

5 Ridges Development

Preliminary Water Service Planning Report

December, 2019 (as revised on 3/2020)



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5 Ridges Development

PRELIMINARY WATER SERVICE PLANNING REPORT

December, 2019



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1.0 Introduction

The purpose of this Study is to provide a preliminary evaluation of the ability of the Sun Valley General Improvement District (SVGID) to supply municipal water service to a proposed approximate 1,216 unit residential subdivision called "5 Ridges" and to an adjacent property anticipated to consist of approximately 584 additional units (1,800 units total). Both areas are hereinafter referred to as the Development. The location of the proposed Development in Sun Valley is shown in Figure 1 and the Development layout is shown in Figure 2.

This work was initially undertaken in the summer of 2018 and since then has undergone Development lot layout changes, various alternative evaluations and three draft reports. Several meetings with the Developer and/or Developer's Consultants were held during the course of this work.

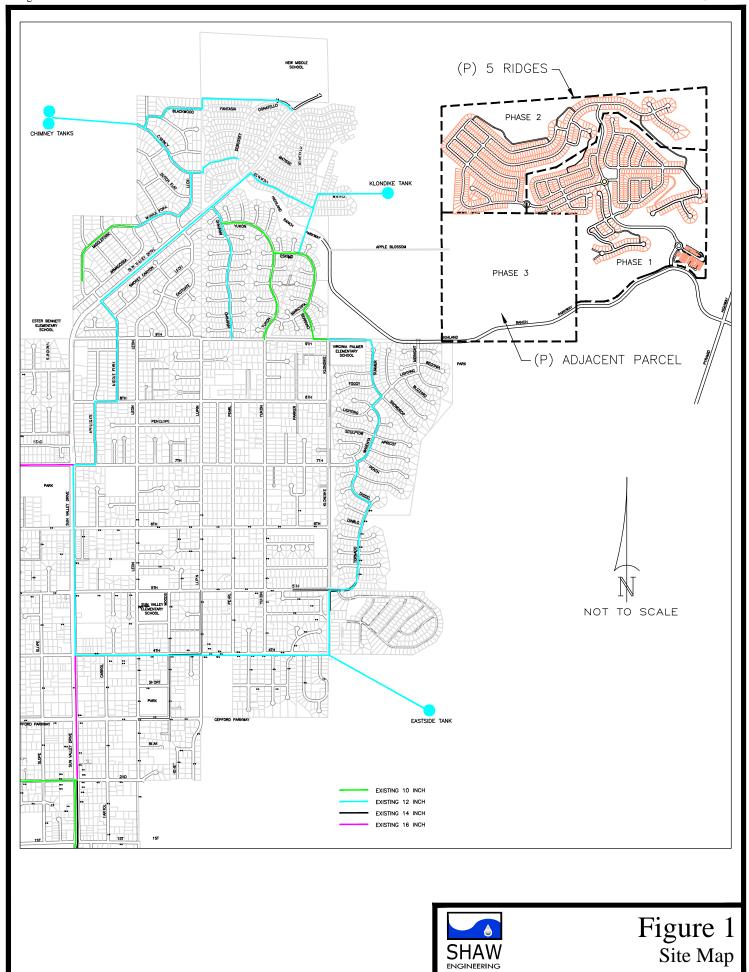
This final Report remains a preliminary planning effort with the primary purpose of providing a reasonable assessment of the ability of SVGID to be able to supply potable water to the Development and identifying the infrastructure envisioned to be required along with the associated project costs. This Report is not intended to be suitable for submission to the Washoe County Health Department for Development approval which would be required during the tentative map process.

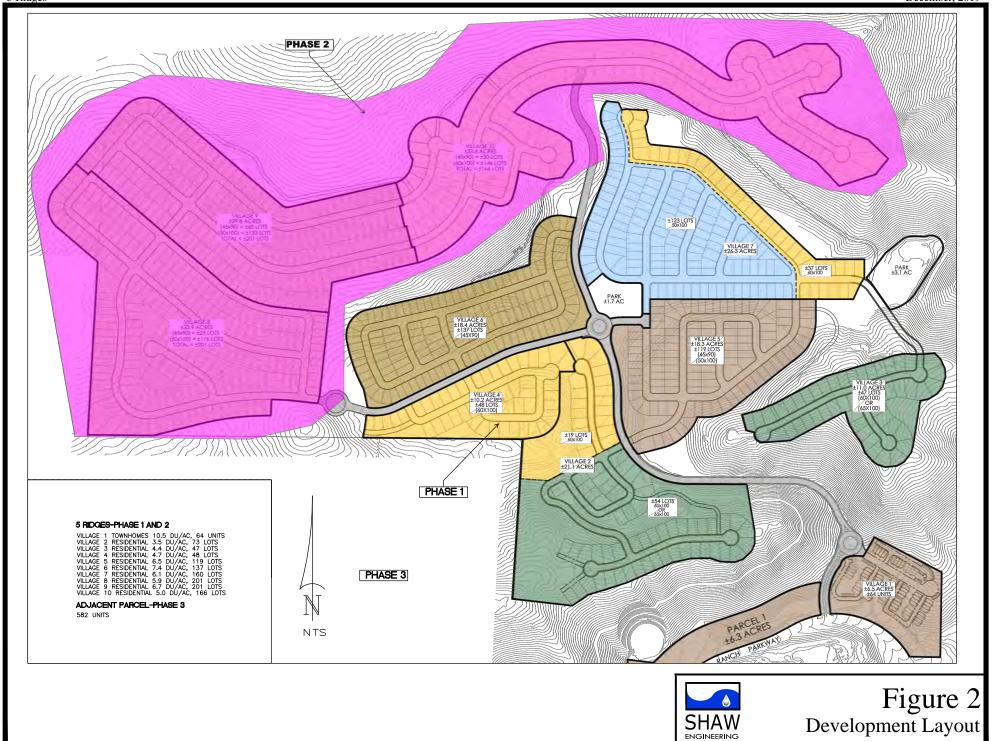
This Study utilized mapping provided by Christy Corporation and Phasing provided by Padovan Engineering basically characterized as follows;

```
Phase 1A (separate tentative map but concurrent with Phase 1B)
       5 Ridges Village 2
                            73 Residential Homes
       5 Ridges Village 3
                            47 Residential Homes
       5 Ridges Village 4
                            48 Residential Homes
       5 Ridges Village 6
                            137 Residential Homes
       5 Ridges Village 7
                            160 Residential Homes + 2 Parks
Phase 1B (separate tentative map but concurrent with Phase 1A)
       5 Ridges Village 1
                            64 Townhomes
       5 Ridges Village 5
                            119 Residential Homes
Phase 2
       5 Ridges Village 8
                            201 Residential Homes
       5 Ridges Village 9
                            201 Residential Homes
       5 Ridges-Village 10
                           166 Residential Homes
Phase 3
       Adjacent Property
                            582 Units
```

The 5 Ridges total count is 1,216 customers and includes 2 parks and when added to the adjacent property yields a total count of 1,800 customers.

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The Development currently lies between and outside of the existing Truckee Meadows Water Authority (TMWA) and SVGID service areas. In discussions between TMWA, SVGID and the Development, TMWA indicated that they would be supportive of SVGID serving the Development if that was the more practical and economical solution. TMWA offered to investigate providing additional source capacity to SVGID if requested. SVGID would, at a minimum, have to modify their existing wholesale service agreement with TMWA to expand SVGID's service area and the Development would have to apply for annexation into SVGID's service area.

2.0 Givens and General Assumptions

All of the existing water system information was obtained from the *SVGID Water System Master Plan Update*, September 2016, (WMP) which was prepared by Shaw Engineering. The following was utilized for the existing SVGID water system based upon the WMP;

Minimum Month Demand 140 GPD/Customer (PF=0.46)

Average Day Demand 262 Gallons per Day (GPD)/Customer

Maximum Day Demand 603 GPD/Customer (PF=2.3) Peak Hour Demand 1,025 GPD/Customer (PF=3.6)

SVGID's current existing service area buildout customers, current will serves and the proposed Development are summarized below;

SVGID Service Area Buildout		6,950 Customers ¹
Development Phase 1A		467 Customers (includes 2 parks)
Development Phase 1B		183 Customers
Development Phase 2		568 Customers
Development Phase 3		582 Customers
To	tal	8,750 Customers

(1) Buildout Customers includes full buildout of Ladera and Sun Mesa.

The Development has identified a fire flow requirement of 1,500 GPM for a 2 hour duration. In addition, two parks have been identified and will be designed by the Development to have minimal landscaping and water usage.

This Report follows current SVGID planning and design criteria which is consistent with the Nevada Administrative Code (NAC) and the WMP. In addition, transmission main redundancy is required to serve in excess of 250 Customers.

The street surface elevations in the 5 Ridges portion of the Development varies from approximately 4630 to 4970 feet as shown on the preliminary drawings provided by Christy Corporation provided on October 18, 2019. The ground surface elevations for the adjacent parcel vary from 4800 to 4920 per the topographic drawings provided by Christy Corporation on October 25, 2019. The drawings were utilized in the preparation of this

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preliminary plan and in the hydraulic model that was developed. The surface elevations are further broken down by Phases to correspond to SVGID's existing hydraulic pressure zones and are shown in Table 1 below.

	Unit Counts and F	TABLE 1 Flows by Hydraulic Press	sure Zones		
Phase	Unit	Elevation = 4800- 4900 (±) (Chocolate Zone)	Elevation = 4900- 5000 (±) (Sidehill/Chimney Zone)		
	Village 2	73 Houses			
	Village 3	47 Houses			
1A	Village 4	48 Houses			
	Village 6	137 Houses			
	Village 7	160 Houses + 2 parks			
1B	Village 1 ¹	64 Townhomes			
16	Village 5	119 Houses			
	Village 8		201 Houses		
2	Village 9		201 Houses		
	Village 10		166 Houses		
3	Adjacent Property	582			
	Total	1,232 Customers MDD = 516 GPM PHD = 877 GPM	568 Customers MDD = 238 GPM PHD = 404 GPM		
		1,800 Customers MDD = 754 GPM PHD = 1,281 GPM			

Footnotes

1. Surface elevations <4800 and Customer Service will require pressure reducing valve.

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Based upon the above presented information, the total approximate flows utilized in this Plan are summarized in Table 2 on the following page.

TABLE 2 Total System Wide Flows							
Number	Minimum Month Demand	Average Day Demand	Maximum Day Demand	Peak Hour Demand			
8,750 Customers ¹	851 GPM	1,592 GPM	3,664 GPM	6,228 GPM			

1. SVGID is 6,950 (5,831 in Chocolate/Central/Southern + 762 in Sidehill/Chimney + 357 in Boundary) plus Development is 1,800 (1,232 in Chocolate and 568 in Sidehill/Chimney).

3.0 Water Infrastructure Requirements

3.1 General

Several alternatives were evaluated over the past year and a half as part of this analysis. The following sections justify the improvements required and identify the recommended alternative including a phased approach for construction. At the request of the Development, new offsite water improvements were located within existing public rights of way whenever possible.

3.2 Source Capacity

SVGID currently has a total source capacity available during all times of the year of up to 4,700 GPM from two TMWA wholesale points, Sullivan Lane (3,600 GPM) and Raleigh Heights (1,100 GPM).

With the largest wholesale point off line (Sullivan Lane), which would be considered an emergency event (enacted water restrictions to minimum month demand), SVGID would have the ability to provide a total gravity source capacity of 1,100 GPM (Raleigh Heights via Boundary Tank) (WMP, Section 3.2.1) from the remaining wholesale point.

Since the existing source capacity (4,700 GPM maximum day and 1,100 GPM minimum month during an emergency) exceeds the proposed Maximum Day Demand (3,664 GPM from Table 2) and the Minimum Month Demand during an emergency (851 GPM from Table 2), the SVGID system currently has the source capacity available to meet the proposed Development Demands.

