07
75	☐	J-162FH	9.23	2,880.00	3,069.97	82.31
76	☐	J-163	9.23	2,885.00	3,070.07	80.19
77	☐	J-164FH	9.23	2,910.00	3,070.91	69.72
78	☐	J-165FH	9.23	2,915.00	3,071.06	67.62
79	☐	J-166	9.23	2,915.00	3,071.46	67.79
80	☐	J-167FH	9.23	2,909.00	3,072.15	70.69
81	☐	J-168FH	9.23	2,917.00	3,072.43	67.35
82	☐	J-169FH	9.23	2,921.00	3,075.98	67.15
83	☐	J-16FH	9.23	2,640.00	2,930.06	125.68
84	☐	J-170FH	9.23	2,917.00	3,075.13	68.52
85	☐	J-171	9.23	2,916.00	3,071.61	67.42
86	☐	J-172	9.23	2,909.00	3,072.15	70.69
87	☐	J-173FH	9.23	2,920.00	3,071.60	65.69
88	☐	J-174	9.23	2,921.00	3,071.41	65.17
89	☐	J-175FH	9.23	2,915.00	3,072.19	68.11
90	☐	J-176	9.23	2,915.00	3,072.18	68.11
91	☐	J-177FH	9.23	2,929.00	3,075.42	63.44
92	☐	J-178	9.23	2,920.00	3,073.24	66.40
93	☐	J-179	9.23	2,920.00	3,073.38	66.46
94	☐	J-17FH	9.23	2,638.00	2,930.04	126.54
95	☐	J-18	9.23	2,637.00	2,930.04	126.97
96	☐	J-180	9.23	2,933.00	3,075.78	61.87
97	☐	J-181	9.23	2,915.00	3,073.76	68.79
98	☐	J-182	9.23	2,915.00	3,073.79	68.80
99	☐	J-183FH	9.23	2,915.00	3,073.78	68.80
100	☐	J-184FH	9.23	2,915.00	3,073.22	68.56

Peak Instantaneous Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
101	☐	J-185	9.23	2,920.00	3,073.99	66.72
102	☐	J-186FH	9.23	2,910.00	3,074.36	71.22
103	☐	J-187	9.23	2,915.00	3,073.33	68.61
104	☐	J-188	9.23	2,909.00	3,074.90	71.88
105	☐	J-189FH	9.23	2,915.00	3,076.92	70.16
106	☐	J-191	9.23	2,915.00	3,073.28	68.58
107	☐	J-192	9.23	2,910.00	3,073.26	70.74
108	☐	J-193FH	9.23	2,917.00	3,073.28	67.72
109	☐	J-194	9.23	2,917.00	3,070.77	66.63
110	☐	J-195	9.23	2,916.50	3,070.77	66.85
111	☐	J-196	9.23	2,909.00	3,070.63	70.03
112	☐	J-197	9.23	2,908.00	3,070.62	70.47
113	☐	J-198FH	9.23	2,900.00	3,070.55	73.90
114	☐	J-199	9.23	2,902.00	3,070.65	73.08
115	☐	J-19FH	9.23	2,636.00	2,930.03	127.40
116	☐	J-1FH	9.23	2,720.00	2,929.70	90.86
117	☐	J-2	9.23	2,720.00	2,929.70	90.86
118	☐	J-200	9.23	2,895.00	3,070.28	75.95
119	☐	J-201	9.23	2,890.00	3,070.20	78.08
120	☐	J-202	9.23	2,892.00	3,070.19	77.21
121	☐	J-203	9.23	2,883.00	3,070.18	81.10
122	☐	J-204FH	9.23	2,880.00	3,070.07	82.36
123	☐	J-205	9.23	2,885.00	3,070.30	80.29
124	☐	J-206	9.23	2,890.00	3,070.44	78.19
125	☐	J-207	9.23	2,883.00	3,070.27	81.14
126	☐	J-208	9.23	2,939.00	3,076.17	59.43
127	☐	J-209	9.23	2,825.00	3,006.07	78.46
128	☐	J-20FH	9.23	2,745.00	2,931.00	80.59
129	☐	J-21	9.23	2,745.00	2,930.57	80.41
130	☐	J-210	9.23	2,937.00	3,075.98	60.22
131	☐	J-211FH	9.23	2,830.00	3,006.07	76.29
132	☐	J-212FH	9.23	2,824.00	3,006.07	78.89
133	☐	J-213	9.23	2,825.00	3,009.83	80.09
134	☐	J-214FH	9.23	2,835.00	3,009.83	75.75
135	☐	J-215FH	9.23	2,825.00	3,009.83	80.09
136	☐	J-216	9.23	2,830.00	3,014.29	79.85
137	☐	J-217	9.23	2,830.00	3,017.05	81.05
138	☐	J-218FH	9.23	2,838.00	3,014.29	76.39
139	☐	J-219	9.23	2,830.00	3,014.28	79.85
140	☐	J-22	9.23	2,920.00	3,075.20	67.25
141	☐	J-220	9.23	2,924.00	3,076.61	66.12
142	☐	J-221FH	9.23	2,748.00	2,930.93	79.26
143	☐	J-222FH	9.23	2,732.00	2,931.38	86.39
144	☐	J-223	9.23	2,720.00	2,930.87	91.37
145	☐	J-224	9.23	2,750.00	2,931.21	78.52
146	☐	J-225FH	9.23	2,752.00	2,931.05	77.58
147	☐	J-226	9.23	2,740.00	2,930.94	82.74
148	☐	J-227FH	9.23	2,845.00	2,993.11	64.18
149	☐	J-228	9.23	2,755.00	2,931.05	76.28
150	☐	J-229FH	9.23	2,753.00	2,930.89	77.08

Peak Instantaneous Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
151	☐	J-23	9.23	2,751.00	2,988.17	102.77
152	☐	J-230	9.23	2,755.00	2,930.89	76.21
153	☐	J-231	9.23	2,750.00	2,930.85	78.36
154	☐	J-232FH	9.23	2,755.00	2,930.79	76.17
155	☐	J-233	9.23	2,750.00	2,930.80	78.34
156	☐	J-234	9.23	2,770.00	2,930.76	69.66
157	☐	J-235FH	9.23	2,765.00	2,930.70	71.80
158	☐	J-236	9.23	2,768.00	2,930.69	70.50
159	☐	J-237	9.23	2,765.00	2,930.68	71.79
160	☐	J-238	9.23	2,778.00	2,930.65	66.14
161	☐	J-24	9.23	2,800.00	2,990.20	82.41
162	☐	J-240	9.23	2,778.00	2,930.64	66.14
163	☐	J-241	9.23	2,780.00	2,930.11	65.04
164	☐	J-242	9.23	2,760.00	2,930.55	73.90
165	☐	J-243	9.23	2,924.00	3,075.80	65.78
166	☐	J-244	9.23	2,770.00	2,930.55	69.56
167	☐	J-245	9.23	2,770.00	2,930.55	69.56
168	☐	J-246	9.23	2,878.00	3,002.76	54.06
169	☐	J-247FH	9.23	2,857.50	2,997.18	60.52
170	☐	J-248	9.23	2,920.00	3,078.29	68.59
171	☐	J-249	9.23	2,920.00	3,078.56	68.70
172	☐	J-250FH	9.23	2,750.00	2,930.80	78.34
173	☐	J-251	9.23	2,750.00	2,930.80	78.34
174	☐	J-252	9.23	2,750.00	2,930.81	78.34
175	☐	J-253	9.23	2,745.00	2,930.80	80.51
176	☐	J-254	9.23	2,735.00	2,930.24	84.60
177	☐	J-255FH	9.23	2,728.00	2,930.17	87.60
178	☐	J-256	9.23	2,728.00	2,930.15	87.59
179	☐	J-257	9.23	2,725.00	2,929.71	88.70
180	☐	J-258FH	9.23	2,735.00	2,929.61	84.33
181	☐	J-259	9.23	2,735.00	2,929.52	84.28
182	☐	J-25FH	9.23	2,758.00	2,989.39	100.26
183	☐	J-26	9.23	2,760.00	2,989.39	99.39
184	☐	J-260FH	9.23	2,735.00	2,929.48	84.27
185	☐	J-261	9.23	2,735.00	2,929.47	84.26
186	☐	J-262	9.23	2,735.00	2,929.46	84.26
187	☐	J-263	9.23	2,720.00	2,929.43	90.75
188	☐	J-264	9.23	2,710.00	2,929.35	95.04
189	☐	J-265	9.23	2,700.00	2,929.04	99.24
190	☐	J-266FH	9.23	2,700.00	2,929.03	99.24
191	☐	J-267FH	9.23	2,751.00	2,934.38	79.46
192	☐	J-268	9.23	2,700.00	2,929.16	99.30
193	☐	J-269FH	9.23	2,700.00	2,929.16	99.29
194	☐	J-27	9.23	2,770.00	2,990.18	95.40
195	☐	J-270FH	9.23	2,700.00	2,929.35	99.38
196	☐	J-271FH	9.23	2,735.00	2,929.48	84.27
197	☐	J-272	9.23	2,824.00	3,004.74	78.32
198	☐	J-273FH	9.23	2,705.00	2,929.58	97.31
199	☐	J-274FH	9.23	2,705.00	2,929.59	97.32
200	☐	J-275FH	9.23	2,785.00	2,987.92	87.92

Peak Instantaneous Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
201	☐	J-277	9.23	2,920.00	3,076.92	67.99
202	☐	J-278FH	9.23	2,740.00	2,931.43	82.95
203	☐	J-279FH	9.23	2,730.00	2,930.83	87.02
204	☐	J-28	9.23	2,807.00	2,992.06	80.19
205	☐	J-280FH	9.23	2,741.00	2,930.36	82.05
206	☐	J-281FH	9.23	2,703.00	2,929.60	98.19
207	☐	J-282	9.23	2,720.00	2,929.68	90.85
208	☐	J-283FH	9.23	2,715.00	2,929.71	93.03
209	☐	J-284FH	9.23	2,720.00	2,929.93	90.96
210	☐	J-285	9.23	2,720.00	2,929.71	90.87
211	☐	J-286	9.23	2,720.00	2,929.94	90.97
212	☐	J-287	9.23	2,720.00	2,930.08	91.03
213	☐	J-288FH	9.23	2,720.00	2,929.70	90.86
214	☐	J-289	9.23	2,720.00	2,929.73	90.88
215	☐	J-290	9.23	2,720.00	2,929.73	90.88
216	☐	J-291FH	9.23	2,921.00	3,074.83	66.65
217	☐	J-292FH	9.23	2,705.00	2,929.64	97.34
218	☐	J-293FH	9.23	2,755.00	2,986.68	100.39
219	☐	J-294	9.23	2,913.00	3,076.79	70.97
220	☐	J-295	9.23	2,946.00	3,115.97	73.65
221	☐	J-296	9.23	2,990.00	3,124.09	58.10
222	☐	J-297FH	9.23	2,705.00	2,929.62	97.33
223	☐	J-298	9.23	2,760.00	2,930.59	73.92
224	☐	J-299	9.23	2,770.00	2,930.55	69.57
225	☐	J-29FH	9.23	2,815.00	2,992.97	77.11
226	☐	J-3	9.23	2,730.00	2,929.88	86.61
227	☐	J-300	9.23	2,915.00	3,076.92	70.16
228	☐	J-301FH	9.23	2,800.00	3,081.61	122.02
229	☐	J-302FH	9.23	2,705.00	2,929.62	97.33
230	☐	J-303FH	9.23	2,730.00	2,929.69	86.53
231	☐	J-304	9.23	3,000.00	3,153.89	66.68
232	☐	J-305FH	9.23	2,877.50	2,996.53	51.58
233	☐	J-306	9.23	2,877.50	3,069.80	83.32
234	☐	J-307FH	9.23	2,740.00	2,929.71	82.20
235	☐	J-308	9.23	3,042.00	3,088.18	20.01
236	☐	J-309	9.23	2,760.00	2,930.56	73.90
237	☐	J-30FH	9.23	2,816.00	2,993.85	77.06
238	☐	J-31	9.23	2,815.00	2,994.49	77.77
239	☐	J-310	9.23	2,930.00	3,076.23	63.36
240	☐	J-311	9.23	2,925.00	3,077.59	66.12
241	☐	J-312	9.23	2,870.00	3,075.44	89.02
242	☐	J-313	9.23	2,800.00	2,997.06	85.39
243	☐	J-314	9.23	2,780.00	2,996.75	93.92
244	☐	J-315FH	9.23	2,930.00	3,076.01	63.26
245	☐	J-316	9.23	2,843.00	2,993.11	65.04
246	☐	J-317FH	9.23	2,902.00	3,070.67	73.09
247	☐	J-318FH	9.23	2,922.00	3,078.17	67.67
248	☐	J-319FH	9.23	2,924.00	3,077.45	66.49
249	☐	J-32	9.23	2,800.00	2,996.10	84.97
250	☐	J-320	9.23	2,922.00	3,077.30	67.29

Peak Instantaneous Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
251	☐	J-321FH	9.23	2,924.00	3,076.81	66.21
252	☐	J-322FH	9.23	2,936.00	3,076.36	60.82
253	☐	J-323FH	9.23	2,930.00	3,076.49	63.47
254	☐	J-324FH	9.23	2,926.00	3,076.75	65.32
255	☐	J-325FH	9.23	2,924.00	3,076.98	66.29
256	☐	J-326FH	9.23	2,928.00	3,076.73	64.44
257	☐	J-327FH	9.23	2,928.00	3,076.61	64.39
258	☐	J-328FH	9.23	2,933.00	3,076.46	62.16
259	☐	J-329FH	9.23	2,934.00	3,076.43	61.72
260	☐	J-330	9.23	2,934.00	3,076.44	61.72
261	☐	J-331	9.23	2,923.00	3,076.80	66.64
262	☐	J-333	9.23	2,885.00	3,070.28	80.28
263	☐	J-334	9.23	2,885.00	3,070.28	80.28
264	☐	J-335	9.23	2,745.00	2,931.03	80.61
265	☐	J-336	9.23	2,745.00	2,931.03	80.61
266	☐	J-33FH	9.23	2,820.00	2,995.20	75.91
267	☐	J-34	9.23	2,830.00	2,995.45	71.69
268	☐	J-35	9.23	2,827.00	2,994.37	72.52
269	☐	J-36	9.23	2,820.00	2,994.43	75.58
270	☐	J-37	9.23	2,825.00	2,993.83	73.15
271	☐	J-38FH	9.23	2,821.00	2,993.06	74.55
272	☐	J-39FH	9.23	2,836.00	2,994.27	68.58
273	☐	J-4	9.23	2,729.00	2,929.88	87.04
274	☐	J-40	9.23	2,839.00	2,994.25	67.27
275	☐	J-41	9.23	2,837.00	2,994.23	68.13
276	☐	J-42	9.23	2,835.00	2,993.87	68.84
277	☐	J-43	9.23	2,833.00	2,993.15	69.40
278	☐	J-44FH	9.23	2,805.00	2,992.12	81.08
279	☐	J-45	9.23	2,805.00	2,992.35	81.18
280	☐	J-46	9.23	2,780.00	2,992.11	91.91
281	☐	J-47	9.23	2,760.00	2,992.11	100.57
282	☐	J-48	9.23	2,780.00	2,992.11	91.91
283	☐	J-49	9.23	2,801.00	2,992.73	83.08
284	☐	J-5	9.23	2,751.00	2,930.12	77.61
285	☐	J-50	9.23	2,803.00	2,992.35	82.05
286	☐	J-51	9.23	2,800.00	2,992.73	83.51
287	☐	J-52	9.23	2,839.00	2,996.24	68.13
288	☐	J-53	9.23	2,842.00	2,995.94	66.70
289	☐	J-54	9.23	2,920.00	3,074.14	66.79
290	☐	J-55	9.23	2,842.00	2,995.79	66.64
291	☐	J-56	9.23	2,847.00	2,995.89	64.51
292	☐	J-57	9.23	2,850.00	2,995.89	63.21
293	☐	J-58	9.23	2,837.00	2,994.38	68.19
294	☐	J-59	9.23	2,860.00	3,081.61	96.02
295	☐	J-6	9.23	2,757.00	2,930.46	75.16
296	☐	J-61	9.23	2,847.00	2,994.35	63.85
297	☐	J-63FH	9.23	2,839.00	2,994.35	67.31
298	☐	J-64	9.23	2,839.00	2,994.14	67.22
299	☐	J-65	9.23	2,851.50	2,995.87	62.55
300	☐	J-66FH	9.23	2,847.00	2,995.50	64.35