3.3 Pumping Stations

The majority of SVGID system demands are met by pumping to storage. The Development will lie in two pressure zones which are configured to correspond to the existing SVGID Chocolate (served by the Main Pump Station) and Sidehill/Chimney (served by the Main and Juniper Terrace Pump Stations) pressure zones.

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Chocolate Pressure Zone.

The Main Pump Station serves four tanks located in the Chocolate Pressure Zone and the Juniper Terrace Tank and Pump Station. The existing Klondike Tank is located closest to the Development and will be the most impacted by the Development demands. The Klondike Tank is the tank located furthest from the Main Pump Station and as a result is the last tank to fill. The Klondike Tank is also the controlling tank for the Main Pump Station. Hydraulic modeling of the existing system, and past operational experience, has demonstrated that this tank can have difficulty maintaining adequate tank levels during maximum demands. This issue will be exacerbated by the Development.

Initially a new "Klondike Pump Station" was considered to address this issue however there was a general reluctance to add another pump station to the system for a variety of reasons. Additional alternatives were then considered and investigated further. Ultimately, improvements to the existing Main Pump Station itself as described herein and upsizing and rehabilitating the transmission mains to the Klondike Tank (as described later in this Report) were selected in lieu of adding another pump station to the system.

Presently the Main Pump Station is comprised of five pumps of varying capacities. It is recommended that the five pumps be replaced with three variable frequency driven pumps so that when two pumps are running together the total flow rate is 3,600 GPM (1,800 GPM/pump) at 100 percent speed. The 3,600 GPM capacity matches the capacity of the Sullivan Wholesale Point. The third pump would act as a standby. These pump modification will also require that some of the existing piping, electrical and building systems be modified as well.

Sidehill/Chimney Pressure Zone.

The Juniper Terrace Pump Station generally serves the eastern larger portion of this Zone and the Raleigh Heights Wholesale point serves the smaller western portion. The Juniper Terrace Pump Station was recently replaced with a new duplex facility capable of pumping 600 GPM. The facility will have to be upsized to 700 GPM (762 Existing SVGID + School (60 GPM) + 568 Development) to meet the maximum day demands. It is envisioned that the two pumps and motor starters will have to be replaced along with the some minor piping modifications and the addition of dedicated standby power.

3.4 Storage Tanks

Chocolate Pressure Zone.

The existing Chocolate Zone storage, which includes the Klondike Tank, has approximately 1.77 MG of excess storage capacity available (WMP, Table 4.5 revised for Klondike HWL of 4993) which is equivalent to approximately 2,800 customers. The Chocolate Zone storage also has adequate fire storage available capable of 3,000 GPM

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for 3 hours. No additional storage would therefore be required in the Chocolate Zone to serve the Development which requires storage for 1,800 customers.

Sidehill/Chimney Pressure Zone.

The Sidehill/Chimney Zone storage, with the addition of the new middle school and related fire storage requirements, has 0.15 MG of excess capacity currently available (WMP Table 4.5 as revised for the addition of the new school). This is equivalent to approximately 239 customers. The Development will add approximately 568 customers to this zone and therefore an additional 200,000 gallons is needed. In order to distribute storage equally in this Zone, it is recommended that this additional storage be located at the existing Sidehill Tank site. The existing 0.29 MG Sidehill Tank should be replaced with a new 0.50 MG gallon storage tank. The existing 0.46 acres (150 ft x 135 ft) BLM easement for the site itself may have to be expanded to accommodate this larger tank. Consideration should be given by SVGID to upsize this tank to 0.70 MG which will provide additional capacity to this Zone for future individual customers.

3.5 Transmission/Distribution

Chocolate Pressure Zone

Phase 1 T Mains #1/Klondike Vault Improvements. The last reach of the existing 12 inch PVC T Main that serves the Klondike Tank requires replacement with a 16 inch PVC T Main (2,000 ft). In addition, the 8 inch altitude valve vault piping at the Klondike Tank will have to be increased to 12 inch These improvements reduces the headloss in the T Mains serving the Klondike Tank and will therefore increase the Main Pump Station flow rate into the Klondike Tank. The alignments will follow the existing utility right of way. Figure 3 illustrates these improvements.

Phase 1 T Main #2. A new 16 inch DIP (ductile iron pipe) T Main from the existing Klondike Tank to the edge of Phase 2 Village 8 which also corresponds with an anticipated future connection to serve Phase 3 (1,300 ft). This alignment was selected by the Developer and will require deep cuts to maintain a positive downward slope on the T Main leaving the tank and to construct an access road over the pipe to minimize the pipe bury depth. At the edge of Phase 2 Village 8, the T Main would reduce to a 12 inch DIP and continues to travel through Phase 2 Village 8 to Phase 1 Village 4 (2,300 ft). Figure 3 illustrates this improvement.

<u>Phase 1 T Main #3</u>. This new PVC T Main is required for redundancy and includes a 12 inch main that travels from Summer Street east along Highland Ranch Parkway to Phase 1 Village 1 (8,100 ft). This alignment is within public right of way and is shown in Figure 3.

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Sidehill/Chimney Pressure Zone

Phase 2 T Main #4A and #4B. T Main #4A upsizes the existing 12 inch to a 14 inch PVC between the existing Chimney Tanks and Barrel Springs Road within existing BLM ROW. T Main #4B is a 12 inch DIP that extends from Sun Valley Boulevard to Village 9 (4,400 LF) that lies partially on private property and final route selection shall be determined during engineering design. See Figure 4.

<u>Phase 2 T Main #5</u>. This is a redundant 12 inch PVC T main that extends from Rembrandt Drive to Village 9 (2,100 feet). The alignment is on private property and the final route selection shall be determined during engineering design. See Figure 4.

<u>Phase 2 Tangberg PRV and Distribution Main.</u> In order to provide source redundancy to the Development and to also satisfy the additional demands that the Sidehill/Chimney Zone will now experience on the west side, the need to bring wholesale water directly from the Boundary Zone into the east side of the Sidehill/Chimney zone is needed. This is accomplished by construction a new PRV station at the existing West 7th Pump Station location and running an 8 inch PVC main east along 7th Street and then north on Tangberg to Mineral (3,500 feet). This alignment is located in public right of way and is shown in Figure 5.

<u>Phase 3 T Main #6.</u> There are older 14 inch and 16 inch asbestos cement T-Mains that lie in Sun Valley Boulevard between the Main Pump Station and 4th Street that serve the Chocolate Zone. These mains are important for system reliability and will be relied upon even more with the addition of the Development. As such it is recommended that these older mains be replaced with 16 inch DI pipe.

<u>Isolation Valves.</u> Isolation valves need to be inserted in at least three locations into the existing 12 inch T Main that is in Sun Valley Boulevard in order to increase system reliability and redundancy.

<u>Other</u>

Onsite Transmission/Distribution. Main sizes within the Development are shown in Appendix A. One on site pressure reducing station will be required between the upper Sidehill/Chimney Zone and the lower Chocolate Zone for added redundancy.

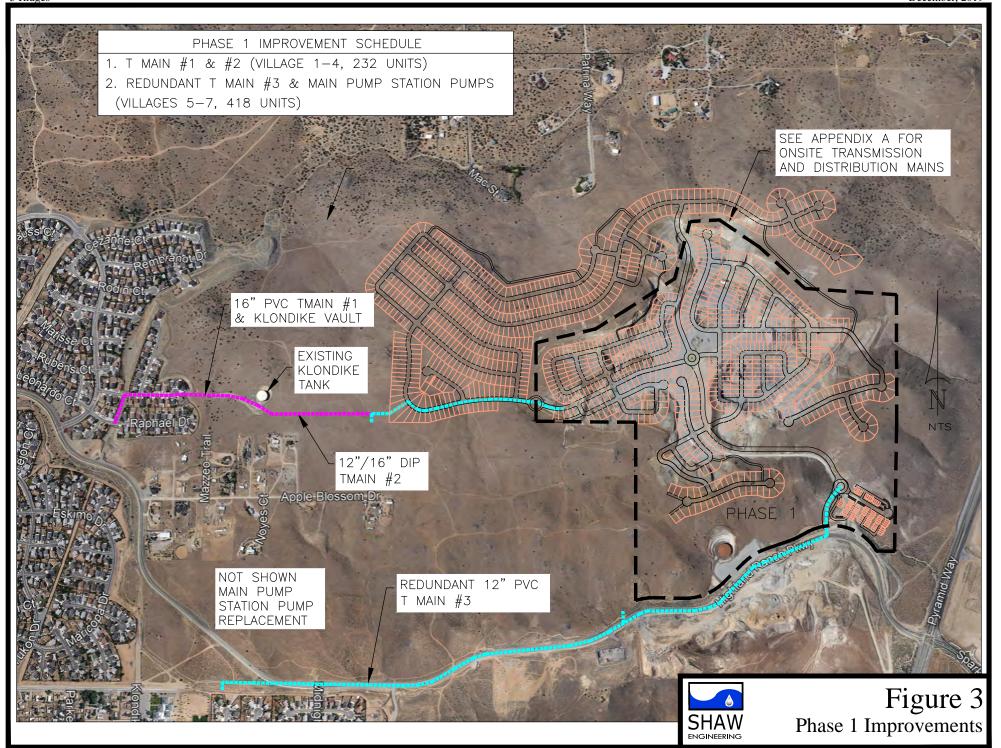
3.6 Estimated Project Cost

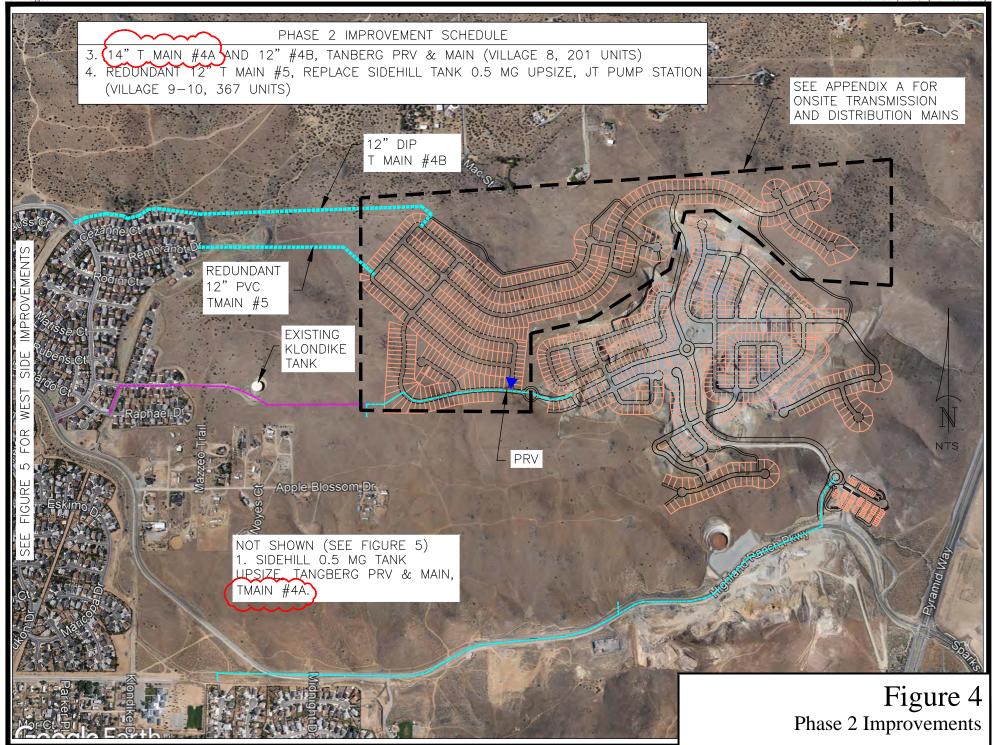
The estimated preliminary total project cost for the required "offsite" improvements for all phases including construction, engineering, construction administration and contingency is \$12.0 million (\$6,667/lot). The breakdown for the costs is shown in Table 3 on the following page. Figures 3 through 6, pages 11 through 14, illustrate the improvements.