Peak Instantaneous Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
301	☐	J-67	9.23	2,842.00	2,994.46	66.06
302	☐	J-68FH	9.23	2,839.00	2,994.14	67.22
303	☐	J-69FH	9.23	2,839.00	2,993.69	67.03
304	☐	J-7	9.23	2,754.00	2,930.09	76.30
305	☐	J-70	9.23	2,837.00	2,993.13	67.65
306	☐	J-71	9.23	2,839.50	2,993.78	66.85
307	☐	J-73FH	9.23	2,830.00	2,991.02	69.77
308	☐	J-74	9.23	2,843.00	2,994.03	65.44
309	☐	J-75	9.23	2,845.00	2,994.10	64.60
310	☐	J-76	9.23	2,849.00	2,994.19	62.91
311	☐	J-77FH	9.23	2,914.00	3,075.55	70.00
312	☐	J-78	9.23	2,940.00	3,076.23	59.03
313	☐	J-79	9.23	2,842.00	2,992.02	65.01
314	☐	J-80FH	9.23	2,940.00	3,076.18	59.01
315	☐	J-81FH	9.23	2,841.00	2,992.61	65.69
316	☐	J-82	9.23	2,921.00	3,075.98	67.15
317	☐	J-83	9.23	2,760.00	2,931.20	74.18
318	☐	J-84	9.23	2,760.00	2,983.42	96.81
319	☐	J-85FH	9.23	2,849.50	2,995.75	63.37
320	☐	J-86	9.23	2,851.50	2,995.74	62.50
321	☐	J-87	9.23	2,852.00	2,996.03	62.41
322	☐	J-88	9.23	2,854.00	2,996.24	61.63
323	☐	J-89	9.23	2,857.00	2,996.00	60.23
324	☐	J-8FH	9.23	2,752.00	2,930.09	77.17
325	☐	J-9	9.23	2,757.00	2,930.68	75.25
326	☐	J-90	9.23	2,857.00	2,996.00	60.23
327	☐	J-91	9.23	2,857.00	2,996.07	60.26
328	☐	J-92	9.23	2,861.00	2,996.36	58.65
329	☐	J-93FH	9.23	2,858.00	2,996.24	59.90
330	☐	J-94	9.23	2,857.00	2,996.54	60.46
331	☐	J-95	9.23	2,863.50	2,996.44	57.60
332	☐	J-956	9.23	2,847.00	3,023.57	76.51
333	☐	J-958	9.23	2,856.00	3,025.29	73.35
334	☐	J-96	9.23	2,863.00	2,996.44	57.82
335	☐	J-97FH	9.23	2,936.00	3,076.09	60.70
336	☐	J-98	9.23	2,866.75	2,996.53	56.23
337	☐	J-99	9.23	2,866.50	2,996.52	56.34
338	☐	J1000	9.23	2,903.00	3,076.29	75.09
339	☐	J1002	9.23	2,892.00	3,076.28	79.85
340	☐	J1004	9.23	2,939.00	3,076.21	59.45
341	☐	J1006	9.23	2,937.00	3,076.21	60.32
342	☐	J1008	9.23	2,940.00	3,076.21	59.02
343	☐	J100FH	9.23	2,933.00	3,077.10	62.44
344	☐	J1010	9.23	2,941.00	3,076.21	58.58
345	☐	J1012	9.23	2,941.00	3,076.21	58.59
346	☐	J1014	9.23	2,942.00	3,076.21	58.15
347	☐	J1016	9.23	2,943.00	3,076.21	57.72
348	☐	J1018	9.23	2,940.00	3,076.21	59.02
349	☐	J1020	9.23	2,944.00	3,076.20	57.28
350	☐	J1022	9.23	2,947.00	3,076.20	55.98

Peak Instantaneous Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
351	☐	J1024	9.23	2,941.00	3,076.20	58.58
352	☐	J1026	9.23	2,953.00	3,084.71	57.07
353	☐	J1028	9.23	2,868.00	3,084.72	93.91
354	☐	J102FH	9.23	2,936.00	3,076.05	60.68
355	☐	J1030	9.23	2,890.00	3,084.72	84.37
356	☐	J1032	9.23	2,873.00	3,084.72	91.74
357	☐	J1034	9.23	2,915.00	3,084.71	73.54
358	☐	J1036	9.23	2,761.00	2,931.84	74.02
359	☐	J1038	9.23	2,764.00	2,931.95	72.77
360	☐	J1040	9.23	2,764.00	2,931.87	72.74
361	☐	J1042	9.23	2,766.00	2,931.91	71.89
362	☐	J1044	9.23	2,768.00	2,931.89	71.01
363	☐	J1048	9.23	3,000.00	3,154.51	66.95
364	☐	J104FH	9.23	2,929.00	3,075.54	63.49
365	☐	J1050	9.23	2,861.00	3,048.14	81.09
366	☐	J1054	0.00	2,940.00	3,109.50	73.45
367	☐	J1056	0.00	2,929.50	3,076.59	63.73
368	☐	J1062	0.00	3,000.00	3,124.09	53.77
369	☐	J1068	0.00	3,138.90	3,165.37	11.47
370	☐	J106FH	9.23	2,923.00	3,075.38	66.03
371	☐	J108FH	9.23	2,921.00	3,075.63	67.00
372	☐	J10FH	9.23	2,845.00	3,020.80	76.18
373	☐	J110FH	9.23	2,914.00	3,075.36	69.92
374	☐	J112FH	9.23	2,934.00	3,076.24	61.63
375	☐	J114FH	9.23	2,932.00	3,075.79	62.30
376	☐	J116FH	9.23	2,925.00	3,075.22	65.09
377	☐	J118FH	9.23	2,929.00	3,076.52	63.92
378	☐	J12	9.23	2,845.00	3,020.92	76.22
379	☐	J120FH	9.23	2,930.00	3,075.80	63.17
380	☐	J122FH	9.23	2,930.00	3,075.24	62.93
381	☐	J124FH	9.23	2,922.00	3,074.99	66.29
382	☐	J126FH	9.23	2,899.00	3,075.50	76.48
383	☐	J128FH	9.23	2,902.00	3,074.26	74.64
384	☐	J130FH	9.23	2,881.00	3,075.46	84.26
385	☐	J132FH	9.23	2,887.00	3,074.39	81.20
386	☐	J134FH	9.23	2,894.00	3,074.00	77.99
387	☐	J136FH	9.23	2,898.00	3,073.82	76.18
388	☐	J138FH	9.23	2,924.00	3,073.79	64.90
389	☐	J140FH	9.23	2,920.00	3,073.22	66.39
390	☐	J142FH	9.23	2,923.00	3,073.19	65.08
391	☐	J144FH	9.23	2,808.00	3,081.61	118.55
392	☐	J146FH	9.23	2,810.00	3,081.61	117.69
393	☐	J148FH	9.23	2,816.00	3,081.61	115.09
394	☐	J14FH	9.23	2,845.00	3,020.61	76.09
395	☐	J150FH	9.23	2,868.00	3,081.61	92.56
396	☐	J152FH	9.23	2,932.00	3,072.84	61.03
397	☐	J154FH	9.23	2,929.00	3,074.33	62.97
398	☐	J156FH	9.23	2,929.00	3,073.89	62.78
399	☐	J158FH	9.23	2,928.00	3,073.97	63.25
400	☐	J16	9.23	2,849.00	3,020.59	74.35

Peak Instantaneous Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
401	☐	J160FH	9.23	2,912.00	3,070.73	68.78
402	☐	J162FH	9.23	2,918.00	3,072.01	66.73
403	☐	J164FH	9.23	2,911.00	3,071.68	69.62
404	☐	J166FH	9.23	2,911.00	3,072.93	70.16
405	☐	J168FH	9.23	2,905.00	3,073.20	72.88
406	☐	J170FH	9.23	2,882.00	3,073.44	82.95
407	☐	J172FH	9.23	2,884.00	3,072.94	81.87
408	☐	J174FH	9.23	2,877.00	3,072.39	84.66
409	☐	J176FH	9.23	2,881.00	3,072.04	82.78
410	☐	J178FH	9.23	2,888.00	3,071.67	79.58
411	☐	J180FH	9.23	2,880.00	3,071.41	82.94
412	☐	J182FH	9.23	2,863.00	3,071.36	90.28
413	☐	J184FH	9.23	2,863.00	3,069.81	89.61
414	☐	J186	9.23	2,788.00	2,930.55	61.77
415	☐	J188FH	9.23	2,775.00	2,930.55	67.40
416	☐	J18FH	9.23	2,844.00	3,020.58	76.51
417	☐	J190FH	9.23	2,893.00	3,070.27	76.81
418	☐	J192FH	9.23	2,766.00	2,930.55	71.30
419	☐	J194FH	9.23	2,780.00	2,930.55	65.23
420	☐	J196FH	9.23	2,763.00	2,930.57	72.61
421	☐	J198FH	9.23	2,776.00	2,930.56	66.97
422	☐	J200FH	9.23	2,783.00	2,930.63	63.97
423	☐	J202FH	9.23	2,760.00	2,930.68	73.96
424	☐	J204FH	9.23	2,777.00	2,930.76	66.62
425	☐	J206FH	9.23	2,889.00	3,070.47	78.63
426	☐	J208FH	9.23	2,879.00	3,070.20	82.85
427	☐	J20FH	9.23	2,850.00	3,020.58	73.91
428	☐	J210FH	9.23	2,892.00	3,070.23	77.23
429	☐	J212FH	9.23	2,881.00	3,070.01	81.90
430	☐	J214FH	9.23	2,738.00	2,930.80	83.54
431	☐	J216FH	9.23	2,743.00	2,930.97	81.45
432	☐	J218FH	9.23	2,722.00	2,930.87	90.51
433	☐	J22	9.23	2,852.00	3,020.58	73.05
434	☐	J220FH	9.23	2,725.00	2,930.88	89.21
435	☐	J222FH	9.23	2,732.00	2,930.89	86.18
436	☐	J224	9.23	2,730.00	2,930.88	87.04
437	☐	J226FH	9.23	2,736.00	2,930.88	84.44
438	☐	J228FH	9.23	2,738.00	2,930.79	83.53
439	☐	J230FH	9.23	2,747.00	2,931.23	79.83
440	☐	J232FH	9.23	2,723.00	2,930.15	89.76
441	☐	J234FH	9.23	2,728.00	2,930.15	87.59
442	☐	J236FH	9.23	2,738.00	2,930.63	83.47
443	☐	J238FH	9.23	2,745.00	2,931.09	80.63
444	☐	J240FH	9.23	2,720.00	2,930.06	91.02
445	☐	J242FH	9.23	2,742.00	2,930.75	81.79
446	☐	J244FH	9.23	2,755.00	2,986.03	100.10
447	☐	J246FH	9.23	2,835.00	3,014.28	77.68
448	☐	J248FH	9.23	2,740.00	2,930.20	82.41
449	☐	J24FH	9.23	2,842.00	3,020.58	77.38
450	☐	J250FH	9.23	2,749.00	2,930.96	78.84

Peak Instantaneous Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
451	☐	J252FH	9.23	2,743.00	2,930.86	81.40
452	☐	J254FH	9.23	2,743.00	2,930.84	81.39
453	☐	J256FH	9.23	2,804.00	2,992.48	81.67
454	☐	J258FH	9.23	2,778.00	2,992.11	92.77
455	☐	J260FH	9.23	2,797.00	2,991.26	84.17
456	☐	J262FH	9.23	2,796.00	2,990.19	84.14
457	☐	J264FH	9.23	2,799.00	2,989.69	82.62
458	☐	J266FH	9.23	2,812.00	2,993.09	78.47
459	☐	J268FH	9.23	2,810.00	2,992.76	79.19
460	☐	J26FH	9.23	2,849.00	3,020.58	74.35
461	☐	J270FH	9.23	2,807.00	2,991.81	80.08
462	☐	J272FH	9.23	2,824.00	2,994.63	73.93
463	☐	J274FH	9.23	2,804.00	2,994.81	82.68
464	☐	J276FH	9.23	2,818.00	2,993.15	75.89
465	☐	J278FH	9.23	2,824.00	2,993.94	73.63
466	☐	J28	9.23	2,922.00	3,076.92	67.13
467	☐	J280FH	9.23	2,819.00	2,993.84	75.76
468	☐	J282FH	9.23	2,841.00	2,995.92	67.13
469	☐	J284FH	9.23	2,843.00	2,995.88	66.24
470	☐	J286FH	9.23	2,844.00	2,995.92	65.83
471	☐	J288FH	9.23	2,849.00	2,996.05	63.72
472	☐	J290FH	9.23	2,794.00	2,985.16	82.83
473	☐	J292FH	9.23	2,856.00	2,995.26	60.34
474	☐	J294FH	9.23	2,845.00	2,994.08	64.60
475	☐	J296FH	9.23	2,843.00	2,994.22	65.52
476	☐	J298FH	9.23	2,852.00	2,996.18	62.47
477	☐	J300FH	9.23	2,875.00	3,007.99	57.63
478	☐	J302FH	9.23	2,871.00	3,004.70	57.93
479	☐	J304FH	9.23	2,872.00	3,002.76	56.66
480	☐	J306FH	9.23	2,864.00	2,996.53	57.43
481	☐	J308FH	9.23	2,858.00	2,996.46	59.99
482	☐	J310FH	9.23	2,752.00	2,931.29	77.69
483	☐	J312FH	9.23	2,739.00	2,929.85	82.69
484	☐	J314FH	9.23	2,743.00	2,930.64	81.30
485	☐	J316FH	9.23	2,734.00	2,930.32	85.07
486	☐	J318FH	9.23	2,720.00	2,929.94	90.97
487	☐	J320FH	9.23	2,716.00	2,929.83	92.65
488	☐	J322FH	9.23	2,721.00	2,929.82	90.48
489	☐	J324FH	9.23	2,727.00	2,929.86	87.90
490	☐	J326FH	9.23	2,729.00	2,929.76	86.99
491	☐	J328FH	9.23	2,736.00	2,929.56	83.87
492	☐	J330FH	9.23	2,727.00	2,929.54	87.76
493	☐	J332FH	9.23	2,736.00	2,929.59	83.88
494	☐	J334FH	9.23	2,739.00	2,929.67	82.62
495	☐	J336FH	9.23	2,733.00	2,930.22	85.45
496	☐	J338FH	9.23	2,725.00	2,929.67	88.68
497	☐	J340FH	9.23	2,739.00	2,930.22	82.85
498	☐	J342FH	9.23	2,728.00	2,929.92	87.49
499	☐	J344FH	9.23	2,736.00	2,930.22	84.15
500	☐	J346FH	9.23	2,740.00	2,930.22	82.42

Peak Instantaneous Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
501	☐	J348FH	9.23	2,746.00	2,930.47	79.93
502	☐	J34FH	9.23	2,922.00	3,077.48	67.37
503	☐	J350FH	9.23	2,746.00	2,930.49	79.94
504	☐	J352FH	9.23	2,735.00	2,930.09	84.53
505	☐	J354FH	9.23	2,749.00	2,930.68	78.72
506	☐	J356FH	9.23	2,721.00	2,930.08	90.59
507	☐	J358FH	9.23	2,733.00	2,930.11	85.41
508	☐	J36	9.23	2,906.00	3,072.71	72.23
509	☐	J360FH	9.23	2,705.00	2,929.09	97.10
510	☐	J362FH	9.23	2,705.00	2,929.25	97.17
511	☐	J364FH	9.23	2,718.00	2,929.47	91.63
512	☐	J366FH	9.23	2,721.00	2,929.47	90.33
513	☐	J368FH	9.23	2,717.00	2,929.45	92.05
514	☐	J370FH	9.23	2,731.00	2,929.53	86.02
515	☐	J372FH	9.23	2,731.00	2,929.55	86.03
516	☐	J374FH	9.23	2,704.00	2,929.60	97.75
517	☐	J376FH	9.23	2,705.00	2,929.63	97.33
518	☐	J380FH	9.23	2,947.00	3,076.18	55.98
519	☐	J382FH	9.23	2,948.00	3,076.18	55.54
520	☐	J384FH	9.23	2,945.00	3,076.18	56.84
521	☐	J388	9.23	2,946.00	3,076.18	56.41
522	☐	J38FH	9.23	2,913.00	3,070.90	68.42
523	☐	J392	9.23	2,952.00	3,076.18	53.81
524	☐	J394	9.23	2,945.00	3,076.18	56.84
525	☐	J396	9.23	2,942.00	3,076.19	58.15
526	☐	J398FH	9.23	2,943.00	3,076.19	57.71
527	☐	J40	9.23	2,916.00	3,071.21	67.25
528	☐	J400	9.23	2,902.00	3,076.04	75.41
529	☐	J402FH	9.23	2,912.00	3,075.96	71.04
530	☐	J404FH	9.23	2,917.00	3,075.90	68.85
531	☐	J406FH	9.23	2,921.00	3,076.02	67.17
532	☐	J408	9.23	2,918.00	3,076.02	68.47
533	☐	J410FH	9.23	2,922.00	3,076.01	66.73
534	☐	J412FH	9.23	2,929.00	3,076.01	63.70
535	☐	J414	9.23	2,928.00	3,077.60	64.82
536	☐	J416FH	9.23	2,928.00	3,078.13	65.05
537	☐	J418FH	9.23	2,926.00	3,078.13	65.92
538	☐	J420FH	9.23	2,918.00	3,078.32	69.46
539	☐	J422FH	9.23	2,928.00	3,077.91	64.96
540	☐	J424FH	9.23	2,928.00	3,077.87	64.94
541	☐	J426FH	9.23	2,927.00	3,077.85	65.36
542	☐	J42FH	9.23	2,919.00	3,071.21	65.95
543	☐	J430	9.23	2,923.00	3,078.30	67.29
544	☐	J432	9.23	2,924.00	3,078.29	66.85
545	☐	J434FH	9.23	2,926.00	3,078.30	65.99
546	☐	J436	9.23	2,922.00	3,078.29	67.72
547	☐	J438	9.23	2,923.00	3,078.29	67.29
548	☐	J440FH	9.23	2,925.00	3,077.84	66.23
549	☐	J442FH	9.23	2,926.00	3,077.97	65.85
550	☐	J444FH	9.23	2,930.00	3,077.30	63.83

Peak Instantaneous Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
551	☐	J446	9.23	2,909.00	3,078.85	73.59
552	☐	J448	9.23	2,923.00	3,078.32	67.30
553	☐	J44FH	9.23	2,918.00	3,070.89	66.25
554	☐	J450FH	9.23	2,918.00	3,076.45	68.66
555	☐	J452FH	9.23	2,915.00	3,076.26	69.87
556	☐	J454	9.23	2,841.00	2,994.23	66.39
557	☐	J456FH	9.23	2,706.00	2,928.96	96.61
558	☐	J458FH	9.23	2,709.00	2,928.96	95.31
559	☐	J46	9.23	2,896.00	3,070.67	75.69
560	☐	J460FH	9.23	2,713.00	2,928.96	93.57
561	☐	J462FH	9.23	2,713.00	2,928.97	93.58
562	☐	J464	9.23	2,711.00	2,928.97	94.44
563	☐	J466	9.23	2,707.00	2,928.96	96.17
564	☐	J468	9.23	2,712.00	2,928.96	94.01
565	☐	J470	9.23	2,712.00	2,929.00	94.02
566	☐	J472	9.23	2,712.00	2,928.96	94.01
567	☐	J474	9.23	2,712.00	2,928.97	94.01
568	☐	J476	9.23	2,815.00	3,084.61	116.82
569	☐	J478FH	9.23	2,816.00	3,084.61	116.39
570	☐	J48	9.23	2,900.00	3,070.28	73.78
571	☐	J480FH	9.23	2,796.00	3,084.63	125.06
572	☐	J482FH	9.23	2,796.00	3,084.65	125.07
573	☐	J484FH	9.23	2,811.00	3,084.68	118.59
574	☐	J486FH	9.23	2,840.00	3,084.72	106.04
575	☐	J488FH	9.23	2,820.00	3,084.71	114.70
576	☐	J490FH	9.23	2,818.00	3,084.71	115.57
577	☐	J492FH	9.23	2,820.00	3,084.71	114.70
578	☐	J494FH	9.23	2,818.00	3,084.71	115.57
579	☐	J496FH	9.23	2,815.00	3,084.72	116.87
580	☐	J500FH	9.23	2,823.00	3,084.72	113.41
581	☐	J508FH	9.23	2,847.00	3,084.73	103.01
582	☐	J50FH	9.23	2,695.00	2,929.60	101.65
583	☐	J510FH	9.23	2,856.00	3,084.73	99.11
584	☐	J512	9.23	2,872.00	3,084.73	92.18
585	☐	J514FH	9.23	2,869.00	3,084.74	93.48
586	☐	J516	9.23	2,867.00	3,084.75	94.35
587	☐	J518FH	9.23	2,865.00	3,084.77	95.22
588	☐	J52	9.23	2,742.00	2,930.22	81.56
589	☐	J522FH	9.23	2,824.00	3,084.73	112.97
590	☐	J524	9.23	2,815.00	3,084.72	116.87
591	☐	J526FH	9.23	2,840.00	3,084.74	106.04
592	☐	J528FH	9.23	2,854.00	3,084.75	99.98
593	☐	J532FH	9.23	2,858.00	3,084.78	98.26
594	☐	J534	9.23	2,860.00	3,084.79	97.40
595	☐	J54	9.23	2,738.00	2,930.22	83.29
596	☐	J540	9.23	2,927.00	3,077.91	65.39
597	☐	J546	9.23	2,760.00	3,109.45	151.42
598	☐	J548	9.23	2,760.00	3,099.40	147.06
599	☐	J550	9.23	2,760.00	3,083.33	140.10
600	☐	J552	9.23	2,760.00	3,078.90	138.18

Peak Instantaneous Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
601	☐	J554	9.23	2,760.00	3,030.48	117.20
602	☐	J556	9.23	2,760.00	3,067.09	133.06
603	☐	J558	9.23	2,760.00	3,096.16	145.66
604	☐	J560	9.23	2,875.00	3,065.55	82.57
605	☐	J562	9.23	2,865.00	3,066.44	87.28
606	☐	J564	9.23	2,820.00	2,991.00	74.09
607	☐	J566FH	9.23	2,922.00	3,076.69	67.03
608	☐	J568FH	9.23	2,928.00	3,076.59	64.39
609	☐	J56FH	9.23	2,740.00	2,929.91	82.29
610	☐	J570FH	9.23	2,929.00	3,076.59	63.95
611	☐	J572	9.23	2,939.00	3,076.45	59.56
612	☐	J574	9.23	2,937.00	3,076.49	60.44
613	☐	J576	9.23	2,942.00	3,076.41	58.24
614	☐	J578	9.23	2,940.00	3,076.42	59.11
615	☐	J580FH	9.23	2,939.00	3,076.42	59.54
616	☐	J582	9.23	2,922.00	3,076.67	67.02
617	☐	J584FH	9.23	2,842.00	3,084.74	105.18
618	☐	J586	9.23	2,865.00	3,084.75	95.22
619	☐	J588	9.23	2,857.00	3,084.77	98.69
620	☐	J58FH	9.23	2,734.00	2,929.80	84.84
621	☐	J590FH	9.23	2,833.00	3,084.74	109.08
622	☐	J594FH	9.23	2,826.00	3,084.74	112.11
623	☐	J596FH	9.23	2,803.00	3,084.71	122.07
624	☐	J60	9.23	2,728.00	2,929.76	87.42
625	☐	J600FH	9.23	2,846.00	3,084.74	103.45
626	☐	J602	9.23	2,846.00	3,084.74	103.45
627	☐	J604	9.23	2,945.00	3,076.34	56.91
628	☐	J606FH	9.23	2,950.00	3,076.26	54.71
629	☐	J608	9.23	2,943.00	3,076.34	57.78
630	☐	J610FH	9.23	2,936.00	3,076.55	60.90
631	☐	J612FH	9.23	2,931.00	3,076.62	63.10
632	☐	J614	9.23	2,931.00	3,076.57	63.08
633	☐	J616	9.23	2,933.00	3,076.56	62.20
634	☐	J618	9.23	3,143.00	3,300.99	68.46
635	☐	J62	9.23	2,723.00	2,929.76	89.59
636	☐	J620	9.23	2,865.00	2,996.52	56.99
637	☐	J622FH	9.23	2,826.00	3,005.94	77.97
638	☐	J624FH	9.23	2,835.00	3,005.93	74.06
639	☐	J626FH	9.23	2,805.00	3,001.62	85.20
640	☐	J630FH	9.23	2,825.00	3,005.92	78.39
641	☐	J634FH	9.23	2,831.00	3,005.92	75.79
642	☐	J638FH	9.23	2,790.00	2,999.77	90.89
643	☐	J64	9.23	2,742.00	2,929.62	81.30
644	☐	J640FH	9.23	2,930.00	3,076.56	63.50
645	☐	J642FH	9.23	2,929.00	3,076.58	63.95
646	☐	J646FH	9.23	2,934.00	3,076.56	61.77
647	☐	J648FH	9.23	2,799.00	2,930.55	57.00
648	☐	J650FH	9.23	2,790.00	2,930.55	60.90
649	☐	J652FH	9.23	2,774.00	2,930.55	67.83
650	☐	J654FH	9.23	2,772.00	2,930.53	68.69

Peak Instantaneous Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
651	☐	J656FH	9.23	2,779.00	2,930.53	65.66
652	☐	J658FH	9.23	2,784.00	2,930.54	63.49
653	☐	J660FH	9.23	2,774.00	2,930.53	67.82
654	☐	J662FH	9.23	2,765.00	2,930.53	71.72
655	☐	J664FH	9.23	2,784.00	2,930.53	63.49
656	☐	J666FH	9.23	2,792.00	2,930.54	60.03
657	☐	J668	9.23	2,805.00	2,930.53	54.39
658	☐	J66FH	9.23	2,733.00	2,929.51	85.15
659	☐	J670	9.23	2,746.42	2,930.94	79.95
660	☐	J672FH	9.23	2,747.00	2,930.94	79.70
661	☐	J674	9.23	2,931.48	3,076.17	62.70
662	☐	J676FH	9.23	2,935.42	3,076.17	60.99
663	☐	J678FH	9.23	2,934.28	3,076.17	61.48
664	☐	J680FH	9.23	2,931.09	3,076.17	62.86
665	☐	J682	9.23	2,926.25	3,076.17	64.96
666	☐	J684FH	9.23	2,930.42	3,076.17	63.15
667	☐	J686FH	9.23	2,929.00	3,076.17	63.77
668	☐	J688	9.23	2,924.95	3,076.17	65.52
669	☐	J68FH	9.23	2,743.00	2,929.48	80.80
670	☐	J690	9.23	2,925.00	3,076.17	65.50
671	☐	J692FH	9.23	2,932.10	3,076.17	62.42
672	☐	J694	9.23	2,923.00	3,076.17	66.37
673	☐	J696	9.23	2,935.00	3,076.28	61.22
674	☐	J698	9.23	2,929.52	3,076.23	63.57
675	☐	J700FH	9.23	2,936.95	3,076.23	60.35
676	☐	J702	9.23	2,925.68	3,076.18	65.21
677	☐	J704FH	9.23	2,926.37	3,076.18	64.91
678	☐	J706FH	9.23	2,934.71	3,076.18	61.30
679	☐	J708FH	9.23	2,930.45	3,076.23	63.17
680	☐	J70FH	9.23	2,731.00	2,929.52	86.02
681	☐	J710FH	9.23	2,935.73	3,076.27	60.90
682	☐	J712	9.23	2,721.80	2,930.15	90.28
683	☐	J714FH	9.23	2,726.17	2,930.15	88.38
684	☐	J716	9.23	2,720.00	2,930.15	91.06
685	☐	J718FH	9.23	2,723.42	2,930.15	89.58
686	☐	J72	9.23	2,724.00	2,930.15	89.33
687	☐	J720FH	9.23	2,781.00	2,998.01	94.03
688	☐	J724	9.23	2,934.00	3,076.41	61.70
689	☐	J728	9.23	2,932.00	3,076.40	62.57
690	☐	J730FH	9.23	2,932.00	3,076.40	62.57
691	☐	J732	9.23	2,930.00	3,076.42	63.44
692	☐	J736	9.23	2,922.00	3,076.52	66.95
693	☐	J738FH	9.23	2,924.00	3,076.49	66.07
694	☐	J74	9.23	2,911.00	3,074.26	70.74
695	☐	J740FH	9.23	2,916.00	3,076.61	69.59
696	☐	J742FH	9.23	2,938.00	3,076.38	59.96
697	☐	J744	9.23	2,942.00	3,076.36	58.22
698	☐	J746	9.23	2,944.00	3,076.21	57.29
699	☐	J748	9.23	2,950.00	3,076.21	54.69
700	☐	J750FH	9.23	2,941.00	3,076.21	58.58

Peak Instantaneous Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
701	☐	J752	9.23	2,946.00	3,076.20	56.42
702	☐	J754	9.23	2,944.00	3,076.21	57.29
703	☐	J756	9.23	2,948.00	3,076.26	55.57
704	☐	J758	9.23	2,952.00	3,076.26	53.84
705	☐	J76	9.23	2,886.00	3,074.55	81.70
706	☐	J774	9.23	2,738.00	2,929.52	82.99
707	☐	J776	9.23	2,736.00	2,929.52	83.85
708	☐	J778	9.23	2,771.00	2,930.53	69.13
709	☐	J780	9.23	2,770.00	2,930.53	69.56
710	☐	J782	9.23	2,812.00	2,994.64	79.14
711	☐	J784FH	9.23	2,774.00	2,930.54	67.83
712	☐	J786FH	9.23	2,781.00	2,997.75	93.92
713	☐	J788FH	9.23	2,921.00	3,075.98	67.15
714	☐	J78FH	9.23	2,932.00	3,075.81	62.31
715	☐	J790FH	9.23	2,926.00	3,076.44	65.18
716	☐	J792	9.23	2,943.00	3,076.22	57.73
717	☐	J794	9.23	2,907.00	3,077.53	73.89
718	☐	J796	9.23	2,889.00	3,076.28	81.15
719	☐	J802	9.23	2,774.00	2,930.55	67.83
720	☐	J804	9.23	2,799.00	3,084.60	123.75
721	☐	J80FH	9.23	2,925.00	3,075.23	65.09
722	☐	J814	9.23	2,981.00	3,147.86	72.30
723	☐	J816	9.23	2,963.00	3,076.25	49.07
724	☐	J818	9.23	2,954.00	3,076.25	52.97
725	☐	J82FH	9.23	2,917.00	3,074.65	68.31
726	☐	J838	9.23	3,004.53	3,154.46	64.97
727	☐	J84FH	9.23	2,922.00	3,074.65	66.14
728	☐	J86	9.23	2,925.00	3,075.22	65.09
729	☐	J88	9.23	2,916.00	3,073.33	68.17
730	☐	J90	9.23	2,922.00	3,075.22	66.39
731	☐	J92FH	9.23	2,948.00	3,076.52	55.69
732	☐	J942	9.23	2,907.00	3,076.45	73.42
733	☐	J946	9.23	2,983.37	3,150.38	72.36
734	☐	J948	9.23	2,946.00	3,109.50	70.85
735	☐	J94FH	9.23	2,950.00	3,076.21	54.69
736	☐	J954	9.23	2,847.00	3,022.70	76.13
737	☐	J960	9.23	2,851.00	3,024.14	75.02
738	☐	J962	9.23	2,855.00	3,024.98	73.65
739	☐	J964	9.23	2,861.00	3,026.14	71.56
740	☐	J966	9.23	2,861.00	3,026.93	71.90
741	☐	J968	9.23	2,915.00	3,076.79	70.10
742	☐	J96FH	9.23	2,941.00	3,076.40	58.67
743	☐	J970	9.23	2,924.00	3,076.67	66.15
744	☐	J972	9.23	2,917.00	3,076.96	69.31
745	☐	J974	9.23	2,919.00	3,076.79	68.37
746	☐	J976	9.23	2,926.00	3,076.67	65.28
747	☐	J978	9.23	2,934.00	3,078.61	62.66
748	☐	J980	9.23	2,934.00	3,078.50	62.61
749	☐	J982	9.23	2,928.00	3,078.25	65.10
750	☐	J984	9.23	2,944.00	3,089.78	63.17

Peak Instantaneous Demand

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
751	☐	J986	9.23	2,923.00	3,081.88	68.84
752	☐	J988	9.23	2,921.00	3,079.23	68.56
753	☐	J98FH	9.23	2,936.00	3,076.86	61.04
754	☐	J990	9.23	2,916.00	3,078.10	70.24
755	☐	J992	9.23	2,923.00	3,077.59	66.98
756	☐	J994	9.23	2,946.00	3,109.91	71.02
757	☐	J996	9.23	2,910.00	3,076.42	72.11
758	☐	J998	9.23	2,908.00	3,076.27	72.91

Peak Day Demand with Fire Flow

		ID	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
1	☐	J-100FH	51.73	2,995.39	1,250.00	48.14	4,018.22
2	☐	J-102FH	86.00	3,066.48	1,250.00	77.72	6,622.10
3	☐	J-103FH	84.81	3,066.72	1,250.00	76.22	5,765.79
4	☐	J-105FH	83.15	3,066.89	1,250.00	74.52	5,453.24
5	☐	J-106FH	81.71	3,065.58	1,250.00	72.60	6,058.99
6	☐	J-107FH	57.80	3,069.40	1,250.00	49.85	3,764.46
7	☐	J-109FH	83.09	3,066.76	1,250.00	74.69	5,679.39
8	☐	J-10FH	82.80	2,932.09	1,250.00	76.98	4,155.00
9	☐	J-110	81.41	3,066.89	1,250.00	71.58	4,504.34
10	☐	J-111	72.62	3,067.10	1,250.00	63.26	4,254.65
11	☐	J-112	81.50	3,067.09	1,250.00	19.05	1,247.42
12	☐	J-113	79.16	3,067.69	1,250.00	71.54	5,784.80
13	☐	J-115	79.04	3,067.42	1,250.00	58.45	2,374.33
14	☐	J-116FH	81.07	3,068.09	1,250.00	73.81	6,109.61
15	☐	J-117	73.89	3,067.53	1,250.00	66.38	5,615.20
16	☐	J-118FH	76.57	3,067.72	1,250.00	69.42	6,134.48
17	☐	J-119FH	77.52	3,067.91	1,250.00	68.70	4,658.88
18	☐	J-11FH	83.08	2,931.73	1,250.00	76.43	3,983.18
19	☐	J-12	72.54	2,933.41	1,250.00	70.12	4,573.51
20	☐	J-120	78.46	3,068.07	1,250.00	70.62	5,417.31
21	☐	J-121	82.43	3,068.23	1,250.00	75.31	6,305.91
22	☐	J-122FH	81.59	3,068.30	1,250.00	74.68	6,495.11
23	☐	J-123	85.89	3,068.23	1,250.00	66.03	2,577.70
24	☐	J-124	76.31	3,068.10	1,250.00	66.20	3,964.05
25	☐	J-125	76.31	3,068.10	1,250.00	61.93	2,941.61
26	☐	J-126FH	72.48	3,068.28	1,250.00	65.88	6,232.66
27	☐	J-127	72.49	3,068.30	1,250.00	64.93	5,237.13
28	☐	J-128FH	58.23	3,069.40	1,250.00	50.26	3,781.18
29	☐	J-129	73.26	3,068.08	1,250.00	66.29	5,852.70
30	☐	J-131FH	72.33	3,067.92	1,250.00	65.36	5,840.20
31	☐	J-132FH	62.55	3,069.36	1,250.00	52.58	3,299.41
32	☐	J-133FH	71.41	3,067.80	1,250.00	64.80	6,381.23
33	☐	J-134FH	61.69	3,069.36	1,250.00	47.37	2,451.24
34	☐	J-135	70.49	3,067.69	1,250.00	63.86	6,350.92
35	☐	J-136FH	68.26	3,067.53	1,250.00	61.42	5,928.19