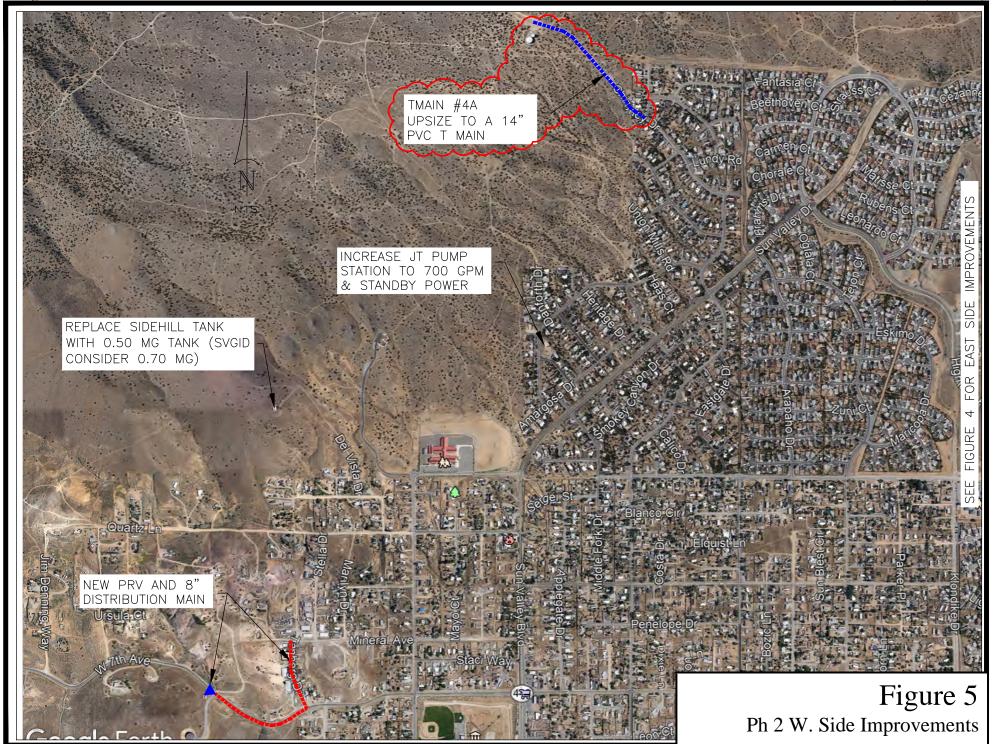
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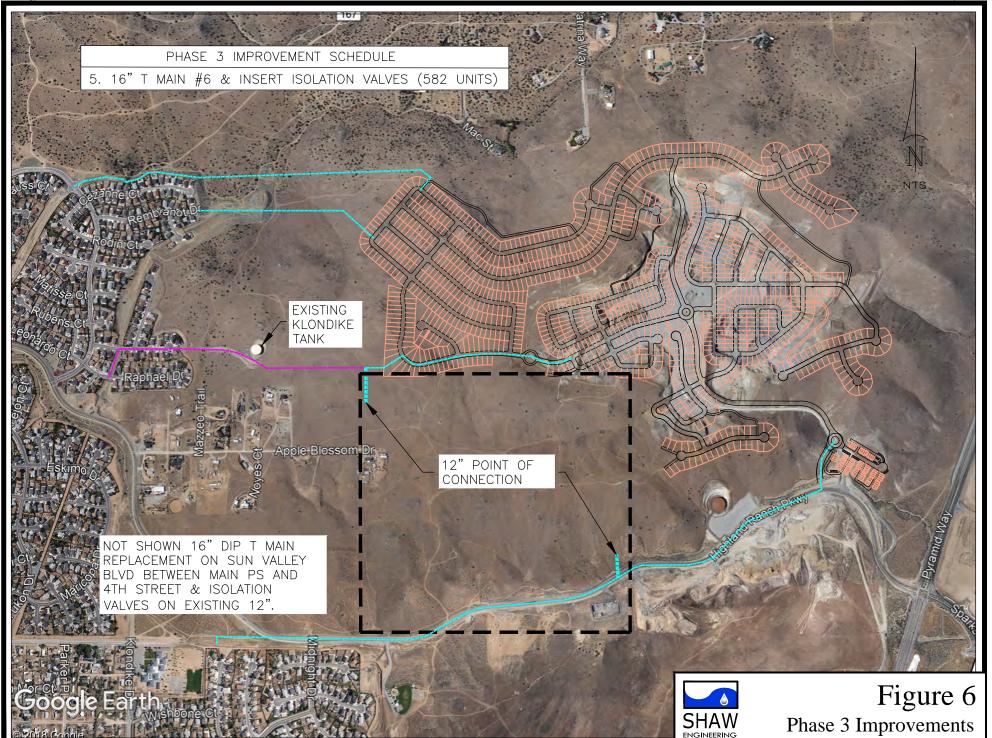
	Project Phasing and	TABLE Estimated I		Project Cos	te			
Phase & Units Served	Infrastructure Description	Quantity	Unit Price		otal			
Phase 1 Villages	16 inch PVC T Main #1/Klondike Vault Pipe Upsize	2,000 LF	\$160/LF	\$320,000				
1-4 232 Units	16 inch DIP T Main #2	1,300 LF	\$190/LF	\$247,000	\$912,000			
(Figure 3)	12 inch DIP T Main #2	2,300 LF	\$150/LF	\$345,000				
Phase 1 Villages	12 inch PVC T Main #3	8,100 LF	\$120/LF	\$972,000				
5-7 418 Units (Figure 3)	Main Pump Station Pump Replacement	1	\$900,000	\$900,000	\$1,872,000			
Phase 2	14 inch PVC T Main #4A	1,700 LF	\$140/LF	\$238,000				
Village 8 201 Units	12 inch DIP T Main #4B	4,400 LF	\$150/LF	\$660,000	\$1,303,000			
(Figures 4 & 5)	Tangberg PRV	1	\$125,000	\$125,000	. , ,			
ω 3)	Tangberg 8 inch main	3,500 LF	\$80/LF	\$280,000				
Phase 2 Village 9	12 inch PVC T Main #5	2,100 LF	\$120/LF	\$252,000	\$1,452,000			
and 10 367 Units	JP Pump Station 700 GPM/Standby Power	1	\$400,000	\$400,000				
(Figures 4 & 5)	Sidehill Tank Demo/ New 0.50 MG Tank	1	\$800,000	\$800,000				
Phase 3 582 Units	16 inch DIP T Main #6 Replacement	5,000	\$250	\$1,250,000	\$1,400,000			
(Figure 6)	Isolation Valves	1	\$150,000	\$150,000	Ψ1,100,000			
See App A	Onsite Transmission/ Distribution Mains/PRV	n/a	n/a	n/a	n/a			
	Subtotal							
	Contractor OH & Profit, 15%							
	Total Estimated Construction							
	Design, Permitting	g and Constru	ction Admini	stration, 20%	\$1,596,000			
			Conti	ngency, 30%	\$2,394,000			
	Tota	l Estimated	Preliminary	Project Cost	\$11,970,000			

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4.0 Additional Comments and Considerations

The following additional comments and considerations should be noted;

- 1. This Report utilized street elevation and lot layouts provided by the Development. Any changes to these two items will require revisions to the hydraulic model and could impact the required infrastructure described herein.
- 2. Successful modification to the TMWA Wholesale Agreement is necessary to expand the existing SVGID Service Area. Although there is presently source capacity currently available, SVGID may want to consider modifying the Wholesale Agreement for additional capacity.
- 3. Successful annexation into SVGID Service Area is necessary.
- 4. Location of the T Mains will have to be investigated further and positively confirmed. The ability and related cost to acquire the land, right of way and/or easements have not been investigated in this Report.
- 5. No consideration was given to environmental permitting, required mitigation or the related costs.
- 6. The 1,500 GPM, 2 hour duration fire flow presented by the Development will need to be confirmed by the Fire Authority. Changes in the required fire flows could impact the required infrastructure described herein.
- 7. Water demand projections are based upon past historical SVGID Customer water usage which is mainly related to residential and neighborhood commercial type of use which is believed to be consistent with this Development.
- 8. Any costs associated with onsite transmission mains, distribution mains and related distribution system appurtenances (including pressure reducing stations, fire hydrants, valves, meters and services), connection fees and water rights dedications and any other fees, unless specifically indicated otherwise, have not been included in this Report.
- 9. Opinions on construction costs provided herein are made on the basis of experience and qualifications of Shaw Engineering. Furthermore, the estimates are based upon current prices and appropriate escalation or de-escalation factors need to be considered as time passes. Since Shaw Engineering has no control over the cost of labor, materials, equipment or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, Owner is cautioned that the prices presented cannot and do not guarantee that the actual construction bid will not vary from opinions of construction cost presented herein. If Owner wishes greater assurance as to construction cost estimates, Owner should consider employing an independent cost estimator.

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Appendix A – Hydraulic Modeling Map & Results

Hydraulic Model Map

Hydraulic Model Results

Residual Pressures (Pumps Off)