Peak Day Demand with Fire Flow

		ID	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
36	☐	J-137	72.14	3,067.49	1,250.00	64.18	5,065.44
37	☐	J-138FH	71.71	3,067.49	1,250.00	49.06	2,059.40
38	☐	J-139FH	82.52	3,067.44	1,250.00	74.33	5,533.45
39	☐	J-140	78.79	3,066.85	1,250.00	69.33	4,491.07
40	☐	J-141FH	72.29	3,066.84	1,250.00	43.59	1,790.13
41	☐	J-142	78.78	3,066.81	1,250.00	69.96	4,993.10
42	☐	J-143FH	76.59	3,066.76	1,250.00	69.33	6,682.80
43	☐	J-144FH	73.36	3,066.31	1,250.00	65.27	5,933.36
44	☐	J-145FH	76.72	3,066.05	1,250.00	68.21	5,948.47
45	☐	J-147FH	75.90	3,066.17	1,250.00	67.32	5,507.36
46	☐	J-149FH	69.94	3,066.42	1,250.00	61.91	5,567.47
47	☐	J-14FH	79.25	2,932.91	1,250.00	72.39	3,943.79
48	☐	J-151FH	75.14	3,066.40	1,250.00	66.58	5,389.97
49	☐	J-153FH	75.29	3,066.25	1,250.00	65.85	4,633.39
50	☐	J-156FH	74.67	3,066.34	1,250.00	65.23	4,566.15
51	☐	J-158FH	72.11	3,066.41	1,250.00	62.38	4,212.04
52	☐	J-15FH	77.95	2,932.90	1,250.00	53.27	2,024.80
53	☐	J-160FH	70.62	3,066.49	1,250.00	61.41	4,419.26
54	☐	J-161FH	73.43	3,066.47	1,250.00	63.41	4,132.84
55	☐	J-162FH	80.74	3,066.33	1,250.00	63.03	2,727.78
56	☐	J-164FH	67.94	3,066.79	1,250.00	60.53	5,943.87
57	☐	J-165FH	65.84	3,066.94	1,250.00	58.40	5,535.77
58	☐	J-167FH	68.65	3,067.43	1,250.00	62.02	6,559.27
59	☐	J-168FH	65.29	3,067.67	1,250.00	58.92	6,558.09
60	☐	J-169FH	64.28	3,069.36	1,250.00	46.45	2,188.90
61	☐	J-16FH	126.76	2,932.55	1,250.00	99.70	2,713.44
62	☐	J-170FH	65.87	3,069.02	1,250.00	60.64	7,996.35
63	☐	J-173FH	63.94	3,067.57	1,250.00	56.52	5,116.95
64	☐	J-175FH	66.70	3,068.93	1,250.00	58.91	4,691.25
65	☐	J-177FH	60.89	3,069.53	1,250.00	55.03	5,786.65
66	☐	J-178	64.19	3,068.15	1,250.00	58.17	6,809.14
67	☐	J-179	64.22	3,068.22	1,250.00	58.28	6,892.59
68	☐	J-17FH	127.62	2,932.53	1,250.00	87.77	2,191.91
69	☐	J-181	66.68	3,068.89	1,250.00	58.21	4,064.94
70	☐	J-182	66.77	3,069.10	1,250.00	55.95	3,233.31

Peak Day Demand with Fire Flow

		ID	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
71	☐	J-183FH	66.77	3,069.10	1,250.00	45.65	2,015.12
72	☐	J-184FH	67.67	3,071.17	1,250.00	62.33	7,395.65
73	☐	J-186FH	68.93	3,069.08	1,250.00	63.00	6,509.13
74	☐	J-187	66.27	3,067.94	1,250.00	59.52	5,634.77
75	☐	J-188	69.64	3,069.73	1,250.00	64.30	7,692.84
76	☐	J-189FH	67.41	3,070.56	1,250.00	57.89	3,535.56
77	☐	J-191	66.24	3,067.88	1,250.00	58.82	5,017.97
78	☐	J-192	68.40	3,067.85	1,250.00	60.94	5,151.97
79	☐	J-19FH	128.48	2,932.52	1,250.00	60.25	1,625.14
80	☐	J-1FH	91.75	2,931.74	1,250.00	77.85	2,986.45
81	☐	J-204FH	80.75	3,066.37	1,250.00	49.31	1,856.82
82	☐	J-20FH	82.05	2,934.36	1,250.00	78.69	6,404.92
83	☐	J-211FH	73.92	3,000.59	1,250.00	53.44	2,253.71
84	☐	J-212FH	76.52	3,000.59	1,250.00	57.89	2,461.94
85	☐	J-214FH	73.23	3,004.01	1,250.00	47.94	1,981.32
86	☐	J-215FH	77.57	3,004.01	1,250.00	54.90	2,225.13
87	☐	J-217	77.99	3,009.99	1,250.00	67.13	4,029.95
88	☐	J-218FH	73.57	3,007.80	1,250.00	45.52	1,888.45
89	☐	J-22	64.81	3,069.57	1,250.00	59.48	7,166.36
90	☐	J-221FH	80.84	2,934.56	1,250.00	69.11	3,200.56
91	☐	J-222FH	88.00	2,935.09	1,250.00	86.50	9,360.84
92	☐	J-225FH	79.53	2,935.54	1,250.00	77.91	9,267.35
93	☐	J-227FH	64.17	2,993.09	1,250.00	52.51	2,876.26
94	☐	J-229FH	79.25	2,935.90	1,250.00	77.62	9,757.61
95	☐	J-232FH	78.56	2,936.31	1,250.00	76.88	10,063.90
96	☐	J-235FH	74.47	2,936.87	1,250.00	72.65	10,037.60
97	☐	J-247FH	59.11	2,993.91	1,250.00	53.58	4,448.55
98	☐	J-250FH	80.58	2,935.96	1,250.00	77.51	6,671.74
99	☐	J-255FH	88.95	2,933.27	1,250.00	69.01	2,587.16
100	☐	J-258FH	85.19	2,931.60	1,250.00	77.66	3,881.29
101	☐	J-25FH	100.65	2,990.30	1,250.00	86.93	4,612.82
102	☐	J-260FH	85.13	2,931.48	1,250.00	76.40	3,627.40
103	☐	J-266FH	100.14	2,931.11	1,250.00	75.84	2,431.07
104	☐	J-267FH	79.51	2,934.49	1,250.00	79.18	5,144.39
105	☐	J-269FH	100.19	2,931.21	1,250.00	80.73	2,717.58

Peak Day Demand with Fire Flow

		ID	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
106	☐	J-270FH	100.25	2,931.37	1,250.00	85.60	3,129.92
107	☐	J-271FH	85.13	2,931.48	1,250.00	77.44	3,872.02
108	☐	J-273FH	98.16	2,931.54	1,250.00	91.05	4,408.29
109	☐	J-274FH	98.17	2,931.55	1,250.00	91.06	4,403.74
110	☐	J-275FH	88.27	2,988.71	1,250.00	73.05	4,336.93
111	☐	J-278FH	83.54	2,932.79	1,250.00	79.65	4,686.86
112	☐	J-279FH	87.70	2,932.41	1,250.00	83.12	4,677.86
113	☐	J-280FH	82.84	2,932.19	1,250.00	77.37	4,259.64
114	☐	J-281FH	99.03	2,931.56	1,250.00	91.83	4,395.87
115	☐	J-283FH	93.87	2,931.64	1,250.00	87.09	4,332.06
116	☐	J-284FH	91.77	2,931.79	1,250.00	62.86	2,054.38
117	☐	J-288FH	91.70	2,931.63	1,250.00	84.50	4,138.31
118	☐	J-291FH	64.10	3,068.94	1,250.00	58.77	7,658.93
119	☐	J-292FH	98.18	2,931.59	1,250.00	91.20	4,423.90
120	☐	J-293FH	100.86	2,987.76	1,250.00	83.75	4,448.55
121	☐	J-294	67.98	3,069.89	1,250.00	62.62	8,019.93
122	☐	J-295	66.59	3,099.69	1,250.00	58.11	6,050.40
123	☐	J-297FH	98.18	2,931.58	1,250.00	90.80	4,312.03
124	☐	J-29FH	76.72	2,992.06	1,250.00	68.80	6,102.85
125	☐	J-301FH	118.17	3,072.72	1,250.00	111.00	7,124.98
126	☐	J-302FH	98.18	2,931.58	1,250.00	90.92	4,344.66
127	☐	J-303FH	87.37	2,931.63	1,250.00	79.79	3,902.37
128	☐	J-305FH	51.48	2,996.31	1,250.00	51.08	5,670.75
129	☐	J-307FH	83.05	2,931.66	1,250.00	76.52	4,042.64
130	☐	J-30FH	76.47	2,992.48	1,250.00	69.16	6,360.89
131	☐	J-311	63.14	3,070.72	1,250.00	57.68	7,694.31
132	☐	J-312	86.16	3,068.85	1,250.00	80.46	8,965.73
133	☐	J-315FH	60.39	3,069.38	1,250.00	53.96	5,194.52
134	☐	J-317FH	71.41	3,066.80	1,250.00	61.11	3,896.61
135	☐	J-318FH	64.62	3,071.14	1,250.00	59.86	8,232.14
136	☐	J-319FH	63.53	3,070.62	1,250.00	58.67	8,111.22
137	☐	J-321FH	63.35	3,070.19	1,250.00	57.95	6,624.63
138	☐	J-322FH	57.93	3,069.70	1,250.00	52.81	6,931.81
139	☐	J-323FH	60.60	3,069.86	1,250.00	55.00	6,036.97
140	☐	J-324FH	62.42	3,070.05	1,250.00	57.35	7,474.75

Peak Day Demand with Fire Flow

		ID	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
141	☐	J-325FH	63.36	3,070.24	1,250.00	58.35	7,748.33
142	☐	J-326FH	61.57	3,070.10	1,250.00	56.05	6,219.25
143	☐	J-327FH	61.50	3,069.93	1,250.00	56.37	7,209.64
144	☐	J-328FH	59.28	3,069.82	1,250.00	53.96	6,463.98
145	☐	J-329FH	58.85	3,069.82	1,250.00	53.20	5,842.67
146	☐	J-33FH	74.98	2,993.03	1,250.00	68.08	6,385.54
147	☐	J-38FH	74.18	2,992.20	1,250.00	66.66	6,041.14
148	☐	J-39FH	67.94	2,992.80	1,250.00	60.53	5,056.27
149	☐	J-44FH	80.91	2,991.72	1,250.00	70.90	4,787.48
150	☐	J-54	64.40	3,068.62	1,250.00	58.85	7,412.60
151	☐	J-63FH	66.71	2,992.97	1,250.00	60.16	5,571.78
152	☐	J-66FH	63.55	2,993.66	1,250.00	58.32	5,658.68
153	☐	J-68FH	66.72	2,992.99	1,250.00	60.62	5,886.02
154	☐	J-69FH	66.72	2,992.99	1,250.00	60.37	5,496.21
155	☐	J-73FH	70.61	2,992.95	1,250.00	62.33	4,250.19
156	☐	J-77FH	67.21	3,069.11	1,250.00	62.06	8,290.30
157	☐	J-80FH	56.09	3,069.45	1,250.00	50.60	6,162.22
158	☐	J-81FH	65.89	2,993.05	1,250.00	57.80	4,032.40
159	☐	J-82	64.28	3,069.36	1,250.00	51.39	2,752.75
160	☐	J-85FH	62.56	2,993.87	1,250.00	57.02	4,779.79
161	☐	J-8FH	78.09	2,932.22	1,250.00	63.11	2,596.96
162	☐	J-93FH	59.03	2,994.23	1,250.00	49.41	2,877.70
163	☐	J-956	75.16	3,020.46	1,250.00	65.73	3,955.22
164	☐	J-958	73.12	3,024.74	1,250.00	64.90	3,542.28
165	☐	J-97FH	57.81	3,069.41	1,250.00	51.29	4,894.43
166	☐	J1000	72.09	3,069.39	1,250.00	65.86	6,304.47
167	☐	J1002	76.76	3,069.16	1,250.00	70.58	6,814.93
168	☐	J1004	56.49	3,069.37	1,250.00	48.96	4,057.76
169	☐	J1006	57.36	3,069.37	1,250.00	50.15	4,373.18
170	☐	J1008	56.05	3,069.37	1,250.00	46.93	3,258.43
171	☐	J100FH	59.52	3,070.37	1,250.00	53.30	4,996.74
172	☐	J1010	55.62	3,069.37	1,250.00	46.17	3,128.55
173	☐	J1012	55.62	3,069.37	1,250.00	44.74	2,758.35
174	☐	J1014	55.19	3,069.37	1,250.00	47.59	3,903.43
175	☐	J1016	54.76	3,069.37	1,250.00	48.46	5,126.64

Peak Day Demand with Fire Flow

		ID	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
176	☐	J1018	56.05	3,069.37	1,250.00	45.01	2,748.37
177	☐	J1020	53.84	3,068.26	1,250.00	33.12	1,741.22
178	☐	J1022	52.54	3,068.26	1,250.00	31.24	1,663.50
179	☐	J1024	55.14	3,068.25	1,250.00	33.58	1,734.75
180	☐	J1026	53.80	3,077.16	1,250.00	32.88	1,654.73
181	☐	J1028	90.63	3,077.16	1,250.00	80.01	3,843.85
182	☐	J102FH	57.86	3,069.54	1,250.00	51.94	5,367.58
183	☐	J1030	81.09	3,077.16	1,250.00	66.99	2,944.12
184	☐	J1032	88.46	3,077.16	1,250.00	74.58	3,166.46
185	☐	J1034	70.26	3,077.16	1,250.00	52.89	2,316.34
186	☐	J1036	74.57	2,933.09	1,250.00	71.16	4,402.08
187	☐	J1038	73.28	2,933.12	1,250.00	70.31	4,491.10
188	☐	J1040	73.27	2,933.10	1,250.00	69.66	4,243.77
189	☐	J1042	72.41	2,933.11	1,250.00	68.97	4,262.44
190	☐	J1044	71.54	2,933.11	1,250.00	67.04	3,860.45
191	☐	J104FH	60.73	3,069.17	1,250.00	53.48	4,367.26
192	☐	J106FH	63.30	3,069.10	1,250.00	56.30	4,806.30
193	☐	J108FH	64.20	3,069.17	1,250.00	58.91	7,386.23
194	☐	J10FH	72.88	3,013.20	1,250.00	61.71	3,796.39
195	☐	J110FH	67.19	3,069.07	1,250.00	62.00	8,214.97
196	☐	J112FH	58.84	3,069.79	1,250.00	53.00	5,521.08
197	☐	J114FH	59.65	3,069.67	1,250.00	53.49	5,279.32
198	☐	J116FH	62.48	3,069.20	1,250.00	54.68	4,079.87
199	☐	J118FH	61.10	3,070.02	1,250.00	55.32	5,817.00
200	☐	J12	73.01	3,013.50	1,250.00	61.84	3,801.00
201	☐	J120FH	60.54	3,069.72	1,250.00	54.46	5,426.33
202	☐	J122FH	60.47	3,069.56	1,250.00	54.37	5,445.65
203	☐	J124FH	63.69	3,068.98	1,250.00	58.40	7,660.96
204	☐	J126FH	73.64	3,068.95	1,250.00	68.01	7,873.80
205	☐	J128FH	72.06	3,068.30	1,250.00	62.90	4,151.37
206	☐	J130FH	81.41	3,068.87	1,250.00	75.68	8,464.36
207	☐	J132FH	78.58	3,068.35	1,250.00	70.96	5,551.61
208	☐	J134FH	75.47	3,068.17	1,250.00	65.28	3,888.01
209	☐	J136FH	73.69	3,068.07	1,250.00	63.95	3,970.18
210	☐	J138FH	62.54	3,068.33	1,250.00	56.00	5,494.78

Peak Day Demand with Fire Flow

		ID	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
211	☐	J140FH	64.07	3,067.86	1,250.00	56.89	5,063.90
212	☐	J142FH	62.85	3,068.04	1,250.00	53.17	3,445.30
213	☐	J144FH	114.70	3,072.72	1,250.00	108.31	7,922.28
214	☐	J146FH	113.84	3,072.72	1,250.00	108.49	10,047.21
215	☐	J148FH	111.24	3,072.72	1,250.00	106.65	13,423.59
216	☐	J14FH	72.65	3,012.67	1,250.00	61.50	3,789.02
217	☐	J150FH	88.99	3,073.37	1,250.00	85.27	14,298.34
218	☐	J152FH	59.95	3,070.35	1,250.00	52.96	4,814.83
219	☐	J154FH	61.06	3,069.93	1,250.00	55.22	5,745.58
220	☐	J156FH	60.94	3,069.65	1,250.00	50.53	3,049.29
221	☐	J158FH	61.07	3,068.95	1,250.00	51.44	3,300.42
222	☐	J16	70.91	3,012.65	1,250.00	56.25	2,979.58
223	☐	J160FH	67.05	3,066.75	1,250.00	53.02	2,768.50
224	☐	J162FH	64.66	3,067.24	1,250.00	57.53	5,428.76
225	☐	J164FH	67.58	3,066.98	1,250.00	60.50	6,064.56
226	☐	J166FH	67.88	3,067.65	1,250.00	60.56	5,315.86
227	☐	J168FH	70.53	3,067.78	1,250.00	63.07	5,313.82
228	☐	J170FH	80.53	3,067.85	1,250.00	72.45	5,368.62
229	☐	J172FH	79.54	3,067.56	1,250.00	71.12	5,170.05
230	☐	J174FH	82.42	3,067.21	1,250.00	73.04	4,749.73
231	☐	J178FH	77.47	3,066.79	1,250.00	68.39	4,735.92
232	☐	J180FH	80.87	3,066.63	1,250.00	73.28	6,771.06
233	☐	J182FH	88.19	3,066.53	1,250.00	80.23	7,094.89
234	☐	J184FH	87.64	3,065.26	1,250.00	78.10	6,217.59
235	☐	J188FH	70.97	2,938.78	1,250.00	65.65	7,289.04
236	☐	J18FH	73.08	3,012.65	1,250.00	55.99	2,731.85
237	☐	J190FH	75.17	3,066.49	1,250.00	41.78	1,693.45
238	☐	J192FH	74.87	2,938.79	1,250.00	72.64	12,783.82
239	☐	J194FH	68.72	2,938.60	1,250.00	61.17	3,805.96
240	☐	J196FH	76.08	2,938.59	1,250.00	74.19	12,744.04
241	☐	J198FH	70.34	2,938.34	1,250.00	61.76	3,509.56
242	☐	J200FH	66.96	2,937.53	1,250.00	65.03	10,100.01
243	☐	J202FH	76.63	2,936.85	1,250.00	57.75	2,316.61
244	☐	J204FH	69.02	2,936.29	1,250.00	38.58	1,637.30
245	☐	J208FH	81.22	3,066.45	1,250.00	66.04	3,095.05