Maximum Day + 1,500 GPM Fire Flow

Maximum Day

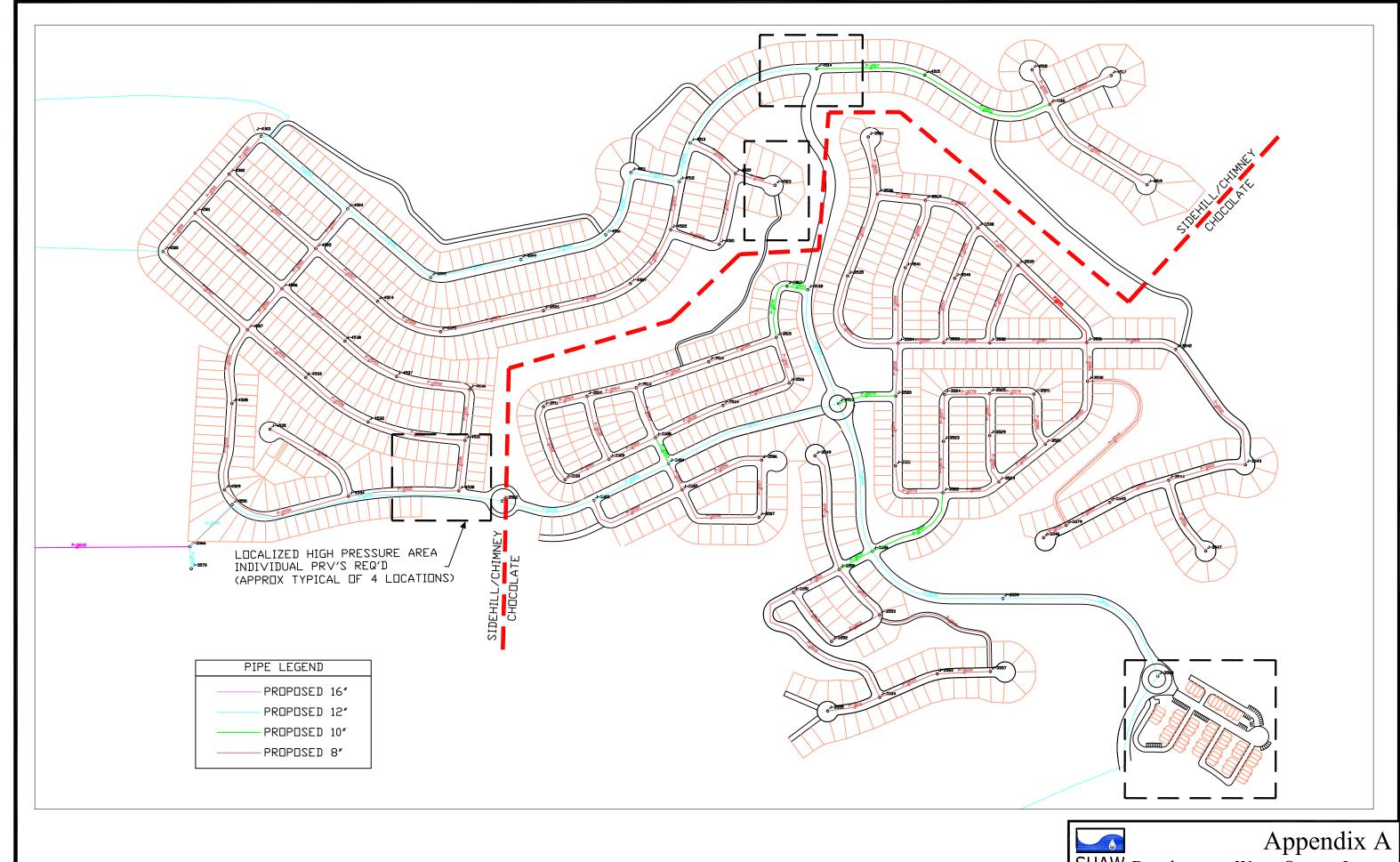
Peak Hour

Zero Demand

Shaw Engineering Appendix A

Hydraulic Model Map

Shaw Engineering Appendix A



SHAW Development Water System Layout

Residual Pressures Maximum Day + 1,500 GPM Fire Flow

Shaw Engineering Appendix A

Scenario Summary Report Scenario: Existing SVGID System + 5 Ridges

Scenario Summary									
ID		64							
Label		Existing SVGID System + 5 Ridges							
Notes									
Active Topology		Base-Active Topology							
Physical		Existing Syste	em						
Demand		8750 Custom	ers Maximum Day Demand						
Initial Settings		Existing Syste	em Pumps OFF Tanks at 50%						
Operational		Base							
Age		Base-Age Alte	ernative						
Constituent		Base-Constitu	ient						
Trace		Base-Trace A	Base-Trace Alternative						
Fire Flow		All Nodes							
Energy Cost		Base-Energy Cost							
Transient		Base Transient							
Pressure Dependent Dema	ind	Base Pressure	e Dependent Demand						
Failure History		Base Failure History							
SCADA		Base SCADA							
User Data Extensions		Base-User Da	nta						
Steady State/EPS Solver C Options	alculation	Proposed SVGID System							
Transient Solver Calculation	n Options	Base Calculat	ion Options						
Hydraulic Summary									
Time Analysis Type	Stead	dy State	Use simple controls during steady state?	True					
Friction Method	119	Hazen- Williams	Is EPS Snapshot?	False					
Accuracy		0.001	Start Time	12:00:00 AM					
Trials		40	Calculation Type	Fire Flow					

Scenario: Existing SVGID System + 5 Ridges Current Time Step: 0.000 h

FlexTable: Tank Table

Label	Zone	Elevation (Base) (ft)	Elevation (Minimum) (ft)	Elevation (Initial) (ft)	Elevation (Maximum) (ft)	Diameter (ft)	Volume Full (Calculated) (gal)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
Eastside	Zone-1-2-3	4,963.00	4,963.00	4,978.00	4,992.92	90.00	1,423,863.12	811	4,978.00
Chocolate	Zone-1-2-3	4,964.25	4,964.25	4,978.00	4,992.92	74.00	922,386.13	394	4,978.00
Klondike	Zone-1-2-3	4,968.00	4,968.00	4,978.00	4,992.92	107.00	1,676,243.96	1,057	4,978.00
Juniper Terr. Tank	Zone-1-2-3	4,952.29	4,952.29	4,974.94	4,974.94	60.00	479,062.68	0	4,974.94
Sidehill	Zone-4 (Sidehill/Chimney)	5,104.00	5,104.00	5,119.34	5,134.41	40.00	285,863.06	83	5,119.34
Chimney 1	Zone-4 (Sidehill/Chimney)	5,104.00	5,104.00	5,119.34	5,135.09	40.00	292,255.26	239	5,119.34
Westside Tank	Zone-3 (Chocolate)	4,961,90	4,961.90	4,978.00	4,992.92	90.00	1,476,211.03	696	4,978.00
Boundary Tank	Zone 6 (Boundary)	5,279.50	5,279.50	5,297.50	5,315.50	80.00	1,353,642.89	150	5,297.50
Chimney 2	Zone-4 (Sidehill/Chimney)	5,104.00	5,104.00	5,119.34	5,135.09	75.00	1,027,459.90	236	5,119.34



S:\Projects\STU\SVGID\SVGID, Quarry Development, 18045.00W\2019 11 Nov Report\Watercadd\2019 SVGID School + 356 Ladera + 5 Ridges Water Model.wtg

Scenario: Existing SVGID System + 5 Ridges Current Time Step: 0.000 h Fire Flow Node FlexTable: Fire Flow Report

		1				Junction		
						w/		
				Pressure	Pressure	Minimum	Velocity	D:- */
		Satisfies	Fire Flow	(Calculated	(Calculated	Pressure	of	Pipe w/
Label	Zone	Fire Flow	(Available)	Residual)	Zone	(Zone @	Maximum	Maximum
		Constraints?	(gpm)	(psi)	Lower	Total	Pipe (ft/s)	Velocity
				(1)	Limit) (psi)	Flow	' ` '	
						Needed)		
J-1001	Zone-1 (Southern)	True	4,321	31	20	J-1015	44.12	P-1001
J-1001 J-1002	Zone-1 (Southern)	True	781	21	20	J-1006	9.31	P-1001
J-1002 J-1003	Zone-1 (Southern)	True	781	21	20	J-1006	9.31	P-1001
J-1003 J-1004	Zone-1 (Southern)	True	711	21	20	J-1006	9.00	P-2196
		True	690	20	21	J-1006	9.00	P-2196
J-1005	Zone-1 (Southern)		574	20	21	J-1007	8.96	P-2196
J-1006	Zone-1 (Southern)	True	558	20	21	J-1007	8.96	P-2196
J-1007	Zone-1 (Southern)	True		31	20	J-1000	20.66	P-1001
J-1008	Zone-1 (Southern)	True	2,298 977	24	20	J-1013	10.81	P-2196
J-1009	Zone-1 (Southern)	True	469	20	40	J-1014	12.05	P-1014
J-1010	Zone-1 (Southern)	False	943	27	20	J-1014	10.80	P-2196
J-1011	Zone-1 (Southern)	True	938	26	20	J-1014	10.80	P-2196
J-1012	Zone-1 (Southern)	True				J-1014	10.80	P-2196
J-1013	Zone-1 (Southern)	True	936	28 20	20 28	J-1014 J-1015	10,80	P-2196
J-1014	Zone-1 (Southern)	True	892	20	28 25	J-1015 J-1014	10.76	P-2196
J-1015	Zone-1 (Southern)	True	1,039	32		J-1014 J-1015	14.01	P-1001
J-1016	Zone-1 (Southern)	True	1,726		20	J-1015 J-1015	13.33	P-1001 P-1001
J-1017	Zone-1 (Southern)	True	1,846	20	22			P-1001 P-2053
J-1018	Zone-1 (Southern)	True	1,682	21	20	J-1015	12.07 16.16	P-2053 P-1021
J-1019	Zone-1 (Southern)	True	1,423	20	29	J-1015		P-1021 P-2053
J-1020	Zone-1 (Southern)	True	1,730	24	20	J-1015	14.19	
J-1021	Zone-1 (Southern)	True	1,185	20	43	J-1015	13.46	P-1023 P-1024
J-1022	Zone-1 (Southern)	True	1,232	20	41	J-1015	13.99	P-3009
J-2001	Zone-1 (Southern)	True	1,804	20	44	J-1015	21.19	
J-2002	Zone-2 (Central)	True	1,268	20	20	J-2043	15.10	P-2001
J-2003	Zone-2 (Central)	True	1,172	20	27	J-2043	14.02	P-2001
J-2004	Zone-2 (Central)	True	948	20	34	J-2043	11.47	P-2001
J-2005	Zone-2 (Central)	True	948	24	20	J-2043	11.47	P-2001
J-2006	Zone-2 (Central)	True	887	20	27	J-2043	10.79	P-2001
J-2007	Zone-2 (Central)	True	948	24	20	J-2043	11.47	P-2001
J-2008	Zone-2 (Central)	True	4,200	74	20	J-2043	33.85	P-3007
J-2009	Zone-2 (Central)	True	2,892	20	24	J-2043	73.98	P-2009
J-2010	Zone-2 (Central)	False	452	20	35	J-2043	11.68	P-2009
J-2011	Zone-2 (Central)	True	3,612	72	20	J-2043	27.19	P-3007
J-2012	Zone-2 (Central)	True	2,196	20	27	J-2043	13.77	P-3007
J-2013	Zone-2 (Central)	True	2,441	45	20	J-2043	12.06	P-2196
J-2014	Zone-2 (Central)	True	2,450	20	20	J-2043	11,59	P-2196
J-2015	Zone-2 (Central)	True	1,911	20	31	J-2043	14.36	P-2179
J-2016	Zone-2 (Central)	True	1,400	66	20	J-2043	11.10	P-2196
J-2017	Zone-2 (Central)	True	1,184	20	24	J-2043	13,52	P-2017
J-2018	Zone-2 (Central)	True	1,764	31	20	J-2043	11.32	P-2196
J-2019	Zone-2 (Central)	True	1,772	49	20	J-2043	11.36	P-2196
J-2020	Zone-2 (Central)	True	1,621	50	20	J-2043	11.24	P-2196
J-2021	Zone-2 (Central)	True	919	50	20	J-2025	10.78	P-2196
J-2022	Zone-2 (Central)	True	920	20	20	J-2025	10.78	P-2196
J-2023	Zone-2 (Central)	True	712	49	20	J-2025	10.63	P-2196
J-2024	Zone-2 (Central)	True	596	46	20	J-2025	10,56	P-2196
J-2025	Zone-2 (Central)	False	468	20	33	J-2043	10.50	P-2196
J-2026	Zone-2 (Central)	True	596	41	20	J-2025	10.56	P-2196
J-2027	Zone-2 (Central)	True	1,026	48	20	J-2025	10.90	P-2196
J-2028	Zone-2 (Central)	True	1,111	43	20	J-2025	10.97	P-2196
J-2029	Zone-2 (Central)	True	1,058	31	20	J-2025	10.93	P-2196
J-2030	Zone-2 (Central)	True	1,074	24	20	J-2025	10,95	P-2196
J-2031	Zone-2 (Central)	True	1,187	50	20	J-2043	11.00	P-2196
J-2032	Zone-2 (Central)	True	1,828	26	20	J-2043	11.31	P-2196
J-2033	Zone-2 (Central)	True	1,376	39	20	J-2043	11.05	P-2196
J-2034	Zone-2 (Central)	True	1,616	31	20	J-2043	11.23	P-2038
J-2035	Zone-2 (Central)	True	1,711	35	20	J-2043	11.10	P-2196
J-2036	Zone-2 (Central)	True	2,018	30	20	J-2043	11.37	P-2196
J-2037	Zone-2 (Central)	True	1,863	27	20	J-2043	11.32	P-2196
J-2038	Zone-2 (Central)	True	771	37	20	J-2042	10.65	P-2196
J-2039	Zone-2 (Central)	True	681	42	20	J-2043	10.65	P-2196
J-2040	Zone-2 (Central)	True	572	33	20	J-2043	10.58	P-2196
	Zone-2 (Central)	True	565	20	20	J-2043	10.57	P-2196
J-2041	Zone-2 (Central)	True	608	20	33	J-2043	10.55	P-2196
J-2041 J-2042				20	32	J-2041	10.53	P-2196
J-2041 J-2042 J-2043	Zone-2 (Central)	True	504					
J-2041 J-2042	Zone-2 (Central) Zone-2 (Central)	True	3,511	20	26	J-2043	19.77	P-3007
J-2041 J-2042 J-2043	Zone-2 (Central) Zone-2 (Central) Zone-2 (Central)	True True	3,511 1,400	20 20	26 33	J-2043 J-2043	19.77 15.91	P-3007 P-2050
J-2041 J-2042 J-2043 J-2044	Zone-2 (Central) Zone-2 (Central)	True	3,511	20	26	J-2043	19.77	P-3007

1	l 7 0 (O11)	1 T ara 1	4 200	no I	33 J-2043	15.12 P-2053
J-2048 J-2049	Zone-2 (Central) Zone-2 (Central)	True True	1,320 2,702	20 35	33 J-2043 20 J-2043	15.90 P-2196
J-2050	Zone-2 (Central)	True	2,016	42	20 J-2043	14.58 P-2196
J-2051	Zone-2 (Central)	True	1,913	42	20 J-2043	22.00 P-2057
J-2052	Zone-2 (Central) Zone-2 (Central)	True True	1,189 933	31 28	20 J-2043 20 J-2043	13.78 P-2057 11.98 P-2196
J-2053 J-2054	Zone-2 (Central)	True	864	20	27 J-2043	11.83 P-2196
J-2055	Zone-2 (Central)	True	801	20	27 J-2043	11.70 P-2196
J-2056	Zone-2 (Central)	True	783	20 24	34 J-2043 20 J-2043	11.67 P-2196 16.77 P-2196
J-2057 J-2058	Zone-2 (Central) Zone-2 (Central)	True True	2,920 3,377	20	20 J-2043 21 J-2043	17.66 P-2196
J-2059	Zone-2 (Central)	True	3,329	20	25 J-2043	18.19 P-2065
J-2060	Zone-2 (Central)	True	2,601	20	24 J-2043 30 J-2043	19.57 P-2066 17.08 P-2066
J-2061 J-2062	Zone-2 (Central) Zone-2 (Central)	True True	2,452 3,307	20 20	24 J-2043	25.21 P-2069
J-2063	Zone-2 (Central)	True	2,669	31	20 J-2043	16.34 P-2196
J-2064	Zone-2 (Central)	True	3,341	27	20 J-2043	19.46 P-2114
J-2065 J-2066	Zone-2 (Central) Zone-2 (Central)	True True	3,090 2,725	20 20	26 J-2043 25 J-2043	14.63 P-2196 17.17 P-2074
J-2067	Zone-2 (Central)	True	2,726	20	21 J-2043	18.07 P-2076
J-2068	Zone-2 (Central)	True	2,851	20	28 J-2043	20,34 P-2077
J-2069	Zone-2 (Central)	True True	2,527 2,380	20 26	21 J-2043 20 J-2043	14,68 P-2079 13,93 P-2196
J-2070 J-2071	Zone-2 (Central) Zone-2 (Central)	True	1,356	20	24 J-2043	12.27 P-2196
J-2072	Zone-2 (Central)	True	1,172	20	27 J-2043	13.02 P-2083
J-2073	Zone-2 (Central)	True	1,197	20	22 J-2043	14.23 P-2083 15.07 P-2196
J-2074 J-2075	Zone-2 (Central) Zone-2 (Central)	True True	2,718 2,331	21 20	20 J-2043 31 J-2043	15.33 P-2086
J-2076	Zone-2 (Central)	True	2,511	29	20 J-2043	14.42 P-2196
J-2077	Zone-2 (Central)	True	2,659	20	27 J-2043	15.59 P-2181 16.34 P-2196
J-2078 J-2079	Zone-2 (Central) Zone-2 (Central)	True True	2,877 2,530	20 20	21 J-2043 27 J-2043	16.34 P-2196 15.85 P-2196
J-2079 J-2080	Zone-2 (Central)	True	2,984	22	20 J-2043	16.92 P-2196
J-2081	Zone-2 (Central)	True	2,811	34	20 J-2043	16.38 P-2196
J-2082	Zone-2 (Central)	True	2,360	20 20	25 J-2043 25 J-2043	15.31 P-2093 14.98 P-2196
J-2083 J-2084	Zone-2 (Central) Zone-2 (Central)	True True	2,296 2,163	20	25 J-2043	15.01 P-2098
J-2085	Zone-2 (Central)	True	2,118	20	26 J-2043	14.04 P-2196
J-2086	Zone-2 (Central)	True	2,335	33	20 J-2043 20 J-2043	14.85 P-2196 13.11 P-2196
J-2087 J-2088	Zone-2 (Central) Zone-2 (Central)	True True	1,647 1,635	23 23	20 J-2043 20 J-2043	13.09 P-2196
J-2089	Zone-2 (Central)	True	1,304	20	27 J-2043	12.50 P-2196
J-2090	Zone-2 (Central)	True	1,333	20	23 J-2043	12.57 P-2196 13.88 P-2196
J-2091 J-2092	Zone-2 (Central) Zone-2 (Central)	True True	1,941 1,876	27 24	20 J-2043 20 J-2043	13.77 P-2196
J-2093	Zone-2 (Central)	True	1,897	23	20 J-2043	13,82 P-2196
J-2094	Zone-2 (Central)	True	3,972	20	30 J-2043	30,62 P-2114
J-2095 J-2096	Zone-2 (Central) Zone-2 (Central)	True True	5,000 3,012	27 20	22 J-2043 32 J-2043	35,36 P-2195 19,74 P-2196
J-2097	Zone-2 (Central)	True	3,430	20	20 J-2043	18,95 P-2196
J-2098	Zone-2 (Central)	True	3,596	57	20 J-2043	25,65 P-2119
J-2099	Zone-2 (Central)	True True	3,853 4,961	56 67	20 J-2043 20 J-2043	22.37 P-2121 26.88 P-2121
J-2100 J-2101	Zone-2 (Central) Zone-2 (Central)	True	3,295	37	20 J-2043	18.38 P-2121
J-2102	Zone-2 (Central)	True	2,741	35	20 J-2043	16.40 P-2196
J-2103	Zone-2 (Central)	True	2,408 2,312	30 29	20 J-2043 20 J-2043	15.33 P-2196 14.94 P-2196
J-2104 J-2105	Zone-2 (Central) Zone-2 (Central)	True True	2,064	20	21 J-2043	14.42 P-2196
J-2106	Zone-2 (Central)	True	2,041	20	22 J-2043	14.27 P-2196
J-2107	Zone-2 (Central)	True	1,559	24 20	20 J-2043 33 J-2043	17.90 P-2109 13.16 P-2109
J-2108 J-2109	Zone-2 (Central) Zone-2 (Central)	True True	1,141 1,043	20	33 J-2043	11.98 P-2112
J-2110	Zone-2 (Central)	True	1,224	20	23 J-2043	14.03 P-2112
J-2111	Zone-2 (Central)	True	2,055	53 27	20 J-2043 20 J-2043	17.57 P-2133 16.68 P-2121
J-2112 J-2113	Zone-2 (Central) Zone-2 (Central)	True True	1,797 1,873	27 49	20 J-2043 20 J-2043	16.70 P-2121
J-2114	Zone-2 (Central)	True	2,273	34	20 J-2043	16,77 P-2121
J-2115	Zone-2 (Central)	True	2,455	38	20 J-2043	18,27 P-2141
J-2116 J-2117	Zone-2 (Central) Zone-2 (Central)	True True	2,518 2,072	38 38	20 J-2043 20 J-2043	16.94 P-2121 15.43 P-2196
J-2117 J-2118	Zone-2 (Central)	True	2,409	23	20 J-2043 20 J-2043	16,12 P-2196
J-2119	Zone-2 (Central)	True	2,549	33	20 J-2043	16.16 P-2196
J-2120	Zone-2 (Central)	True True	2,256 1,843	29 20	20 J-2043 23 J-2043	15.13 P-2196 14.02 P-2196
J-2121 J-2122	Zone-2 (Central) Zone-2 (Central)	True	1,739	24	20 J-2043	13.72 P-2196
J-2123	Zone-2 (Central)	True	1,655	46	20 J-2043	16.09 P-2121
J-2124	Zone-2 (Central)	True	1,646	27	20 J-2043 20 J-2043	16,13 P-2121 14,88 P-2121
J-2125 J-2126	Zone-2 (Central) Zone-2 (Central)	True True	1,336 1,532	39 23	20 J-2043 20 J-2043	14,86 P-2121 15,66 P-2121
J-2127	Zone-2 (Central)	True	1,148	27	20 J-2043	14.20 P-2121
J-2128	Zone-2 (Central)	True	903	20	34 J-2043	13.45 P-2121 13.94 P-2121
J-2129 J-2130	Zone-2 (Central) Zone-2 (Central)	True True	1,064 1,004	37 22	20 J-2043 20 J-2043	13.94 P-2121 13.77 P-2121
J-2131	Zone-2 (Central)	True	854	20	32 J-2043	13.32 P-2196
J-2132	Zone-2 (Central)	True	1,449	20	29 J-2043	14.12 P-2196
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1	Zone-2 (Central)	True	1,519	20	21	J-2043	14.29	P-2196
J-2134	Zone-2 (Central)	True	1,810	33	20	J-2043	15.22	P-2162
		1	901	20	34	J-2043	12.56	P-2196
J-2135	Zone-2 (Central)	True	1 1					P-2196
J-2136	Zone-2 (Central)	True	1,857	22	20	J-2043	14.31	
J-2137	Zone-2 (Central)	True	1,467	20	34	J-2043	13.31	P-2196
J-2138	Zone-2 (Central)	True	1,917	20	22	J-2043	14.37	P-2196
J-2139	Zone-2 (Central)	True	1,994	20	23	J-2043	14.53	P-2196
J-2140	Zone-2 (Central)	True	1,498	20	34	J-2043	13.41	P-2196
		True	1,806	22	20	J-2043	14.11	P-2196
J-2141	Zone-2 (Central)						12,82	P-2196
J-2142	Zone-2 (Central)	True	1,284	26	20	J-2043		
J-2143	Zone-2 (Central)	True	1,490	20	20	J-2043	13.25	P-2196
J-2144	Zone-2 (Central)	True	863	20	34	J-2043	12.02	P-2196
J-2145	Zone-2 (Central)	True	4,431	20	21	J-2043	43.24	P-2179
J-2146	Zone-2 (Central)	True	5,000	31	30	J-2043	24.28	P-2180
		True	997	20	34	J-2043	13.07	P-2196
J-2147	Zone-2 (Central)							P-2183
J-2148	Zone-2 (Central)	True	1,188	29	20	J-2043	13.62	
J-2149	Zone-2 (Central)	True	1,311	20	33	J-2043	15.08	P-2109
J-2150	Zone-2 (Central)	True	573	26	20	J-2043	10.58	P-2196
J-2151	Zone-2 (Central)	True	2,137	20	30	J-2043	18.53	P-3022
J-2152	Zone-2 (Central)	True	3,439	20	28	J-2043	39.74	P-3009
		True	2,007	25	20	J-2043	11.77	P-2187
J-2153	Zone-2 (Central)		1 ' 1					
J-2154	Zone-2 (Central)	True	611	22	20	J-2155	15.60	P-2190
J-2155	Zone-2 (Central)	False	449	20	34	J-2154	11.46	P-2191
J-2156	Zone-2 (Central)	False	455	20	34	J-2043	11.63	P-2193
J-2157	Zone-2 (Central)	True	4,925	58	20	J-2043	37,74	P-2196
		False	¬,,,,,	141	5	J-3500	13,16	P-2109
J-3001	Zone Exempt				5		14.51	P-3086
J-3002	Zone Exempt	False	0	141		J-3500		
J-3003	Zone Exempt	False	0	143	5	J-3500	8.84	P-2196
J-3004	Zone Exempt	False	0	136	5	J-3500	8.84	P-2196
J-3005	Zone Exempt	False	lol	136	5	J-3500	8.84	P-2196
J-3006	Zone Exempt	False	ا أ	135	5	J-3500	11.47	P-2001
		1	5,000	88	34	J-3065	14.31	P-3226
J-3007	Zone-3 (Chocolate)	True						
J-3008	Zone-3 (Chocolate)	True	5,000	49	36	J-3065	10.08	P-3011
J-3010	Zone-3 (Chocolate)	True	4,487	20	37	J-3065	24.20	P-3013
J-3011	Zone-3 (Chocolate)	True	3,379	20	37	J-3065	15.65	P-3013
J-3012	Zone-3 (Chocolate)	True	2,925	20	29	J-3065	10.41	P-3013
		True	2,991	20	20	J-3065	9.81	P-3013
J-3013	Zone-3 (Chocolate)			20	20	J-3065	9.65	P-3260
J-3014	Zone-3 (Chocolate)	True	2,671					
J-3015	Zone-3 (Chocolate)	True	2,675	20	20	J-3065	9.70	P-3260
J-3016	Zone-3 (Chocolate)	True	2,803	20	22	J-3065	11.41	P-3260
J-3017	Zone-3 (Chocolate)	True	2,774	20	26	J-3065	11.70	P-3260
J-3018	Zone-3 (Chocolate)	True	3,123	25	20	J-3065	13,94	P-3260
J-3019	Zone-3 (Chocolate)	True	5,000	42	32	J-3065	29,98	P-3269
		True		20	34	J-3065	26,39	P-3024
J-3020	Zone-3 (Chocolate)		4,129					
J-3021	Zone-3 (Chocolate)	True	3,212	20	22	J-3065	16.53	P-3269
J-3022	Zone-3 (Chocolate)	True	2,139	27	20	J-3065	16.36	P-3026
J-3023	Zone-3 (Chocolate)	True	1,704	31	20	J-3065	11.38	P-3026
J-3024	Zone-3 (Chocolate)	True	1,559	25	20	J-3065	12.16	P-3028
J-3025	Zone-3 (Chocolate)	True	1,559	25	20	J-3065	17.73	P-3029
			1,555	37	5	J-3500	8,84	P-2196
J-3026	Zone Exempt	False						P-3033
J-3027	Zone-3 (Chocolate)	True	1,629	31	20	J-3065	11.07	
J-3028	Zone-3 (Chocolate)	True	1,609	36	20	J-3065	12.17	P-3033
J-3029	Zone-3 (Chocolate)	True	1,388	30	20	J-3065	8.84	P-2196
J-3030	Zone-3 (Chocolate)	True	1,286	38	20	J-3065	8.84	P-2196
J-3031	Zone-3 (Chocolate)	True	1,572	44	20	J-3065	9,70	P-3051
			1,483	41	20	J-3165	11.70	P-3051
J-3032	Zone-3 (Chocolate)	True						
J-3033	Zone-3 (Chocolate)	True	762	29	20	J-3165	8.87	P-3038
J-3034	Zone-3 (Chocolate)	True	615	20	20	J-3165	8.84	P-2196
J-3035	Zone Exempt	False	0	141	5	J-3500	17.90	P-2109
J-3036	Zone Exempt	False	lol	143	5	J-3500	8.84	P-2196
J-3037	Zone Exempt	False	Ĭŏl	135	5	J-3500	11.70	P-3051
		False	Ĭŏl	122	5	J-3500	8.87	P-3038
J-3038	Zone Exempt				5	J-3500	8.84	P-2196
J-3039	Zone Exempt	False	0	87			1	
J-3040	Zone Exempt	False	0	92	5	J-3500	8.84	P-2196
J-3041	Zone-3 (Chocolate)	True	5,000	75	28	J-3065	9.57	P-3046
J-3042	Zone-3 (Chocolate)	True	5,000	49	22	J-3065	9.35	P-3050
J-3043	Zone-3 (Chocolate)	True	4,301	47	20	J-3065	35.76	P-3050
				20	32	J-3065	17.90	P-3055
J-3044	Zone-3 (Chocolate)	True	2,513			J-3065	8.84	P-2196
J-3045	Zone-3 (Chocolate)	True	5,000	54	20			
J-3046	Zone-3 (Chocolate)	True	4,687	38	20	J-3065	8.84	P-2196
J-3047	Zone-3 (Chocolate)	True	2,456	20	31	J-3065	15.71	P-3056
J-3048	Zone-3 (Chocolate)	True	4,559	33	20	J-3065	8.84	P-2196
J-3049	Zone-3 (Chocolate)	True	4,446	27	20	J-3065	8.84	P-2196
J-3050	Zone-3 (Chocolate)	True	4,253	20	22	J-3065	8.84	P-2196
					5	J-3500	8.84	P-2196
J-3051	Zone Exempt	False	0	29				
J-3052	Zone Exempt	False	0	22	5	J-3500	8.84	P-2196
J-3053	Zone Exempt	False	0	22	5	J-3500	26.65	P-3085
J-3054	Zone Exempt	False	lol	24	5	J-3500	16.86	P-3086
J-3055	Zone Exempt	False	Ŏ	11	5	J-3500	8.84	P-2196
		False	Ö	14	5	J-3500	15.17	P-3086
J-3056	Zone Exempt							
J-3057	Zone-3 (Chocolate)	True	2,380	20	29	J-3065	17.50	P-3067
J-3058	Zone-3 (Chocolate)	True	3,082	28	20	J-3065	15.57	P-3068
J-3059	Zone-3 (Chocolate)	True	2,280	24	20	J-3065	9,02	P-3070
J-3060	Zone-3 (Chocolate)	True	1,765	27	20	J-3065	8.98	P-3070
J-3061	Zone-3 (Chocolate)	True	1,553	28	20	J-3065	8,84	P-2196
J-3001	Zunc-o (onocolate)	1 """	1,555				1 5,5, 1	