Peak Day Demand with Fire Flow

		ID	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
246	☐	J20FH	70.48	3,012.65	1,250.00	55.09	2,864.32
247	☐	J212FH	80.31	3,066.35	1,250.00	61.47	2,599.54
248	☐	J214FH	85.76	2,935.92	1,250.00	79.72	4,853.92
249	☐	J216FH	83.40	2,935.48	1,250.00	57.54	2,072.58
250	☐	J218FH	92.08	2,934.51	1,250.00	66.55	2,250.63
251	☐	J22	69.61	3,012.65	1,250.00	52.65	2,648.03
252	☐	J220FH	90.78	2,934.52	1,250.00	68.39	2,404.13
253	☐	J222FH	87.76	2,934.53	1,250.00	70.90	2,769.28
254	☐	J226FH	86.02	2,934.52	1,250.00	63.68	2,315.17
255	☐	J228FH	85.06	2,934.31	1,250.00	67.22	2,608.16
256	☐	J230FH	81.38	2,934.82	1,250.00	79.00	7,509.23
257	☐	J232FH	91.11	2,933.27	1,250.00	62.66	2,124.30
258	☐	J234FH	88.94	2,933.27	1,250.00	63.43	2,228.21
259	☐	J236FH	84.92	2,933.99	1,250.00	67.61	2,661.08
260	☐	J238FH	82.13	2,934.54	1,250.00	79.11	6,769.13
261	☐	J240FH	92.02	2,932.37	1,250.00	67.36	2,299.77
262	☐	J242FH	82.86	2,933.23	1,250.00	75.30	3,966.02
263	☐	J244FH	100.64	2,987.26	1,250.00	82.60	4,297.09
264	☐	J246FH	74.87	3,007.80	1,250.00	51.23	2,149.98
265	☐	J248FH	83.72	2,933.21	1,250.00	65.87	2,627.31
266	☐	J24FH	73.94	3,012.65	1,250.00	55.56	2,617.12
267	☐	J250FH	80.25	2,934.21	1,250.00	75.73	5,337.56
268	☐	J252FH	82.68	2,933.81	1,250.00	76.06	4,369.70
269	☐	J254FH	82.63	2,933.70	1,250.00	75.64	4,221.01
270	☐	J256FH	81.47	2,992.01	1,250.00	71.22	4,464.04
271	☐	J258FH	92.60	2,991.71	1,250.00	75.61	3,172.69
272	☐	J260FH	84.14	2,991.19	1,250.00	73.47	4,953.64
273	☐	J262FH	84.27	2,990.49	1,250.00	72.64	4,693.31
274	☐	J264FH	82.79	2,990.07	1,250.00	70.80	4,855.43
275	☐	J266FH	78.14	2,992.34	1,250.00	69.72	5,173.96
276	☐	J268FH	78.88	2,992.04	1,250.00	70.28	5,577.77
277	☐	J26FH	70.91	3,012.65	1,250.00	52.39	2,526.23
278	☐	J270FH	79.90	2,991.39	1,250.00	70.46	5,619.68
279	☐	J272FH	73.17	2,992.87	1,250.00	65.96	5,781.19
280	☐	J274FH	81.84	2,992.87	1,250.00	74.77	6,554.70

Peak Day Demand with Fire Flow

		ID	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
281	☐	J276FH	75.68	2,992.65	1,250.00	68.50	5,808.16
282	☐	J278FH	73.13	2,992.79	1,250.00	66.31	5,837.83
283	☐	J280FH	75.22	2,992.59	1,250.00	67.41	5,343.80
284	☐	J282FH	66.07	2,993.49	1,250.00	60.15	6,136.77
285	☐	J284FH	65.26	2,993.62	1,250.00	59.71	5,844.56
286	☐	J286FH	64.94	2,993.87	1,250.00	60.10	5,871.44
287	☐	J288FH	62.91	2,994.20	1,250.00	58.04	5,093.51
288	☐	J290FH	86.20	2,992.95	1,250.00	72.25	3,267.05
289	☐	J292FH	59.56	2,993.45	1,250.00	53.41	4,396.36
290	☐	J294FH	64.19	2,993.14	1,250.00	57.41	4,689.28
291	☐	J296FH	65.08	2,993.19	1,250.00	58.20	4,670.30
292	☐	J298FH	61.62	2,994.20	1,250.00	56.58	4,725.53
293	☐	J300FH	51.51	2,993.89	1,250.00	36.39	1,938.22
294	☐	J302FH	53.25	2,993.89	1,250.00	40.84	2,268.34
295	☐	J304FH	52.81	2,993.88	1,250.00	28.29	1,487.07
296	☐	J306FH	56.59	2,994.61	1,250.00	52.51	4,605.84
297	☐	J308FH	59.19	2,994.61	1,250.00	54.90	4,669.27
298	☐	J310FH	78.30	2,932.71	1,250.00	74.23	4,433.69
299	☐	J312FH	83.52	2,931.76	1,250.00	75.99	3,761.64
300	☐	J314FH	82.03	2,932.32	1,250.00	76.16	4,035.37
301	☐	J316FH	85.82	2,932.06	1,250.00	80.11	4,311.82
302	☐	J318FH	91.77	2,931.79	1,250.00	81.25	3,401.08
303	☐	J320FH	93.47	2,931.72	1,250.00	86.64	4,281.37
304	☐	J322FH	91.30	2,931.71	1,250.00	79.62	3,226.59
305	☐	J324FH	88.72	2,931.75	1,250.00	79.78	3,603.31
306	☐	J326FH	87.82	2,931.69	1,250.00	80.49	3,959.43
307	☐	J328FH	84.73	2,931.54	1,250.00	75.98	3,588.80
308	☐	J330FH	88.63	2,931.54	1,250.00	80.10	3,762.30
309	☐	J332FH	84.74	2,931.57	1,250.00	76.53	3,697.32
310	☐	J334FH	83.47	2,931.63	1,250.00	76.52	3,947.06
311	☐	J336FH	86.26	2,932.07	1,250.00	75.08	3,160.75
312	☐	J338FH	89.56	2,931.68	1,250.00	81.31	3,834.14
313	☐	J340FH	83.66	2,932.07	1,250.00	73.20	3,195.74
314	☐	J342FH	88.39	2,932.00	1,250.00	80.44	3,863.67
315	☐	J344FH	84.96	2,932.07	1,250.00	74.45	3,223.68

Peak Day Demand with Fire Flow

		ID	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
316	☐	J346FH	83.23	2,932.07	1,250.00	74.95	3,567.32
317	☐	J348FH	80.74	2,932.33	1,250.00	75.22	4,162.63
318	☐	J34FH	64.48	3,070.81	1,250.00	59.03	6,472.77
319	☐	J350FH	80.75	2,932.35	1,250.00	75.27	4,178.50
320	☐	J352FH	85.46	2,932.22	1,250.00	72.76	3,005.93
321	☐	J354FH	79.57	2,932.64	1,250.00	74.59	4,401.06
322	☐	J356FH	91.53	2,932.25	1,250.00	76.73	2,948.48
323	☐	J358FH	86.32	2,932.23	1,250.00	78.52	3,865.99
324	☐	J360FH	98.00	2,931.16	1,250.00	79.74	2,784.73
325	☐	J362FH	98.05	2,931.29	1,250.00	85.06	3,325.08
326	☐	J364FH	92.50	2,931.47	1,250.00	82.86	3,654.37
327	☐	J366FH	91.20	2,931.47	1,250.00	81.79	3,665.31
328	☐	J368FH	92.92	2,931.45	1,250.00	84.72	4,000.50
329	☐	J370FH	86.88	2,931.52	1,250.00	78.34	3,702.17
330	☐	J372FH	86.89	2,931.52	1,250.00	79.63	4,020.36
331	☐	J374FH	98.60	2,931.56	1,250.00	87.99	3,611.03
332	☐	J376FH	98.18	2,931.58	1,250.00	90.89	4,331.91
333	☐	J380FH	53.03	3,069.38	1,250.00	45.30	3,620.21
334	☐	J382FH	52.59	3,069.38	1,250.00	44.99	3,656.07
335	☐	J384FH	53.89	3,069.38	1,250.00	47.77	5,198.75
336	☐	J388	53.46	3,069.38	1,250.00	47.42	5,246.11
337	☐	J392	50.86	3,069.38	1,250.00	44.04	4,022.08
338	☐	J394	53.90	3,069.38	1,250.00	47.91	5,357.55
339	☐	J396	55.19	3,069.38	1,250.00	48.93	5,172.68
340	☐	J398FH	54.76	3,069.38	1,250.00	48.54	5,174.17
341	☐	J400	72.50	3,069.33	1,250.00	67.30	8,657.23
342	☐	J402FH	68.15	3,069.29	1,250.00	62.95	8,234.79
343	☐	J404FH	65.98	3,069.26	1,250.00	60.78	7,938.41
344	☐	J406FH	64.27	3,069.33	1,250.00	54.63	3,450.29
345	☐	J408	65.57	3,069.33	1,250.00	58.35	4,817.12
346	☐	J410FH	63.84	3,069.33	1,250.00	55.82	4,109.10
347	☐	J412FH	60.81	3,069.34	1,250.00	52.40	3,729.49
348	☐	J416FH	62.01	3,071.11	1,250.00	54.73	4,198.02
349	☐	J418FH	62.88	3,071.11	1,250.00	57.36	6,116.10
350	☐	J420FH	66.39	3,071.23	1,250.00	60.69	6,152.30

Peak Day Demand with Fire Flow

		ID	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
351	☐	J422FH	61.95	3,070.98	1,250.00	57.05	7,376.36
352	☐	J424FH	61.95	3,070.97	1,250.00	56.02	5,524.52
353	☐	J426FH	62.38	3,070.97	1,250.00	56.57	5,729.05
354	☐	J42FH	64.23	3,067.25	1,250.00	52.58	3,087.85
355	☐	J434FH	62.92	3,071.22	1,250.00	55.06	3,960.82
356	☐	J440FH	63.25	3,070.97	1,250.00	58.15	7,134.18
357	☐	J442FH	62.84	3,071.04	1,250.00	57.81	7,304.57
358	☐	J444FH	60.87	3,070.49	1,250.00	55.95	7,707.70
359	☐	J44FH	64.55	3,066.98	1,250.00	52.18	2,963.18
360	☐	J450FH	65.68	3,069.59	1,250.00	60.45	7,893.73
361	☐	J452FH	66.91	3,069.43	1,250.00	61.71	8,102.57
362	☐	J456FH	97.51	2,931.05	1,250.00	64.17	2,023.86
363	☐	J458FH	96.21	2,931.05	1,250.00	64.31	2,054.49
364	☐	J46	74.01	3,066.80	1,250.00	61.87	3,421.88
365	☐	J460FH	94.48	2,931.05	1,250.00	61.80	2,004.18
366	☐	J462FH	94.49	2,931.06	1,250.00	67.64	2,226.12
367	☐	J478FH	109.95	3,069.76	1,250.00	103.99	10,409.40
368	☐	J480FH	119.15	3,070.98	1,250.00	113.42	11,347.00
369	☐	J482FH	119.74	3,072.34	1,250.00	114.43	12,207.76
370	☐	J484FH	113.90	3,073.87	1,250.00	109.20	12,769.49
371	☐	J486FH	102.25	3,075.98	1,250.00	98.79	15,121.86
372	☐	J488FH	110.95	3,076.05	1,250.00	106.25	8,945.29
373	☐	J490FH	111.85	3,076.13	1,250.00	106.57	7,915.15
374	☐	J492FH	111.02	3,076.22	1,250.00	105.55	7,637.90
375	☐	J494FH	111.85	3,076.15	1,250.00	104.23	6,007.91
376	☐	J496FH	113.37	3,076.63	1,250.00	108.33	8,268.78
377	☐	J500FH	110.09	3,077.07	1,250.00	105.27	8,197.42
378	☐	J508FH	99.71	3,077.13	1,250.00	94.77	7,395.44
379	☐	J50FH	102.50	2,931.56	1,250.00	86.92	3,034.65
380	☐	J510FH	95.86	3,077.23	1,250.00	91.07	7,354.19
381	☐	J512	88.93	3,077.23	1,250.00	82.75	5,546.87
382	☐	J514FH	90.27	3,077.32	1,250.00	85.84	7,558.18
383	☐	J516	91.14	3,077.35	1,250.00	86.85	7,845.47
384	☐	J518FH	92.05	3,077.45	1,250.00	88.45	9,598.10
385	☐	J522FH	109.66	3,077.08	1,250.00	105.28	9,083.50

Peak Day Demand with Fire Flow

		ID	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
386	☐	J526FH	102.78	3,077.20	1,250.00	98.52	8,825.45
387	☐	J528FH	96.77	3,077.33	1,250.00	92.93	9,376.98
388	☐	J532FH	95.11	3,077.51	1,250.00	92.24	13,815.27
389	☐	J534	94.27	3,077.57	1,250.00	91.96	21,711.63
390	☐	J536	67.46	3,069.68	1,250.00	61.74	8,160.93
391	☐	J540	62.37	3,070.95	1,250.00	56.83	7,530.15
392	☐	J566FH	64.03	3,069.77	1,250.00	58.47	7,202.39
393	☐	J568FH	61.37	3,069.64	1,250.00	55.63	6,536.27
394	☐	J56FH	83.12	2,931.82	1,250.00	76.65	4,015.40
395	☐	J570FH	60.94	3,069.64	1,250.00	53.00	4,064.21
396	☐	J572	56.53	3,069.47	1,250.00	50.71	5,960.66
397	☐	J574	57.41	3,069.49	1,250.00	50.98	5,139.21
398	☐	J576	55.17	3,069.33	1,250.00	48.10	4,498.04
399	☐	J578	56.09	3,069.46	1,250.00	50.24	5,854.47
400	☐	J580FH	56.53	3,069.46	1,250.00	49.97	4,944.74
401	☐	J582	64.01	3,069.74	1,250.00	57.91	6,098.18
402	☐	J584FH	101.68	3,076.66	1,250.00	98.61	16,682.37
403	☐	J588	95.41	3,077.19	1,250.00	92.74	18,273.68
404	☐	J58FH	85.68	2,931.73	1,250.00	78.79	4,003.97
405	☐	J590FH	105.58	3,076.66	1,250.00	98.80	6,005.70
406	☐	J594FH	108.61	3,076.66	1,250.00	99.01	4,696.81
407	☐	J596FH	118.35	3,076.15	1,250.00	108.51	5,007.40
408	☐	J600FH	100.20	3,077.24	1,250.00	95.09	7,161.42
409	☐	J602	100.20	3,077.24	1,250.00	96.04	8,873.01
410	☐	J604	53.75	3,069.06	1,250.00	44.05	3,117.30
411	☐	J606FH	51.44	3,068.72	1,250.00	38.12	2,291.58
412	☐	J608	54.62	3,069.06	1,250.00	42.63	2,592.72
413	☐	J610FH	57.86	3,069.53	1,250.00	51.21	4,967.96
414	☐	J612FH	60.07	3,069.64	1,250.00	53.72	5,468.28
415	☐	J614	60.03	3,069.55	1,250.00	51.63	3,837.91
416	☐	J616	59.15	3,069.52	1,250.00	50.70	3,853.53
417	☐	J620	56.50	2,995.38	1,250.00	35.80	1,724.95
418	☐	J622FH	73.20	2,994.93	1,250.00	65.85	5,377.70
419	☐	J624FH	69.30	2,994.92	1,250.00	55.24	2,797.95
420	☐	J626FH	81.99	2,994.21	1,250.00	72.19	4,511.89

Peak Day Demand with Fire Flow

		ID	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
421	☐	J630FH	73.63	2,994.92	1,250.00	53.92	2,270.34
422	☐	J634FH	71.03	2,994.92	1,250.00	47.05	1,954.16
423	☐	J638FH	88.30	2,993.78	1,250.00	77.93	4,533.67
424	☐	J640FH	60.46	3,069.53	1,250.00	52.64	4,189.55
425	☐	J642FH	60.91	3,069.57	1,250.00	52.82	4,047.02
426	☐	J646FH	58.72	3,069.52	1,250.00	49.64	3,471.71
427	☐	J648FH	116.61	3,068.11	1,250.00	109.08	9,120.27
428	☐	J650FH	120.26	3,067.55	1,250.00	112.00	8,635.89
429	☐	J652FH	126.89	3,066.85	1,250.00	117.44	8,071.02
430	☐	J654FH	127.84	3,067.04	1,250.00	117.43	6,737.89
431	☐	J656FH	124.91	3,067.28	1,250.00	115.59	7,493.28
432	☐	J658FH	122.79	3,067.38	1,250.00	113.39	7,267.69
433	☐	J660FH	127.08	3,067.29	1,250.00	117.22	7,053.97
434	☐	J662FH	130.92	3,067.15	1,250.00	117.16	5,070.77
435	☐	J664FH	122.83	3,067.47	1,250.00	113.51	7,271.52
436	☐	J666FH	119.51	3,067.82	1,250.00	110.49	7,245.74
437	☐	J66FH	86.01	2,931.50	1,250.00	78.57	3,955.59
438	☐	J672FH	81.66	2,935.45	1,250.00	28.57	1,366.55
439	☐	J674	59.75	3,069.37	1,250.00	53.06	5,093.78
440	☐	J676FH	58.04	3,069.37	1,250.00	50.96	4,536.40
441	☐	J678FH	58.53	3,069.36	1,250.00	50.14	3,702.13
442	☐	J680FH	59.91	3,069.36	1,250.00	51.62	3,850.72
443	☐	J682	62.01	3,069.36	1,250.00	54.27	4,356.04
444	☐	J684FH	60.20	3,069.36	1,250.00	51.94	3,897.40
445	☐	J686FH	60.82	3,069.36	1,250.00	52.22	3,763.24
446	☐	J688	62.57	3,069.36	1,250.00	54.01	3,890.56
447	☐	J68FH	81.67	2,931.47	1,250.00	69.69	2,986.63
448	☐	J690	62.55	3,069.36	1,250.00	52.91	3,446.47
449	☐	J692FH	59.48	3,069.36	1,250.00	51.49	3,981.76
450	☐	J694	63.42	3,069.36	1,250.00	55.57	4,375.48
451	☐	J696	58.24	3,069.40	1,250.00	52.25	5,866.02
452	☐	J698	60.60	3,069.38	1,250.00	53.42	4,705.20
453	☐	J700FH	57.38	3,069.38	1,250.00	47.93	3,221.30
454	☐	J702	62.26	3,069.36	1,250.00	54.37	4,263.54
455	☐	J704FH	61.96	3,069.36	1,250.00	53.43	3,874.66