				4	1		المما	D 0400
1,000	Zone-3 (Chocolate)	True	1,480	20 20	20 28	J-3065 J-3065	8.84 13.64	P-2196 P-3074
J-3063	Zone-3 (Chocolate)	True True	1,739 1,101	26	20	J-3065	8.84	P-2196
J-3064 J-3065	Zone-3 (Chocolate) Zone-3 (Chocolate)	True	874	20	32	J-3062	9.95	P-3076
J-3066	Zone-3 (Chocolate)	True	1,377	29	20	J-3065	8.84	P-2196
J-3067	Zone-3 (Chocolate)	True	1,632	30	20	J-3065	11.54	P-3080
J-3068	Zone-3 (Chocolate)	True	1,762	32	20	J-3065	8.84	P-2196
J-3069	Zone-3 (Chocolate)	True	2,291	28	20	J-3065	16.39	P-3083
J-3070	Zone-3 (Chocolate)	True	2,718	39	20	J-3065	15.23	P-3084
J-3071	Zone-3 (Chocolate)	True	3,449	31	20	J-3065	14.22 26.65	P-3084 P-3085
J-3072	Zone-3 (Chocolate)	True	3,502	28 20	20 20	J-3065 J-3065	20,03	P-3086
J-3073	Zone-3 (Chocolate) Zone-3 (Chocolate)	True True	1,842 1,822	20	20	J-3065	21.06	P-3086
J-3074 J-3075	Zone-3 (Chocolate)	True	1,452	20	26	J-3065	16.86	P-3086
J-3076	Zone-3 (Chocolate)	True	1,304	20	23	J-3065	15.17	P-3086
J-3077	Zone-3 (Chocolate)	True	1,245	20	26	J-3065	14.51	P-3086
J-3078	Zone Exempt	False	0	39	5	J-3500	8.84	P-2196
J-3079	Zone-3 (Chocolate)	True	5,000	23	24	J-3065	8,85	P-3169
J-3080	Zone-3 (Chocolate)	True	5,000	25	24	J-3065	8,86	P-3169
J-3081	Zone-3 (Chocolate)	True	5,000	26	24	J-3065	10.59	P-3094 P-3094
J-3082	Zone-3 (Chocolate)	True	5,000	28	23 23	J-3065 J-3065	9.95 9.45	P-3094 P-3094
J-3083	Zone-3 (Chocolate)	True	5,000 5,000	31 33	22	J-3065	8.95	P-3094
J-3084	Zone-3 (Chocolate) Zone-3 (Chocolate)	True True	5,000	37	22	J-3065	8.84	P-2196
J-3085 J-3086	Zone-3 (Chocolate)	True	5,000	41	21	J-3065	9.03	P-3084
J-3087	Zone-3 (Chocolate)	True	5,000	46	21	J-3065	9.48	P-3084
J-3088	Zone-3 (Chocolate)	True	5,000	46	21	J-3065	9.51	P-3084
J-3089	Zone-3 (Chocolate)	True	5,000	49	21	J-3065	9.80	P-3084
J-3090	Zone-3 (Chocolate)	True	5,000	49	21	J-3065	10.71	P-3104
J-3091	Zone-3 (Chocolate)	True	5,000	52	26	J-3065	40.17	P-3108
J-3092	Zone-3 (Chocolate)	True	5,000	56	27	J-3065	13.30	P-3108
J-3093	Zone-3 (Chocolate)	True	5,000	56 56	27	J-3065 J-3065	11.93 8.84	P-3108 P-2196
J-3094	Zone-3 (Chocolate)	True	5,000	56 46	27 27	J-3065	11.08	P-3111
J-3095	Zone-3 (Chocolate)	True True	5,000 5,000	41	27	J-3065	11,12	P-3114
J-3096 J-3097	Zone-3 (Chocolate) Zone-3 (Chocolate)	True	5,000	40	27	J-3065	12.85	P-3114
J-3098	Zone-3 (Chocolate)	True	5,000	42	27	J-3065	9,45	P-3128
J-3099	Zone-3 (Chocolate)	True	5,000	31	26	J-3065	11.42	P-3115
J-3100	Zone-3 (Chocolate)	True	5,000	26	26	J-3065	10.70	P-3119
J-3101	Zone-3 (Chocolate)	True	5,000	23	25	J-3065	12.14	P-3119
J-3102	Zone-3 (Chocolate)	True	5,000	23	25	J-3065	13.80	P-3119
J-3103	Zone-3 (Chocolate)	True	5,000	56	27	J-3065	11.88	P-3120
J-3104	Zone-3 (Chocolate)	True	5,000	55	28	J-3065 J-3065	10.48 8,84	P-3122 P-2196
J-3105	Zone-3 (Chocolate)	True	5,000 5,000	54 51	28 28	J-3065	11.89	P-3123
J-3106 J-3107	Zone-3 (Chocolate) Zone-3 (Chocolate)	True True	5,000	48	28	J-3065	10.29	P-3123
J-3107	Zone-3 (Chocolate)	True	5,000	47	28	J-3065	12.14	P-3127
J-3109	Zone-3 (Chocolate)	True	5,000	52	28	J-3065	15.43	P-3127
J-3110	Zone-3 (Chocolate)	True	5,000	54	28	J-3065	9.40	P-3169
J-3111	Zone-3 (Chocolate)	True	5,000	51	28	J-3065	13.46	P-3128
J-3112	Zone-3 (Chocolate)	True	5,000	47	27	J-3065	10.80	P-3128
J-3113	Zone-3 (Chocolate)	True	5,000	46	26	J-3065	47.96	P-3131
J-3114	Zone-3 (Chocolate)	True	2,132	20	26 36	J-3065	24.34 15.37	P-3132 P-3132
J-3115	Zone-3 (Chocolate)	True	1,341	20 128	5	J-3065 J-3500	25.65	P-2119
J-3116 J-3117	Zone Exempt Zone Exempt	False False	0	126	5	J-3500	19.74	P-2196
J-3118	Zone Exempt	False	0	126	5	J-3500	10.80	P-3128
J-3119	Zone Exempt	False	ŏ	126	5	J-3500	47.96	P-3131
J-3120	Zone Exempt	False	0	118	5	J-3500	8.84	P-2196
J-3121	Zone-3 (Chocolate)	True	5,000	56	30	J-3065	9.96	P-3230
J-3122	Zone-3 (Chocolate)	True	4,950	69	20	J-3065	9.26	P-3230
J-3123	Zone-3 (Chocolate)	True	4,980	53	20	J-3065	9.77 9.56	P-3231 P-3231
J-3124	Zone-3 (Chocolate)	True	5,000 5,000	53 51	21 22	J-3065 J-3065	9.55	P-3231 P-3231
J-3125	Zone-3 (Chocolate) Zone-3 (Chocolate)	True True	5,000	49	22	J-3065	9.13	P-3231
J-3126 J-3127	Zone-3 (Chocolate)	True	5,000	47	23	J-3065	8.94	P-3231
J-3127 J-3128	Zone-3 (Chocolate)	True	5,000	45	24	J-3065	8.84	P-2196
J-3129	Zone-3 (Chocolate)	True	5,000	43	25	J-3065	8.84	P-2196
J-3130	Zone-3 (Chocolate)	True	5,000	48	26	J-3065	8.84	P-2196
J-3131	Zone-3 (Chocolate)	True	5,000	47	27	J-3065	8.84	P-2196
J-3132	Zone-3 (Chocolate)	True	5,000	50	27	J-3065	8.84	P-2196
J-3133	Zone-3 (Chocolate)	True	5,000	46	28	J-3065	8.84	P-2196 P-2196
J-3134	Zone-3 (Chocolate)	True	5,000	45 46	28 29	J-3065 J-3065	8.84 8.84	P-2196 P-2196
J-3135	Zone-3 (Chocolate)	True True	5,000 5,000	48	29	J-3065	8.84	P-2196
J-3136	Zone-3 (Chocolate) Zone-3 (Chocolate)	True	5,000	49	30	J-3065	8.84	P-2196
J-3137 J-3138	Zone-3 (Chocolate)	True	5,000	52	31	J-3065	8.84	P-2196
J-3139	Zone-3 (Chocolate)	True	5,000	50	30	J-3065	8.84	P-2196
J-3140	Zone-3 (Chocolate)	True	5,000	48	30	J-3065	8.84	P-2196
J-3141	Zone-3 (Chocolate)	True	5,000	45	30	J-3065	9.33	P-3161
J-3142	Zone-3 (Chocolate)	True	5,000	55	29	J-3065	9.83	P-3168
J-3143	Zone-3 (Chocolate)	True	5,000	53	29	J-3065	24.32	P-3162
J-3144	Zone-3 (Chocolate)	True	2,490	20	35	J-3065	28.27	P-3194 P-3162
J-3145	Zone-3 (Chocolate) Zone-3 (Chocolate)	True True	5,000 5,000	36 31	28 28	J-3065 J-3065	19.79 15.81	P-3162 P-3162
J-3146				-3 ()	/n i	u-0000	10.01	1-0102