Peak Day Demand with Fire Flow

		ID	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
456	☐	J706FH	58.34	3,069.36	1,250.00	45.65	2,561.48
457	☐	J708FH	60.20	3,069.38	1,250.00	52.38	4,137.77
458	☐	J70FH	86.88	2,931.52	1,250.00	75.79	3,242.90
459	☐	J710FH	57.92	3,069.40	1,250.00	51.56	5,312.51
460	☐	J714FH	89.73	2,933.26	1,250.00	66.26	2,359.02
461	☐	J718FH	90.92	2,933.26	1,250.00	63.89	2,187.26
462	☐	J720FH	92.03	2,993.39	1,250.00	81.79	4,713.84
463	☐	J724	58.71	3,069.50	1,250.00	50.47	3,730.29
464	☐	J728	59.58	3,069.50	1,250.00	51.67	3,970.21
465	☐	J730FH	59.58	3,069.50	1,250.00	49.09	3,021.22
466	☐	J732	60.45	3,069.52	1,250.00	52.45	3,976.56
467	☐	J736	63.97	3,069.64	1,250.00	57.74	5,786.55
468	☐	J738FH	63.09	3,069.60	1,250.00	56.64	5,467.21
469	☐	J74	68.16	3,068.30	1,250.00	57.10	3,307.17
470	☐	J740FH	66.61	3,069.73	1,250.00	61.35	8,008.67
471	☐	J742FH	56.97	3,069.47	1,250.00	50.46	4,979.45
472	☐	J744	55.22	3,069.44	1,250.00	49.35	5,740.16
473	☐	J746	53.88	3,068.35	1,250.00	35.56	1,904.34
474	☐	J748	51.24	3,068.27	1,250.00	31.13	1,770.52
475	☐	J750FH	55.16	3,068.30	1,250.00	32.42	1,670.18
476	☐	J752	52.97	3,068.25	1,250.00	31.37	1,745.45
477	☐	J754	53.86	3,068.30	1,250.00	33.62	1,771.48
478	☐	J756	52.31	3,068.72	1,250.00	36.96	2,078.36
479	☐	J758	50.57	3,068.72	1,250.00	31.20	1,689.80
480	☐	J76	79.04	3,068.42	1,250.00	72.63	6,990.13
481	☐	J778	128.32	3,067.15	1,250.00	118.19	6,911.60
482	☐	J784FH	126.90	3,066.87	1,250.00	117.22	7,677.32
483	☐	J786FH	92.00	2,993.33	1,250.00	81.84	4,745.42
484	☐	J788FH	64.28	3,069.36	1,250.00	48.45	2,373.67
485	☐	J78FH	59.49	3,069.30	1,250.00	54.24	6,875.19
486	☐	J790FH	62.20	3,069.54	1,250.00	53.86	3,905.13
487	☐	J792	54.76	3,069.37	1,250.00	48.49	5,239.79
488	☐	J794	71.08	3,071.04	1,250.00	65.46	9,079.16
489	☐	J796	77.97	3,068.93	1,250.00	72.30	8,549.20
490	☐	J798	48.92	3,067.91	1,250.00	36.97	2,435.36

Peak Day Demand with Fire Flow

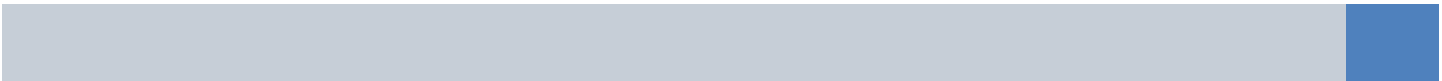
		ID	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
491	☐	J800	67.06	3,067.77	1,250.00	54.90	3,107.15
492	☐	J80FH	62.41	3,069.03	1,250.00	57.20	7,645.93
493	☐	J814	100.50	3,212.95	1,250.00	100.45	113,673.48
494	☐	J816	45.80	3,068.71	1,250.00	9.33	1,020.72
495	☐	J818	49.71	3,068.71	1,250.00	28.70	1,569.08
496	☐	J820	106.17	3,205.47	1,250.00	98.93	8,714.78
497	☐	J822	105.60	3,210.23	1,250.00	101.81	11,471.18
498	☐	J824	99.91	3,211.33	1,250.00	97.82	14,039.81
499	☐	J826	96.77	3,211.04	1,250.00	93.55	10,732.08
500	☐	J828	93.26	3,211.38	1,250.00	90.16	9,748.71
501	☐	J82FH	65.70	3,068.62	1,250.00	58.86	5,326.75
502	☐	J830	93.62	3,211.29	1,250.00	89.91	8,399.48
503	☐	J832	95.44	3,211.13	1,250.00	91.73	8,584.76
504	☐	J834	88.02	3,212.33	1,250.00	86.35	13,120.27
505	☐	J836	90.51	3,211.29	1,250.00	83.73	5,006.63
506	☐	J838	90.10	3,212.48	1,250.00	89.05	18,185.05
507	☐	J840	115.20	3,210.76	1,250.00	107.45	5,348.15
508	☐	J842	117.01	3,210.76	1,250.00	106.24	4,362.85
509	☐	J844	105.41	3,211.26	1,250.00	101.33	7,853.18
510	☐	J846	105.64	3,211.25	1,250.00	100.74	6,799.67
511	☐	J848	108.30	3,211.23	1,250.00	103.12	6,649.17
512	☐	J84FH	63.53	3,068.62	1,250.00	51.91	2,950.70
513	☐	J850	108.52	3,211.22	1,250.00	103.73	7,070.75
514	☐	J852	105.14	3,211.34	1,250.00	102.85	14,042.08
515	☐	J854	102.39	3,211.34	1,250.00	99.74	10,566.45
516	☐	J856	101.02	3,211.34	1,250.00	98.43	10,617.90
517	☐	J858	62.87	3,033.54	1,250.00	58.80	3,586.73
518	☐	J86	62.48	3,069.20	1,250.00	53.04	3,394.58
519	☐	J860	63.32	3,044.19	1,250.00	55.71	3,425.89
520	☐	J862	64.53	3,048.41	1,250.00	55.24	3,494.72
521	☐	J864	69.14	3,044.19	1,250.00	48.14	1,977.34
522	☐	J866	65.95	3,054.25	1,250.00	55.05	3,694.79
523	☐	J868	57.78	3,060.17	1,250.00	46.82	3,596.84
524	☐	J870	60.08	3,059.22	1,250.00	48.29	3,331.49
525	☐	J872	67.40	3,059.09	1,250.00	55.51	3,631.65

Peak Day Demand with Fire Flow

		ID	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
526	☐	J874	59.17	3,059.09	1,250.00	45.82	2,877.56
527	☐	J876	58.65	3,059.09	1,250.00	39.14	2,103.28
528	☐	J878	60.86	3,059.09	1,250.00	37.56	1,896.17
529	☐	J88	65.83	3,067.94	1,250.00	57.77	4,388.06
530	☐	J880	66.39	3,059.09	1,250.00	46.11	2,260.41
531	☐	J882	70.37	3,059.22	1,250.00	55.81	3,095.93
532	☐	J884	75.48	3,067.76	1,250.00	57.96	2,581.87
533	☐	J886	67.62	3,067.76	1,250.00	60.09	5,430.79
534	☐	J888	69.50	3,068.52	1,250.00	62.70	6,034.98
535	☐	J890	67.49	3,068.31	1,250.00	60.69	6,076.72
536	☐	J892	73.06	3,068.52	1,250.00	62.42	3,767.36
537	☐	J894	64.41	3,068.32	1,250.00	57.86	6,207.82
538	☐	J896	66.17	3,067.35	1,250.00	58.81	5,851.61
539	☐	J898	65.62	3,067.39	1,250.00	55.95	3,988.59
540	☐	J90	63.78	3,069.20	1,250.00	57.48	5,451.01
541	☐	J900	63.68	3,067.39	1,250.00	55.61	4,822.76
542	☐	J902	65.60	3,067.93	1,250.00	58.54	6,001.23
543	☐	J904	54.22	3,067.82	1,250.00	45.33	3,654.87
544	☐	J906	54.95	3,067.85	1,250.00	46.36	3,849.17
545	☐	J908	60.81	3,067.86	1,250.00	52.42	4,343.23
546	☐	J910	56.20	3,067.86	1,250.00	44.80	2,822.94
547	☐	J912	58.08	3,067.86	1,250.00	49.04	3,820.00
548	☐	J914	54.75	3,067.85	1,250.00	45.64	3,590.65
549	☐	J916	55.07	3,067.85	1,250.00	43.57	2,734.28
550	☐	J918	45.85	3,067.82	1,250.00	33.15	2,036.17
551	☐	J920	45.39	3,067.82	1,250.00	28.11	1,601.60
552	☐	J922	50.41	3,067.82	1,250.00	37.19	2,196.43
553	☐	J924	44.86	3,067.82	1,250.00	29.78	1,739.35
554	☐	J926	53.79	3,067.82	1,250.00	42.35	2,678.97
555	☐	J928	50.37	3,067.82	1,250.00	39.42	2,593.38
556	☐	J92FH	52.80	3,069.85	1,250.00	47.60	6,047.42
557	☐	J930	50.26	3,067.82	1,250.00	37.05	2,189.45
558	☐	J932	51.76	3,067.82	1,250.00	40.93	2,706.41
559	☐	J934	53.42	3,067.82	1,250.00	32.23	1,658.07
560	☐	J936	54.13	3,067.82	1,250.00	44.58	3,363.44

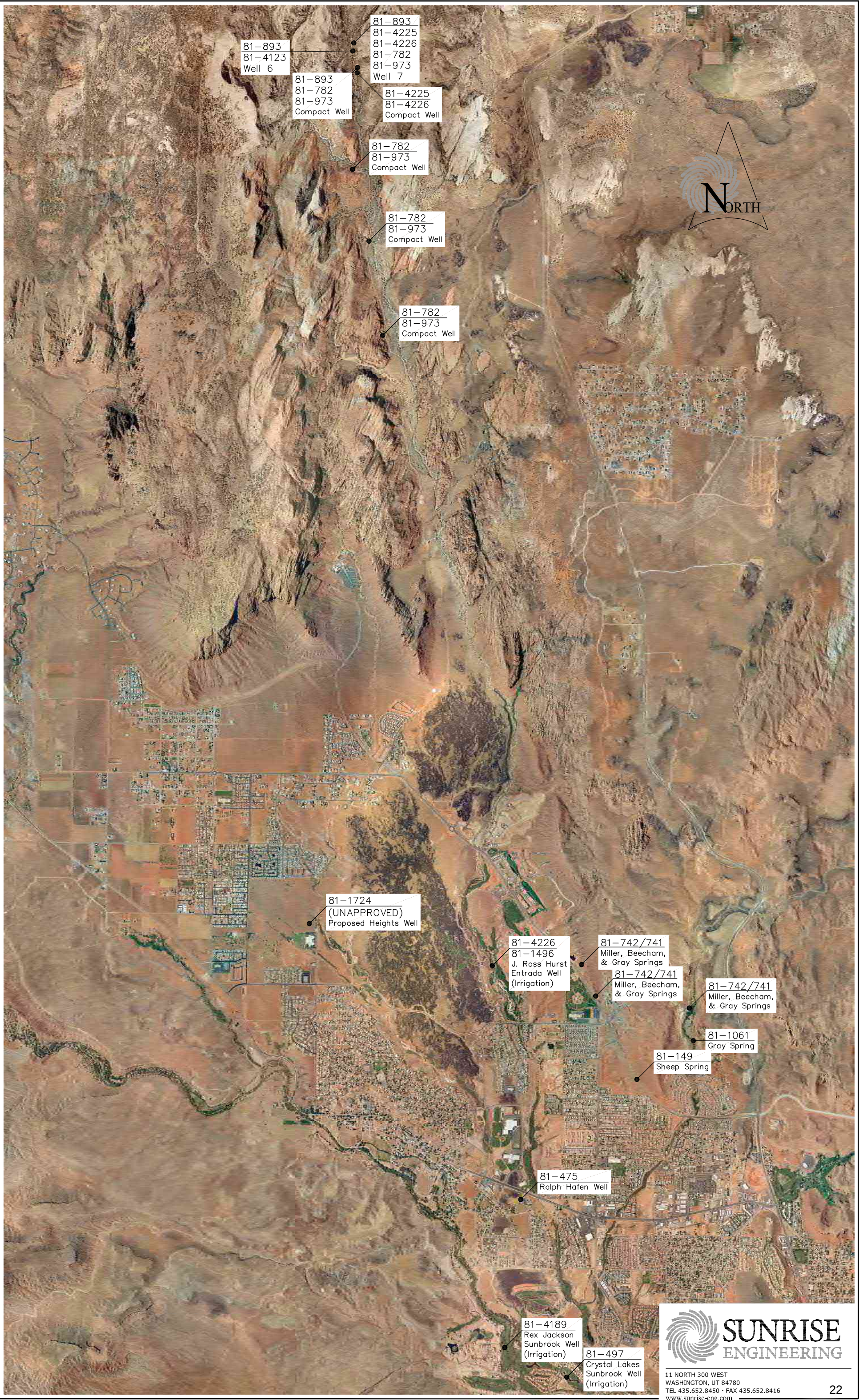
Peak Day Demand with Fire Flow

		ID	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
561	☐	J938	66.09	3,070.83	1,250.00	59.32	5,731.62
562	☐	J940	62.71	3,070.83	1,250.00	51.80	3,125.03
563	☐	J942	70.19	3,069.00	1,250.00	64.48	7,637.58
564	☐	J944	121.83	3,210.76	1,250.00	109.42	4,104.32
565	☐	J946	99.30	3,212.54	1,250.00	98.53	25,054.83
566	☐	J948	58.20	3,080.32	1,250.00	51.41	6,753.42
567	☐	J94FH	51.79	3,069.51	1,250.00	46.45	5,880.22
568	☐	J950	61.16	3,079.04	1,250.00	54.13	6,724.93
569	☐	J952	61.08	3,080.72	1,250.00	52.66	4,512.55
570	☐	J954	74.18	3,018.19	1,250.00	63.74	3,875.93
571	☐	J960	74.07	3,021.94	1,250.00	64.42	3,537.15
572	☐	J962	73.25	3,024.06	1,250.00	64.14	3,362.43
573	☐	J964	71.88	3,026.88	1,250.00	65.07	3,496.53
574	☐	J966	72.68	3,028.74	1,250.00	69.66	4,179.28
575	☐	J968	67.12	3,069.90	1,250.00	61.82	8,076.51
576	☐	J96FH	55.80	3,069.77	1,250.00	49.38	4,566.79
577	☐	J970	63.14	3,069.72	1,250.00	56.37	5,186.79
578	☐	J972	66.32	3,070.07	1,250.00	60.99	7,980.61
579	☐	J974	65.38	3,069.89	1,250.00	60.01	7,708.01
580	☐	J976	62.27	3,069.72	1,250.00	52.66	3,404.90
581	☐	J978	59.54	3,071.41	1,250.00	53.81	6,735.23
582	☐	J980	59.51	3,071.34	1,250.00	53.83	6,895.69
583	☐	J982	62.04	3,071.18	1,250.00	56.42	7,307.87
584	☐	J984	57.89	3,077.60	1,250.00	51.12	6,518.76
585	☐	J986	65.41	3,073.96	1,250.00	59.00	7,115.55
586	☐	J988	65.56	3,072.31	1,250.00	59.59	7,168.83
587	☐	J98FH	58.14	3,070.17	1,250.00	51.39	4,428.65
588	☐	J990	67.35	3,071.44	1,250.00	61.66	7,518.53
589	☐	J992	64.15	3,071.05	1,250.00	58.61	7,566.67
590	☐	J994	58.37	3,080.72	1,250.00	51.62	6,839.72
591	☐	J996	69.14	3,069.56	1,250.00	63.18	6,508.39
592	☐	J998	69.93	3,069.39	1,250.00	64.19	6,989.38



APPENDIX C

WATER RIGHTS INVENTORY



81-893
81-4123
Well 6

81-893
81-782
81-973
Compact Well

81-893
81-4225
81-4226
81-782
81-973
Well 7

81-4225
81-4226
Compact Well

81-782
81-973
Compact Well

81-782
81-973
Compact Well

81-782
81-973
Compact Well

81-1724
(UNAPPROVED)
Proposed Heights Well

81-4226
81-1496
J. Ross Hurst
Entrada Well
(Irrigation)

81-742/741
Miller, Beecham,
& Gray Springs

81-742/741
Miller, Beecham,
& Gray Springs

81-742/741
Miller, Beecham,
& Gray Springs

81-1061
Gray Spring

81-149
Sheep Spring

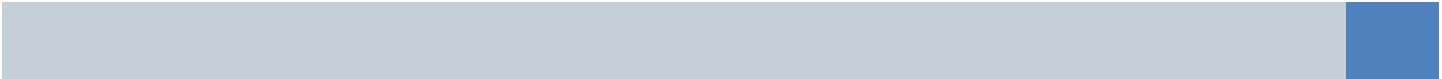
81-475
Ralph Hafen Well

81-4189
Rex Jackson
Sunbrook Well
(Irrigation)

81-497
Crystal Lakes
Sunbrook Well
(Irrigation)



11 NORTH 300 WEST
WASHINGTON, UT 84780
TEL 435.652.8450 • FAX 435.652.8416
www.sunrise-eng.com



APPENDIX D

OPINION OF PROBABLE COST

SUNRISE ENGINEERING INC.							
11 North 300 West, Washington, Utah 84780 Tel: (435) 652-8450 Engineer's Opinion of Probable Cost							
SANTA CLARA CITY WATER FACILITY PLAN PROJECTS						NW/MG	11/15/2022
NO.	DESCRIPTION	Est Quantity	Units	Unit Price	TOTAL COST	I.F. Eligible	Impact Fee Eligible Cost
10" to 12" PRV Enlargement							
13	Mobilization	1	LS	\$ 6,250	\$ 6,250	100%	\$ 6,250
14	Traffic Control	1	LS	\$ 5,000	\$ 5,000	100%	\$ 5,000
15	Materials Sampling & Testing	1	LS	\$ 5,000	\$ 5,000	100%	\$ 5,000
16	12" PVC Line, Fittings, Bedding, Backfill & Tracer Wire (C900, Class 150, SDR 18: or C909 PC150)	100	LN FT.	\$ 100.00	\$ 10,000	100%	\$ 10,000
17	12" PRV	1	EA	\$ 15,000.00	\$ 15,000	100%	\$ 15,000
18	PRV Station w/ Appurtenances	1	EA	\$ 100,000	\$ 100,000	100%	\$ 100,000
		SUBTOTAL			\$ 141,250	100%	\$ 141,250
		CONTINGENCY		20%	\$ 29,000	100%	\$ 29,000
		CONSTRUCTION TOTAL			\$ 170,250		\$ 170,250
	INCIDENTALS						
17	Administration		LS	1%	\$ 1,800	100%	\$ 1,800
19	Engineering Design		LS	12.5%	\$ 21,300	100%	\$ 21,300
20	Engineering Construction Services		HOURLY	8%	\$ 13,700	100%	\$ 13,700
21	GIS Mapping	0	EST.		\$ 1,500	100%	\$ 1,500
							\$ -
		TOTAL PROJECT COST			\$ 208,550	100%	\$208,550

SUNRISE ENGINEERING INC.							
11 North 300 West, Washington, Utah 84780 Tel: (435) 652-8450 Engineer's Opinion of Probable Cost							
SANTA CLARA CITY WATER FACILITY PLAN PROJECTS						NW/MG	11/15/2022
NO.	DESCRIPTION	Est Quantity	Units	Unit Price	TOTAL COST	I.F. Eligible	Impact Fee Eligible Cost
12" Line Well Connection to Snow Canyon Tank							
22	Mobilization	1	LS	\$ 137,500	\$ 137,500	100%	\$ 137,500
23	Traffic Control	1	LS	\$ 5,000	\$ 5,000	100%	\$ 5,000
24	Materials Sampling & Testing	1	LS	\$ 5,000	\$ 5,000	100%	\$ 5,000
23	12" PVC Line, Fittings, Bedding, Backfill & Tracer Wire (C900, Class 150, SDR 18: or C909 PC150)	26,000	LF	\$ 100	\$ 2,600,000	100%	\$ 2,600,000
25	Misc fittings, pipe, and valve assembly	1	LS	\$ 150,000	\$ 150,000	100%	\$ 150,000
		SUBTOTAL			\$ 2,897,500	100%	\$ 2,897,500
		CONTINGENCY		20%	\$ 580,000	100%	\$ 580,000
		CONSTRUCTION TOTAL			\$ 3,477,500		\$ 3,477,500
	INCIDENTALS						
26	Administration		LS	1%	\$ 34,800	100%	\$ 34,800
27	Engineering Design		LS	9.0%	\$ 313,000	100%	\$ 313,000
28	Engineering Construction Services		HOURLY	8%	\$ 278,200	100%	\$ 278,200
29	Legal & Fiscal/Environmental	0	EST.		\$ 50,000	100%	\$ 50,000
30	Miscellaneous	0	EST.		\$ 15,000	100%	\$ 15,000
31	GIS Mapping	0	EST.		\$ 1,500	100%	\$ 1,500
							\$ -
		TOTAL PROJECT COST			\$ 4,170,000		\$ 4,170,000

SUNRISE ENGINEERING INC.							
11 North 300 West, Washington, Utah 84780							
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Engineer's Opinion of Probable Cost							
SANTA CLARA CITY WATER FACILITY PLAN PROJECTS							
						NW/MG	11/15/2022
NO.	DESCRIPTION	Est Quantity	Units	Unit Price	TOTAL COST	I.F. Eligible	Impact Fee Eligible Cost
New Well							
45	Mobilization	1	LS	\$ 68,350	\$ 68,350	100%	\$ 68,350
46	Traffic Control	1	LS	\$ 5,000	\$ 5,000	100%	\$ 5,000
47	Materials Sampling & Testing	1	LS	\$ 5,000	\$ 5,000	100%	\$ 5,000
46	Conductor Casing	1	LS	\$ 40,000	\$ 40,000	100%	\$ 40,000
48	20" Diameter Well Drilling	1,200	LF	\$ 200	\$ 240,000	100%	\$ 240,000
49	GeoPhysical Logging	1	LS	\$ 5,000	\$ 5,000	100%	\$ 5,000
50	18" Diameter Well Casing	1,200	LF	\$ 250	\$ 300,000	100%	\$ 300,000
51	18" Diameter Stainless Steel Screen	1,200	LF	\$ 200	\$ 240,000	100%	\$ 240,000
52	Misc pipes, fittings, etc	1	LS	\$ 50,000	\$ 50,000	100%	\$ 50,000
53	Conductor Casing Removal	1	LS	\$ 10,000	\$ 10,000	100%	\$ 10,000
54	Pea Gravel (Disinfected)	600	LF	\$ 15	\$ 9,000	100%	\$ 9,000
55	Disinfection	1	LS	\$ 5,000	\$ 5,000	100%	\$ 5,000
56	Well Drillers Report	1	LS	\$ 3,000	\$ 3,000	100%	\$ 3,000
57	Well Equipping	1	LS	\$ 175,000	\$ 175,000	100%	\$ 175,000
58	Well House Building	1	LS	\$ 175,000	\$ 175,000	100%	\$ 175,000
59	Well Site Electrical	1	LS	\$ 100,000	\$ 100,000	100%	\$ 100,000
60	Metering Manhole	1	EA	\$ 15,000.00	\$ 15,000	100%	\$ 15,000
		SUBTOTAL			\$ 1,445,350	100%	\$ 1,445,350
		CONTINGENCY		20%	\$ 290,000	100%	\$ 290,000
		CONSTRUCTION TOTAL			\$ 1,735,350		\$ 1,735,350
	INCIDENTALS						
61	Administration		LS	1%	\$ 17,400	100%	\$ 17,400
62	Engineering Design		LS	9.0%	\$ 156,200	100%	\$ 156,200
63	Engineering Construction Services		HOURLY	8%	\$ 138,900	100%	\$ 138,900
64	Legal & Fiscal/Environmental	0	EST.		\$ 50,000	100%	\$ 50,000
65	Miscellaneous	0	EST.		\$ 15,000	100%	\$ 15,000
66	GIS Mapping	0	EST.		\$ 1,500	100%	\$ 1,500
							\$ -
	TOTAL PROJECT COST				\$ 2,114,350		\$ 2,114,350

SUNRISE ENGINEERING INC.							
11 North 300 West, Washington, Utah 84780							
Tel: (435) 652-8450							
Engineer's Opinion of Probable Cost							
SANTA CLARA CITY WATER FACILITY PLAN PROJECTS							
						NW/MG	11/15/2022
NO.	DESCRIPTION	Est Quantity	Units	Unit Price	TOTAL COST	I.F. Eligible	Impact Fee Eligible Cost
Irrigation: Riesling Avenue 8" Line							
1	Mobilization	1	LS	\$ 4,440	\$ 4,440	100%	\$ 4,440
2	8" PVC Irrigation Line (DR-18), Bedding, Backfill, Tracer Wire, Etc.	1,200	LF	\$ 60	\$ 72,000	100%	\$ 72,000
3	Misc Connections and Tie Ins	1	LS	\$ 2,400	\$ 2,400	100%	\$ 2,400
4	2.5" Bituminous Surface Coarse	3,600	SF	\$ 3.00	\$ 10,800	100%	\$ 10,800
5	6" Untreated Base Course	3,600	SF	\$ 1.00	\$ 3,600	100%	\$ 3,600
6			SUBTOTAL		\$ 93,240	100%	\$ 93,240
7			CONTINGENCY	20%	\$ 19,000	100%	\$ 19,000.00
8			CONSTRUCTION TOTAL		\$ 112,240		\$ 112,240
9	INCIDENTALS						
10	Administration		LS	1%	\$ 1,200	100%	\$ 1,200
11	Engineering Design		LS	11.3%	\$ 12,700	100%	\$ 12,700
12	Engineering Construction Services		HOURLY	8%	\$ 9,000	100%	\$ 9,000
13	GIS Mapping		EST.		\$ 1,000	100%	\$ 1,000
						100%	
			TOTAL PROJECT COST		\$ 136,140	100%	\$ 136,140

SUNRISE ENGINEERING INC.							
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Engineer's Opinion of Probable Cost							
SANTA CLARA CITY WATER FACILITY PLAN PROJECTS							
						NW/MG	11/15/2022
NO.	DESCRIPTION	Est Quantity	Units	Unit Price	TOTAL COST	I.F. Eligible	Impact Fee Eligible Cost
Irrigation: Crestview Drive 8" Line							
1	Mobilization	1	LS	\$ 16,430	\$ 16,430	100%	\$ 16,430
2	8" PVC Irrigation Line (DR-18), Bedding, Backfill, Tracer Wire, Etc.	5,300	LF	\$ 60.00	\$ 318,000	100%	\$ 318,000
3	Misc Connections and Tie Ins	1	LS	\$ 10,600.00	\$ 10,600	100%	\$ 10,600
4	2.5" Bituminous Surface Coarse	15,900	SF	\$ 3.00	\$ 47,700	100%	\$ 47,700
5	6" Untreated Base Course	15,900	SF	\$ 1.00	\$ 15,900	100%	\$ 15,900
			SUBTOTAL		\$ 345,030	100%	\$345,030
			CONTINGENCY	20%	\$ 70,000	100%	\$ 70,000.00
			CONSTRUCTION TOTAL		\$ 415,030		\$ 415,030
	INCIDENTALS						
6	Administration		LS	1%	\$ 4,200	100%	\$ 4,200
14	Engineering Design		LS	12.5%	\$ 51,900	100%	\$ 51,900
15	Engineering Construction Services		HOURLY	8%	\$ 33,300	100%	\$ 33,300
16	Legal & Fiscal/Interim Financing	0	EST.			100%	\$ -
17	Miscellaneous	0	EST.			100%	\$ -
18	GIS Mapping	0	EST.		\$ 800	100%	\$ 800
						100%	
			TOTAL PROJECT COST		\$ 505,230	100%	\$ 505,230

SUNRISE ENGINEERING INC.							
11 North 300 West, Washington, Utah 84780 Tel: (435) 652-8450 Engineer's Opinion of Probable Cost							
SANTA CLARA CITY WATER FACILITY PLAN PROJECTS						NW/MG	11/15/2022
NO.	DESCRIPTION	Est Quantity	Units	Unit Price	TOTAL COST	I.F. Eligible	Impact Fee Eligible Cost
Irrigation: Villa Bonita 8" Line							
19	Mobilization	1	LS	\$ 3,300	\$ 3,300	100%	\$ 3,300
20	8" PVC Irrigation Line (DR-18), Bedding, Backfill, Tracer Wire, Etc.	750	LF	\$ 60	\$ 45,000	100%	\$ 45,000
21	Misc Connections and Tie Ins	1	LS	\$ 1,500	\$ 12,000	100%	\$ 12,000
22	2.5" Bituminous Surface Coarse	2,250	SF	\$ 3.00	\$ 6,750	100%	\$ 6,750
23	6" Untreated Base Course	2,250	SF	\$ 1.00	\$ 2,250	100%	\$ 2,250
		SUBTOTAL			\$ 69,300	100%	\$ 69,300
		CONTINGENCY		20%	\$ 14,000	100%	\$ 14,000.00
		CONSTRUCTION TOTAL			\$ 83,300		\$ 83,300
	INCIDENTALS						\$ -
24	Administration		LS	1%	\$ 900	100%	\$ 900
25	Engineering Design		LS	9.5%	\$ 8,000	100%	\$ 8,000
26	Engineering Construction Services		HOURLY	8%	\$ 6,700	100%	\$ 6,700
27	GIS Mapping	0	EST.		\$ 1,000	100%	\$ 1,000
						100%	
		TOTAL PROJECT COST			\$ 99,900	100%	\$ 99,900

SUNRISE ENGINEERING INC.							
11 North 300 West, Washington, Utah 84780 Tel: (435) 652-8450 Engineer's Opinion of Probable Cost							
SANTA CLARA CITY WATER FACILITY PLAN PROJECTS						NW/MG	11/15/2022
NO.	DESCRIPTION	Est Quantity	Units	Unit Price	TOTAL COST	I.F. Eligible	Impact Fee Eligible Cost
Irrigation: North Town Road 8" Line							
28	Mobilization	1	LS	\$ 18,075	\$ 18,075	100%	\$ 18,075
29	8" PVC Irrigation Line (DR-18), Bedding, Backfill, Tracer Wire, Etc.	4,885	LF	\$ 60	\$ 293,100	100%	\$ 293,100
30	Misc Connections and Tie Ins	1	LS	\$ 9,770	\$ 9,770	100%	\$ 9,770
31	2.5" Bituminous Surface Coarse	14,655	SF	\$ 3.00	\$ 43,965	100%	\$ 43,965
32	6" Untreated Base Course	14,655	SF	\$ 1.00	\$ 14,655	100%	\$ 14,655
		SUBTOTAL			\$ 379,565	100%	\$ 379,565
		CONTINGENCY		20%	\$ 76,000	100%	\$ 76,000.00
		CONSTRUCTION TOTAL			\$ 455,565		\$ 455,565
	INCIDENTALS						
33	Administration		LS	1%	\$ 4,600	100%	\$ 4,600
34	Engineering Design		LS	12.5%	\$ 57,000	100%	\$ 57,000
35	Engineering Construction Services		HOURLY	8%	\$ 36,500	100%	\$ 36,500
36	Legal & Fiscal/ROW	0	EST.		\$ 20,000	100%	\$ 20,000
37	Miscellaneous	0	EST.		\$ 5,000	100%	\$ 5,000
38	GIS Mapping	0	EST.		\$ 1,000	100%	\$ 1,000
							\$ -
		TOTAL PROJECT COST			\$ 579,665	100%	\$ 579,665

SUNRISE ENGINEERING INC.							
11 North 300 West, Washington, Utah 84780 Tel: (435) 652-8450 Engineer's Opinion of Probable Cost							
SANTA CLARA CITY WATER FACILITY PLAN PROJECTS						NW/MG	11/15/2022
NO.	DESCRIPTION	Est Quantity	Units	Unit Price	TOTAL COST	I.F. Eligible	Impact Fee Eligible Cost
Irrigation: Sycamore Drive 8" Line							
39	Mobilization	1	LS	\$ 4,070	\$ 4,070	100%	\$ 4,070
40	8" PVC Irrigation Line (DR-18), Bedding, Backfill, Tracer Wire, Etc.	1,100	LF	\$ 60	\$ 66,000	100%	\$ 66,000
41	Misc Connections and Tie Ins	1	LS	\$ 2,200	\$ 2,200	100%	\$ 2,200
42	2.5" Bituminous Surface Coarse	3,300	SF	\$ 3.00	\$ 9,900	100%	\$ 9,900
43	6" Untreated Base Course	3,300	SF	\$ 1.00	\$ 3,300	100%	\$ 3,300
		SUBTOTAL			\$ 85,470	100%	\$ 85,470
		CONTINGENCY		20%	\$ 18,000	100%	\$ 18,000.00
		CONSTRUCTION TOTAL			\$ 103,470		\$ 103,470
	INCIDENTALS						
44	Administration		LS	1%	\$ 1,100	100%	\$ 1,100
45	Engineering Design		LS	9.7%	\$ 10,100	100%	\$ 10,100
46	Engineering Construction Services		HOURLY	8%	\$ 8,300	100%	\$ 8,300
47	GIS Mapping	0	EST.		\$ 1,500	100%	\$ 1,500
							\$ -
		TOTAL PROJECT COST			\$ 124,470	100%	\$ 124,470

SUNRISE ENGINEERING INC.							
11 North 300 West, Washington, Utah 84780 Tel: (435) 652-8450 Engineer's Opinion of Probable Cost							
SANTA CLARA CITY WATER FACILITY PLAN PROJECTS						NW/MG	11/15/2022
NO.	DESCRIPTION	Est Quantity	Units	Unit Price	TOTAL COST	I.F. Eligible	Impact Fee Eligible Cost
Irrigation: Claude Drive 8" Line							
48	Mobilization	1	LS	\$ 4,070	\$ 4,070	100%	\$ 4,070
49	8" PVC Irrigation Line (DR-18), Bedding, Backfill, Tracer Wire, Etc.	1,100	LF	\$ 60	\$ 66,000	100%	\$ 66,000
50	Misc Connections and Tie Ins	1	LS	\$ 2,200	\$ 2,200	100%	\$ 2,200
51	2.5" Bituminous Surface Coarse	3,300	SF	\$ 3.00	\$ 9,900	100%	\$ 9,900
52	6" Untreated Base Course	3,300	SF	\$ 1.00	\$ 3,300	100%	\$ 3,300
		SUBTOTAL			\$ 85,470	100%	\$ 85,470
		CONTINGENCY		20%	\$ 18,000	100%	\$ 18,000.00
		CONSTRUCTION TOTAL			\$ 103,470		\$ 103,470
	INCIDENTALS						
53	Administration		LS	1%	\$ 1,100	100%	\$ 1,100
54	Engineering Design		LS	9.7%	\$ 10,100	100%	\$ 10,100
55	Engineering Construction Services		HOURLY	8%	\$ 8,300	100%	\$ 8,300
56	GIS Mapping	0	EST.		\$ 1,500	100%	\$ 1,500
							\$ -
		TOTAL PROJECT COST			\$ 124,470	100%	\$ 124,470

SUNRISE ENGINEERING INC.