	J-3148 J-3149 J-3150 J-3151 J-3152 J-3153 J-3154 J-3155 J-3156 J-3157 J-3158 J-3159 J-3161 J-3162 J-3163 J-3164 J-3162 J-3163 J-3164 J-3165 J-3167 J-3168 J-3167 J-3178 J-3170 J-3171 J-3172 J-3177 J-3178 J-3178 J-3180 J-3177 J-3178 J-3180 J-3181 J-3182 J-3183 J-3184 J-3185 J-3186 J-3191 J-3192 J-3193 J-3194 J-3195 J-3198 J-3199 J-3200 J-3501 J-3500 J-3501 J-3500 J-3501 J-3506 J-3507 J-3508 J-3507 J-3508 J-3509 J-3510 J-3510 J-3511 J-3512	Zone-3 (Chocolate) Zone Exempt Zone Exempt Zone Exempt Zone Exempt Zone Exempt Zone Exempt Zone-3 (Chocolate) Zone-3 (Chocolate	True True True True True True True True	5,000 5,000 4,735 4,237 3,782 3,132 5,000 3,317 2,414 1,866 0 5,000 2,771 5,000 5,000 2,630 578 2,430 5,000 2,786 1,605 0 0 0 0 0 0 0 0 0 0 0 0 0	24 55 34 21 20 20 20 54 40 20 20 42 32 20 44 48 47 31 20 20 42 32 20 12 141 40 65 43 55 98 69 65 42 30 20 20 20 20 20 42 32 20 20 42 32 20 42 32 20 42 32 20 42 32 20 42 32 20 42 32 20 42 32 20 42 32 20 43 44 40 40 40 40 40 40 40 40 40	28	11.28 20.70 19.61 17.58 24.29 20.14 10.33 13.71 27.41 21.18 8.84 10.10 17.77 11.58 10.08 10.85 10.95 10.10 10.85 10.95 10.10 10.85 10.95 10.10 10.85 10.95 10.10 10.85 10.97 10.56 10.97 10.56 10.87 10.90 10.	P-3167 P-3168 P-3172 P-3172 P-3175 P-3175 P-3175 P-3175 P-3179 P-3179 P-3186 P-3186 P-3186 P-3186 P-3186 P-3186 P-3196 P-3196 P-3196 P-3196 P-3196 P-3196 P-2196 P-3196 P-2196 P-3196 P-2196 P-3196 P-2196 P-3196 P-2196	
Phose 1	J-3502 J-3503 J-3504 J-3505 J-3506 J-3507 J-3508 J-3509 J-3510 J-3511	Zone Exempt Zone-3 (Chocolate)	False True True True True True True True Tru	0 2,706 2,552 2,597 2,597 2,597 2,451 2,257 2,166 2,049	37 26 37 33 34 29 35 29 22 20	5 J-350 20 J-306 20 J-306 20 J-306 20 J-306 20 J-306 20 J-306 20 J-306 20 J-306 27 J-306	8.84 8.84 10.32 10.32 10.32 10.32 10.32 8.84 8.84 8.84 8.84 8.84 8.84 8.84 8.8	P-2196 P-2196 P-3554 P-3554 P-3554 P-2196 P-2196 P-2196 P-2196	

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J-4001S J-4002S J-4003S J-4004S J-4004S J-4005S J-4006S J-4007S J-4008S J-4019 J-4012S J-4011S J-4012S J-4013S J-4014S J-4015S J-4016S J-4017S J-4016S J-4017S J-402S J-4029C J-4021S J-4021C J-4025C J-4026C J-4027C J-4028C J-4029C J-4030C J-4031C J-4038C J-4037C J-4038C J-4039C J-4044C J-4045C J-4046C J-4045C J-4046C J-4047C J-4048C J-4046C J-4047C J-4048C J-4049C J-4048C J-4049C J-4050C J-4050C J-4050C J-4055C J-4056C J-4056C	J-3539 J-3540 J-3541 J-3542 J-3543 J-3545 J-3545 J-3546 J-3550 J-3551 J-3553 J-3555 J-3555 J-3556 J-3557 J-3560 J-3561 J-3566 J-3566 J-3569 J-3569 J-3569 J-3569 J-3569 J-3579 J-3570 J-3579 J-3580
Zone-4 (Sidehill/Chimney)	Zone-3 (Chocolate) Zone-2 (Central) Zone-2 (Central) Zone-3 (Chocolate)
True True True True True True True True	True True True True True True True True
2,002 1,942 1,639 1,489 1,409 1,268 1,596 1,495 1,217 1,944 2,637 3,129 1,148 0 2,122 2,150 1,880 1,695 1,391 2,334 2,685 3,070 3,057 3,126 2,810 2,718 2,963 1,113 3,016 3,155 1,641 3,220 3,479 3,304 3,178 3,178 3,107 3,095 3,649 3,784 2,086 1,620 1,893 9,784 2,086 1,620 1,500 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2,520 2,520 2,520 2,520 2,520 2,270 2,045 1,943 2,019 2,082 1,748 2,354 2,520 2,427 2,439 2,440 2,520 2,157 2,520 2,157 2,520 4,775 2,520 4,775 2,400 2,466 2,086 0 4,039 0 0 2,288 3,901
29 24 20 27 33 33 39 20 52 20 52 33 39 20 8 49 47 22 22 20 27 31 38 34 42 20 35 46 47 47 46 31 50 52 25 20 35 20 35 20 36 47 48 37 30 47 8 23 26 20 20 20 20 20 20 20 20 20 20 20 20 20	39 36 36 36 40 25 20 22 26 20 20 50 44 37 42 23 20 56 26 68 20 20 50 7 20 20 50 44 37 42 23 20 20 50 44 20 20 20 20 20 20 20 20 20 20 20 20 20
20 20 20 20 20 20 20 20 20 20 20 20 20 2	20 20 20 20 20 20 20 20 20 20 20 20 20 2
J-4051C	J-3065
17.78 15.96 11.22 9.41 8.95 14.39 11.56 12.15 13.82 12.67 20.53 12.46 12.58 21.45 19.35 14.68 18.66 12.65 8.84 20.64 19.03 8.84 12.65 8.84 8.84 9.28 8.84 18.63 13.82 18.63 11.66 10.88 9.90 10.17 11.57 12.43 17.14 22.22 10.70	10.76 10.36 10.72 11.25 10.54 8.84 8.84 13.30 11.18 15.06 10.42 10.04 10.09 8.84 11.28 8.84 14.32 15.34 11.80 9.15 8.84
P-4012 P-4012 P-4012 P-4014 P-4014 P-4006 P-4100 P-4100 P-4100 P-4009 P-4014 P-4015 P-4015 P-4019 P-4019 P-4019 P-4027 P-4027 P-4027 P-4027 P-4027 P-4027 P-4027 P-4027 P-4027 P-4028 P-4030 P-2196 P-4030 P-2196 P-4030 P-2196 P-4030 P-2196 P-4030 P-2196 P-4050 P-4050 P-4050 P-4050 P-4050 P-4050 P-4056 P-4060 P-4061 P-4064	P-3618 P-3618 P-3618 P-3618 P-3618 P-3601 P-2196 P-2196 P-3640 P-3606 P-3619 P-3619 P-3619 P-3619 P-3616 P-2196 P-3643 P-3626 P-3632 P-2196 P-3632 P-3632 P-3632 P-3632 P-3632 P-3632 P-3632 P-3632 P-3632 P-3632 P-3632 P-3634 P-3632 P-3634 P-3648 P-

	1 Shore 2
J-5001 J-6001 J-6002 J-6003 J-6004 J-6005 J-6006 J-6007 J-6008 J-6010 J-6011 J-6011 J-6012 J-6024 J-6028	J-4061C J-4063C J-4063C J-4063C J-4066C J-4066C J-4066C J-4066C J-4069C J-4070C J-4071C J-4071C J-4072C J-4074C J-4075C J-4076C J-4076C J-4076C J-4078C J-40808 J-40808 J-40800 J-4500 J-4500 J-4500 J-4501 J-4502 J-4503 J-4504 J-4505 J-4508 J-4509 J-4510 J-4511 J-4512 J-4513 J-4514 J-4515 J-4516 J-4517 J-4518 J-4519 J-4520 J-4521 J-4522 J-4523 J-4526 J-4527 J-4528 J-4529 J-4530 J-4531 J-4535 J-4536 J-4535 J-4536 J-4535 J-4536 J-4537 J-4538
Zone 4 (Subernicimiley) Zone 5 (West7th) Zone 6 (Boundary)	Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/C
True True True True True True True True	True True True True True True True True
1,970 3,934 2,944 2,373 2,890 2,668 2,769 2,668 2,668 2,668 2,668 2,603 2,555 2,237 2,372	5,000 4,893 4,741 4,034 2,840 4,509 4,306 3,672 4,160 4,313 4,280 3,672 4,160 4,215 2,737 2,635 4,168 2,355 2,357 2,385 1,475 1,325 2,357 2,385 1,476 1,325 2,357 2,385 1,476 1,325 2,135 2,103
37 66 45 20 44 32 20 45 51 31 22 47 40 29 36	37 31 31 32 23 36 20 44 20 20 46 20 20 25 20 20 20 8 49 49 30 25 31 35 38 26 20 20 20 20 20 20 20 20 20 20
20 20 20 20 20 20 20 20 20 20 20 20 20 2	24 20 20 20 20 20 20 20 20 20 20
J-5001 J-6049 J-6049 J-6049 J-6049 J-6049 J-6049 J-6049 J-6049 J-6049 J-6049 J-6049 J-6049 J-6049	J-4051C
14.19 8.84 8.84 15.17 8.84 11.85 10.95 8.85 17.05 17.05 8.84 8.84 8.84	18.59 14.99 16.15 19.61 12.39 17.13 16.28 21.21 18.01 22.51 19.51 18.27 20.85 17.82 18.87 15.25 14.98 15.27 20.85 14.98 8.84 8.84 8.84 8.84 8.84 8.84 8.84
P-6048 P-2196 P-2196 P-6002 P-2196 P-6004 P-6004 P-6044 P-2196 P-6031 P-6032 P-2196 P-2196 P-2196 P-2196	P-4069 P-4069 P-4071 P-4072 P-4060 P-4074 P-4074 P-4078 P-4080 P-4076 P-4080 P-4079 P-4080 P-4081 P-4083 P-4085 P-4087 P-4087 P-4087 P-4087 P-4087 P-4027 P-4027 P-4100 P-4019 P-6031 P-4056 P-4110 School P-2196