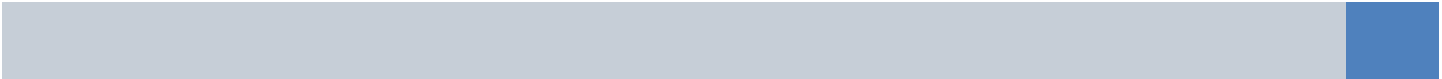
11 North 300 West, Washington, Utah 84780

Tel: (435) 652-8450

Engineer's Opinion of Probable Cost**SANTA CLARA CITY WATER FACILITY PLAN PROJECTS**

NW/MG 5/10/2023

NO.	DESCRIPTION	Est Quantity	Units	Unit Price	TOTAL COST	I.F. Eligible	Impact Fee Eligible Cost
Irrigation: Additional Water Share Purchase							
57	Water Share (4ac-ft)	20	EA	\$ 15,000	\$ 300,000	100%	\$ 300,000
			SUBTOTAL		\$ 300,000	100%	\$ 300,000
			CONTINGENCY	20%	\$ 60,000	100%	\$ 60,000.00
			CONSTRUCTION TOTAL		\$ 360,000		\$ 360,000
	INCIDENTALS						
58	Administration/ Legal Services		LS	1%	\$ 3,600	100%	\$ 3,600
							\$ -
			TOTAL PROJECT COST		\$ 363,600	100%	\$ 363,600



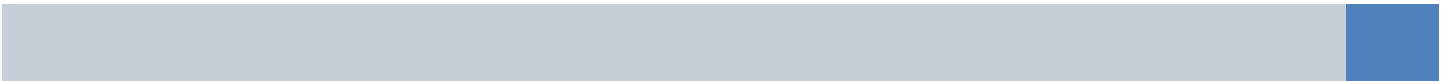
APPENDIX E

PROJECTED CASH FLOW

CASHFLOW PROJECTIONS

CULINARY WATER MASTER PLAN
CITY OF SANTA CLARA

4										
5	Fiscal Year Beginning July	2034	2035	2036	2037	2038	2039	2040	2041	2042
6		2035	2036	2037	2038	2039	2040	2041	2042	2043
7										
8	Average Rate ERU	\$59.05	\$59.79	\$60.53	\$61.29	\$62.06	\$62.83	\$63.62	\$64.41	\$65.22
9	Connection Fee	\$316	\$325	\$335	\$345	\$355	\$366	\$377	\$388	\$400
10	Impact fee	\$3,057	\$3,057	\$3,057	\$3,057	\$3,057	\$3,057	\$3,057	\$3,057	\$3,057
11	WCWCD Surcharge Rate/ERU	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75
1	System Users:									
2	Total Existing ERU's	5,811	6,043	6,285	6,536	6,798	7,070	7,353	7,647	7,953
3	New ERU's:	232	242	251	261	272	283	294	306	318
4										
5	REVENUES:									
6	User Fees	4,199,772	4,422,360	4,656,745	4,903,553	5,163,441	5,437,103	5,725,270	6,028,709	6,348,231
7	Other Operating Revenues	78,567	80,924	83,351	85,852	88,427	91,080	93,813	96,627	96,627
8	Connection Fees	73,250	78,700	84,076	90,048	96,659	103,585	110,839	118,824	127,188
9	Impact Fees	710,551	738,973	768,532	799,273	831,244	864,494	899,073	935,036	972,438
10	Interest Income	76,143	123,485	178,309	241,245	327,791	424,488	532,148	651,638	783,896
11	Gain on Disposal	0	0	0	0	0	0	0	0	0
12	WCWCD Surcharge									
	Estimated Irrigation User Fee									
13	TOTAL REVENUE:	\$5,138,283	\$5,444,442	\$5,771,013	\$6,119,970	\$6,507,562	\$6,920,750	\$7,361,143	\$7,830,834	\$8,328,380
14										
15	EXPENSES: (Inc. O&M & Debt Serv.)	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
16	Salaries, Wages, & Benefits (100's)	1,074,330	1,128,046	1,184,449	1,243,671	1,305,855	1,371,147	1,439,705	1,511,690	1,587,274
17	Materials & Supplies (200's)	596,827	614,732	633,174	652,169	671,734	691,886	712,642	734,022	756,042
18	Professional & Technical Services (300's)	69,315	71,394	73,536	75,742	78,014	80,355	82,765	85,248	87,806
19	Special Dept. Materials & Supplies (400's)	94,720	97,562	100,489	103,504	106,609	109,807	113,101	116,494	119,989
20	Other Charges (500's)	38,182	39,327	40,507	41,722	42,974	44,263	45,591	46,959	48,368
21	Capital Expenses (700's)	239,371	246,552	253,949	261,567	269,414	277,497	285,821	294,396	303,228
22	Others (900's)	884,759	911,302	938,641	966,800	995,804	1,025,678	1,056,449	1,088,142	1,120,787
	Irrigation System Expenses	67,196	69,212	71,288	73,427	75,629	77,898	80,235	82,642	85,122
23	Sub-Total Operation & Maintainance	\$3,064,700	\$3,178,127	\$3,296,032	\$3,418,602	\$3,546,033	\$3,678,532	\$3,816,310	\$3,959,594	\$4,108,615
24										
25	EXISTING DEBT SERVICE (800's)									
26	Debt Payment to Water District	63,600	63,600	63,600	63,600	63,600	63,600	63,600	63,600	63,600
27	All other Debt	285,722	285,722	285,722	285,722	285,722	285,722	285,722	285,722	285,722
28	Sub-Total Existing Debt Service	\$349,322	\$349,322	\$349,322	\$349,322	\$349,322	\$349,322	\$349,322	\$349,322	\$349,322
29										
30	NEW DEBT SERVICE									
31	Division of Water Resources	0	0	0	0	0	0	0	0	0
32	Revenue Bond Reserves 10%	0	0	0	0	0	0	0	0	0
33	Sub-Total New Debt Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
34	Total Debt Service	\$349,322	\$349,322	\$349,322	\$349,322	\$349,322	\$349,322	\$349,322	\$349,322	\$349,322
35	PROPOSED PROJECT EXPENSES									
	Culinary: Water Right Recommendations									
	Culinary: North Hamblin Pkwy to North Town Rd 12" Line									
	Culinary: 10" to 12" PRV Enlargement									
	Culinary: 12" Line Well Connection to Snow Canyon Tank									
	Culinary: New Well	\$352,392	\$352,392	\$352,392						
	Irrigation: Riesling Avenue 8" Line			\$	-					
	Irrigation: Crestview Drive 8" Line									
	Irrigation: Villa Bonita 8" Line									
	Irrigation: North Town Road 8" Line									
	Irrigation: Sycamore Drive 8" Line									
	Irrigation: Claude Drive 8" Line									
	Irrigation:Additional Water Share Purchase									
36	Renewal and Replacement Fund	188,321	193,992	199,887	188,396	194,768	201,393	208,282	215,446	222,897
37	TOTAL EXPENSES:	\$3,954,734	\$4,073,833	\$4,197,633	\$3,956,320	\$4,090,123	\$4,229,246	\$4,373,914	\$4,524,362	\$4,680,834
38										
39	Net Cashflow	\$1,183,549	\$1,370,609	\$1,573,380	\$2,163,650	\$2,417,438	\$2,691,504	\$2,987,229	\$3,306,473	\$3,647,546
40	Project Self Participation									
41										
42	CASH ON HAND									
43	*Fund Balance	3,087,128	4,457,737	6,031,117	8,194,767	10,612,206	13,303,710	16,290,939	19,597,412	23,244,958
44	Renewal and Replacement Account Balance:	2,888,806	3,082,798	3,282,686	3,471,082	3,665,850	3,867,242	4,075,524	4,290,970	4,513,867
45	Total	\$5,975,934	\$7,540,535	\$9,313,803	\$11,665,849	\$14,278,055	\$17,170,952	\$20,366,463	\$23,888,381	\$27,758,824
46	*Fund Balance is obtained by adding the previous year's									
47	balance to the net cash flow, minus any self funded portion									
48	of future projects.									



APPENDIX F

IMPACT FEE CERTIFICATION

CERTIFICATION OF IMPACT FEE ANALYSIS BY CONSULTANT

In accordance with Utah Code Annotated, § 11-36a-306 Nathan Wallentine, P.E., on behalf of Sunrise Engineering, Inc., makes the following certification:

I certify that the attached impact fee facilities plan and impact fee analysis:

1. Includes only the costs for qualifying public facilities that are:
 - a. Allowed under the Impact Fees Act; and
 - b. Actually incurred; or
 - c. Projected to be incurred or encumbered within six years after each impact fee is paid;
2. Does not include:
 - a. costs of operation and maintenance of public facilities;
 - b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents;
 - c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and that methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement; and
3. Offsets costs with grants or other alternate sources of payment (if grants or other sources of payment have been applied for and received and such information was made available when the Impact Fee Analysis was prepared); and
4. Complies in each and every relevant respect with the Impact Fees Act.

Nathan Wallentine, P.E. makes this certification with the following qualifications:

1. All of the recommendations for implementations of the Impact Fee Facilities Plan (“IFFP”) made in the IFFP documents or in the Impact Fee Analysis documents are followed in their entirety by Santa Clara City staff and elected officials.
2. If all or a portion of the IFFP’s or Impact Fee Analyses are modified or amended, this certification is no longer valid.
3. All information provided to Sunrise Engineering, Inc., its contractors or suppliers is assumed to be correct, complete and accurate. This includes information provided by the City and outside sources.

4. The undersigned is trained and licensed as a professional engineer and has not been trained or licensed as a lawyer. Nothing in the foregoing certification shall be deemed an opinion of law or an opinion of compliance with law which under applicable professional licensing laws or regulations or other laws or regulations must be rendered by a lawyer licensed in the State of Utah.
5. The foregoing Certification is an expression of professional opinion based on the undersigned's best knowledge, information and belief and shall not be construed as a warranty or guaranty of any fact or circumstance.
6. The foregoing certification is made only to Santa Clara City and may not be used or relied upon by any other person or entity without the expressed written authorization of the undersigned.

Sunrise Engineering, Inc.

By: _____

Dated: _____

		12 Months Usage	Ave Usage
1722 Desert Heights	1189601	218	18
1700 Desert Heights	1189402	181	15
1684 Deserts Heights	1188602	173	14
1660 Deserts Heights	1189002	286	24
1648 Deserts Heights	1188801	88	7
1642 Deserts Heights	1189203	216	18
1620 Deserts Heights	1188402	101	8
1588 Deserts Heights	1188202	224	19
1566 Deserts Heights	1188001	280	23
1562 Deserts Heights	2001410	261	21
1528 Deserts Heights	1186802	175	14
1563 Deserts Heights	1187001	103	8
1567 Deserts Heights	1187402	129	11
1589 Deserts Heights	2001422	140	12
1621 Deserts Heights	1186402	215	18
1633 Deserts Heights	2001348	125	10
1663 Deserts Heights	1185801	218	18
1669 Deserts Heights	1185602	242	20
1721 Deserts Heights	1185202	145	12
1741 Deserts Heights	1184602	145	12
2503 Stefanie Lane	1190202	150	12
2482 Stefanie Lane	1190802	276	23
2508 Stefanie Lane	1190602	271	22
2536 Stefanie Lane	1190402	227	19

		12 Months Usage	Ave. Usage
2520 School Way	Units 1-4	132	11
	Units 5-8	60	5
	Units 9-12	73	6
	Units 13-16	117	10
	Units 17-20	123	10
	Units 21-24	94	8
	Units 25-28	87	7
	Units 29-32	61	5
	Units 33-36	NA	NA
	Units 37-40	44	4
	Units 41-44	79	7
	Units 45-48	144	12
	Units 49-52	NA	NA
	Units 53-56	NA	NA
	Units 57-60	NA	NA
	Units 61-64	NA	NA

Mayor
Rick Rosenberg

City Manager
Brock Jacobsen



City Council
Denny Drake
Christa Hinton
Leina Mathis
Ben Shakespeare
Jarett Waite

City Council Application

Meeting Date: 6-14-2023

Agenda Item #3

Applicant: Santa Clara Power

Requested By: Gary Hall

Subject: Solar Net Metering Policy

Description:

Continued discussion on a new solar policy and fees.

Attachments: Yes

Recommendation: Discussion

Cost: N/A

Legal Approval: N/A

Finance Approval: N/A

Budget Approval: N/A



Santa Clara Solar Net Metering Agreement

Gary Hall
Power Director

Solar Reliability Charge (SRC)

kW Size	Monthly kWh * Charge	Current SRC	If SRC Decreased
1 kW	1 * 149 = 149 kWh * \$0.0272 =	\$ 4.05	\$2.05
2 kW	2 * 149 = 316 kWh * \$0.0272 =	\$ 8.10	\$4.10
3 kW	3 * 149 = 474 kWh * \$0.0272 =	\$12.15	\$6.15
4 kW	4 * 149 = 632 kWh * \$0.0272 =	\$16.20	\$8.20
5 kW	5 * 149 = 790 kWh * \$0.0272 =	\$20.25	\$10.25
6 kW	6 * 149 = 948 kWh * \$0.0272 =	\$24.30	\$12.30
7 kW	7 * 149 = 1,106 kWh * \$0.0272 =	\$28.35	\$14.35
8 kW	8 * 149 = 1,264 kWh * \$0.0272 =	\$32.40	\$16.40
9 kW	9 * 149 = 1,264 kWh * \$0.0272 =	\$36.45	\$18.45
10 kW	10 * 149 = 1,264 kWh * \$0.0272 =	\$40.50	\$20.50
11 kW	11 * 149 = 1,264 kWh * \$0.0272 =	\$44.55	\$22.55
12 kW	12 * 149 = 1,264 kWh * \$0.0272 =	\$48.60	\$24.60

***Annual Solar Reliability Charge income \$15,361.46**

***Annual Solar Reliability Charge if rates changed \$7,683.78**

Solar Fee Comparison								
CHARGES	SANTA CLARA	Santa Clara Option 1 (Decrease SRC)	Santa Clara Option 2 (Eliminate SRC)	ST. GEORGE	WASHINGTON	HURRICANE	Rocky Mountain Power	Dixie Power
Base Rate	\$20	\$20 (Remains the same)	\$20 (Remains the same)	\$25	\$25	\$30 base \$40 base rate if storage battery is being used	\$1.50 per kWh of installed capacity	\$25
Solar Reliability Charge	\$4.05 per kWh Installed	\$2.05 per kWh Installed	\$0.00 per kWh Installed No SRC	.02328¢ per kWh produced. (First 215 kWh at no charge.)	No Charge	No Charge	June-September .0516¢ per kWh October-May .0446¢ per kWh	.0585 per kWh produced
Excess kWh Credit	.06¢ per kWh (All excess credit is rolled over to following month and remainder paid to customer at the end of year.)	.06¢ per kWh (All excess credit is rolled over to following month and remainder paid to customer at the end of year.)	.06¢ per kWh (All excess credit is rolled over to following month and remainder paid to customer at the end of year.)	.04¢ per kWh	.04¢ per kWh (Credit does not roll over or pay out.)	.04¢ per kWh (Credit is rolled over and remainder paid out at end of year.)	All credits expire at end of annual billing period.	.058¢ per kWh (All excess credit rolls over to following month. Credit expires at end of annual billing period.)
Solar kWh Cap	8 kWh Residential	10-12 kWh Residential	10-12 kWh Residential	3kWh Residential 10 kWh Commercial	Renewable resource installed by customer shall not be greater than 120% of historical max	6kWh Max For city.	25kWh max Residential 2 mWh Commercial	25kWh max Residential 2 MW Commercial

Mayor
Rick Rosenberg

City Manager
Brock Jacobsen



City Council
Denny Drake
Leina Mathis
Ben Shakespeare
Jarett Waite
Christa Hinton

CITY COUNCIL

Meeting Date: June 14, 2023

Agenda Item: 4

Applicant: Santa Clara
City

Requested by: Jim McNulty

Subject: Regulations for Accessory Structures

Description:

City staff would like to have a discussion with the City Council regarding regulations for accessory buildings and garages. A Memo has been attached which outlines the discussion items.

Recommendation:

Attachments: Yes

Cost: N/A

Legal Approval: Yes

Finance Approval: N/A

Budget Approval: N/A

2603 Santa Clara Drive, Santa Clara,
Utah 84765 Phone (435) 673-6712 Fax
(435) 628-7338



TO: Santa Clara City Council
FROM: Jim McNulty, Planning Manager
DATE: June 14, 2023
RE: Regulations for Accessory Structures

City staff would like to have a discussion with the City Council regarding regulations for accessory structures. We would like to discuss the following items:

1. Accessory Structure Height.
2. Accessory Structure Size & Lot Coverage.
3. Accessory Structure Location.
4. Single-Family Residential (R-1-6, Mixed Lot Size, R-1-10, and RA Zones)

This discussion will focus on accessory buildings and detached garages. ADUs will not be discussed as we've recently updated this ordinance (Chapter 17.22).