1	Zone 6 (Boundary)	l True I	2,533	47	20	J-6049	8,84	P-2196
J-6030	Zone 6 (Boundary)	True	2,678	46	20	J-6049	8.84	P-2196
J-6031	Zone 6 (Boundary)	True	2,372	29	20	J-6049	15.16	P-6055
J-6032	Zone 6 (Boundary)	True	2,556	28	20	J-6049	16.33	P-6051
J-6034	Zone Exempt	False	0	45	5	J-3500	8.84	P-2196
J-6045	Zone Exempt	False	0	100	5	J-3500	17.05	P-6032
J-6046	Zone Exempt	False	0	172	5	J-3500	8.84	P-2196
J-6047	Zone 6 (Boundary)	True	2,177	24	20	J-6049	8.84	P-2196
J-6048	Zone 6 (Boundary)	True	2,109	20	20	J-6049	8.84	P-2196
J-6049	Zone 6 (Boundary)	True	2,063	20	22	J-6048	8.84	P-2196
J-6050	Zone 6 (Boundary)	True	2,157	40	20	J-6049	8.84	P-2196
J-6051	Zone 6 (Boundary)	True	2,200	33	20	J-6049	8.84	P-2196
J-6052	Zone 6 (Boundary)	True	2,251	46	20	J-6049	8.84	P-2196
J-6053	Zone 6 (Boundary)	True	2,251	38	20	J-6049	14.38	P-6064
J-6054	Zone 6 (Boundary)	True	2,295	47	20	J-6049	8.84	P-2196
J-6055	Zone 6 (Boundary)	True	2,295	29	20	J-6049	14.67	P-6066
J-6056	Zone 6 (Boundary)	True	2,353	. 53	20	J-6049	8.84	P-2196
J-6057	Zone 6 (Boundary)	True	2,407	52	20	J-6049	8.84	P-2196
J-6058	Zone 6 (Boundary)	True	2,469	45	20	J-6049	8.84	P-2196
J-Section 5.3.2	Zone 6 (Boundary)	Faise	0	88	37	J-6049	8.84	P-2196
J-Tangberg	Zone-4 (Sidehill/Ćhimney)	True	1,107	20	41	J-4051C	12.57	P-4006

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Residual Pressures Maximum Day

Shaw Engineering Appendix A

Scenario Summary Report Scenario: Existing SVGID System + 5 Ridges

Scenario Summary									
ID	64	Viscos and Carry							
Label	Existing SVC	GID System + 5 Ridges							
Notes									
Active Topology	Base-Active	Base-Active Topology							
Physical		Existing System							
Demand		8750 Customers Maximum Day Demand							
Initial Settings	Existing Sys	Existing System Pumps OFF Tanks at LWL							
Operational	Base	Base Base-Age Alternative							
Age	Base-Age A								
Constituent	Base-Consti	tuent							
Trace	Base-Trace	Base-Trace Alternative							
Fire Flow	All Nodes	All Nodes							
Energy Cost	Base-Energ	Base-Energy Cost							
Transient	Base Transi	Base Transient Base Pressure Dependent Demand Base Failure History Base SCADA Base-User Data							
Pressure Dependent Demand	Base Pressu								
Failure History	Base Failure								
SCADA	Base SCADA								
User Data Extensions	Base-User D								
Steady State/EPS Solver Calcula Options	ation Proposed S	Proposed SVGID System							
Transient Solver Calculation Op	tions Base Calcul	Base Calculation Options							
Hydraulic Summary									
Time Analysis Type	Steady State	Use simple controls during steady state?	True						
Friction Method	Hazen- Williams	Is EPS Snapshot?	False						
Accuracy	0.001	Start Time	12:00:00 AM Fire Flow						
Trials	40	40 Calculation Type							

Scenario: Existing SVGID System + 5 Ridges Current Time Step: 0.000 h FlexTable: Tank Table

Label	Zone	Elevation (Base) (ft)	Elevation (Minimum) (ft)	Elevation (Initial) (ft)	Elevation (Maximum) (ft)	Diameter (ft)	Volume Full (Calculated) (gal)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
Exercise.	Zone-1-2-3	4.963.00	4,963,00	4,989.25	4.992.92	90.00	1,423,863.12	811	4,989.25
Eastside	Zone-1-2-3 Zone-1-2-3	4,964,25	4,964.25	4,989.25	4,992,92	74.00	922,386.13	394	4,989.25
Chocolate	Zone-1-2-3 Zone-1-2-3	4.968.00	4,968.00	4,989.25	4,992,92	107.00	1.676,243.96	1,057	4,989.25
Klondike	Zone-1-2-3 Zone-1-2-3	4,952.29	4,952.29	4,974.94	4.974.94	60.00	479,062.68	0	4,974.94
Juniper Terr. Tank	Zone-4 (Sidehill/Chimney)	5,104.00	5,104,00	5,123.59	5.134.41	40.00	285,863.06	102	5,123.59
Sidehill	Zone-4 (Sidehill/Chimney)	5,104.00	5,104.00	5,123.59	5,135.09	40.00	292,255,26	229	5,123.59
Chimney 1	Zone-4 (Sideniii/Chimiley) Zone-3 (Chocolate)	4.961.90	4,961.90	4.989.25	4,992.92	90.00	1,476,211.03	696	4,989.25
Westside Tank	Zone 6 (Boundary)	5,279.50	5,279.50	5,304.50	5,315,50	80.00	1,353,642.89	150	5,304.50
Boundary Tank Chimney 2	Zone-4 (Sidehill/Chimney)	5,104.00	5,104.00	5,123,59	5,135.09	75.00	1,027,459.90	226	5,123.59



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Scenario: Existing SVGID System + 5 Ridges Current Time Step: 0.000 h FlexTable: Junction Table

ID	Label	Elevation (ft)	Pressure (psi)	Demand (gpm)	Zone
127	J-1001	4,639.00	55	4	Zone-1 (Southern)
131	J-1002	4,662.00	45	5	Zone-1 (Southern)
132	J-1003	4,649.00	51	1	Zone-1 (Southern)
128	J-1004	4,662.00	45	4	Zone-1 (Southern)
133	J-1005	4,653.00	49	0	Zone-1 (Southern)
129	J-1006	4,664.00	44	4	Zone-1 (Southern)
130	J-1007	4,661.00	46	1	Zone-1 (Southern)
134	J-1008	4,635.00	57	5	Zone-1 (Southern)
135	J-1009	4,621.00	63	9	Zone-1 (Southern)
139	J-1010	4,618.00	64	3	Zone-1 (Southern)
136	J-1011	4,625.00	61	3	Zone-1 (Southern)
138	J-1012	4,619.00	64	7	Zone-1 (Southern)
137	J-1013	4,625.00	61	4	Zone-1 (Southern)
140	J-1014	4,658.00	47	3	Zone-1 (Southern)
141	J-1015	4,665.00	44	3	Zone-1 (Southern)
142	J-1016	4,636.00	57 55	8 13	Zone-1 (Southern) Zone-1 (Southern)
143	J-1017	4,639.00	55 50	8	Zone-1 (Southern)
144	J-1018	4,651.00	50 49	0 1	Zone-1 (Southern)
145	J-1019 J-1020	4,653.00 4,653.00	49 49	5	Zone-1 (Southern)
146		4,662.00	45 45	2	Zone-1 (Southern)
148	J-1021 J-1022	4,659.00	45 47	1	Zone-1 (Southern)
147 149	J-1022 J-2001	4,720.00	74	5	Zone-1 (Southern)
150	J-2001 J-2002	4,710.00	7 4 78	7	Zone-2 (Central)
150	J-2002 J-2003	4,710.00	78	3	Zone-2 (Central)
152	J-2004	4,700.00	82	3	Zone-2 (Central)
153	J-2004	4,667.00	96	5	Zone-2 (Central)
155	J-2006	4,664.00	98	5	Zone-2 (Central)
154	J-2007	4,649.00	104	35	Zone-2 (Central)
157	J-2008	4,659.00	106	4	Zone-2 (Central)
158	J-2009	4,664.00	104	2	Zone-2 (Central)
159	J-2010	4,655.00	108	4	Zone-2 (Central)
161	J-2011	4,675.00	99	54	Zone-2 (Central)
162	J-2012	4,696.00	90	18	Zone-2 (Central)
163	J-2013	4,716.00	81	20	Zone-2 (Central)
164	J-2014	4,745.00	69	46	Zone-2 (Central)
165	J-2015	4,776.00	56	7	Zone-2 (Central)
166	J-2016	4,696.00	90	20	Zone-2 (Central)
167	J-2017	4,700.00	88	8	Zone-2 (Central)
168	J-2018	4,696.00	90	15	Zone-2 (Central)
169	J-2019	4,727.00	76	12	Zone-2 (Central)
190	J-2020	4,730.00	75	13	Zone-2 (Central)
170	J-2021	4,737.00	72 56	10	Zone-2 (Central)
175	J-2022	4,773.00	56	4 6	Zone-2 (Central) Zone-2 (Central)
171	J-2023	4,740.00	71		Zone-2 (Central)
172	J-2024	4,747.00	68	9 5	Zone-2 (Central)
174	J-2025	4,806.00	42 69	4	Zone-2 (Central)
173	J-2026	4,744.00 4,727.00	76	9	Zone-2 (Central)
176 170	J-2027	4,732.00	76	15	Zone-2 (Central)
179	J-2028	4,747.00	68	6	Zone-2 (Central)
177 178	J-2029 J-2030	4,762.00	61	9	Zone-2 (Central)
178	J-2030 J-2031	4,741.00	70	11	Zone-2 (Central)
191	J-2032	4,740.00	70 71	2	Zone-2 (Central)
181	J-2032	4,745.00	68	10	Zone-2 (Central)
182	J-2034	4,753.00	65	8	Zone-2 (Central)
183	J-2035	4,763.00	61	13	Zone-2 (Central)
100	5 = 5 5 5	1	Ι	1	l ' '

	1		4 754 00	cc I	12	Zone-2 (Central)
	186	J-2036	4,751.00	66	12	•
	192	J-2037	4,735.00	73	5	Zone-2 (Central)
	184	J-2038	4,758.00	63	6	Zone-2 (Central)
			′ 1	62	11	Zone-2 (Central)
	187	J-2039	4,760.00			
	188	J-2040	4,779.00	54	5	Zone-2 (Central)
	189	J-2041	4,790.00	49	4	Zone-2 (Central)
	185	J-2042	4,797.00	46	9	Zone-2 (Central)
					3	Zone-2 (Central)
ı	193	J-2043	4,810.00	40		
	195	J-2044	4,667.00	103	13	Zone-2 (Central)
	196	J-2045	4,651.00	110	2	Zone-2 (Central)
				105	4	Zone-2 (Central)
ı	202	J-2046	4,664.00			Zone-2 (Central)
l	203	J-2047	4,662.00	106	8	
ı	204	J-2048	4,654.00	109	4	Zone-2 (Central)
ı	213	J-2049	4,664.00	105	5	Zone-2 (Central)
				102	5	Zone-2 (Central)
l	214	J-2050	4,671.00		ے ا	
ı	205	J-2051	4,671.00	102	5	Zone-2 (Central)
ı	206	J-2052	4,696.00	91	5	Zone-2 (Central)
ı			4,703.00	88	5	Zone-2 (Central)
ı	207	J-2053			3	
l	208	J-2054	4,717.00	82	3	Zone-2 (Central)
ı	209	J-2055	4,701.00	89	3	Zone-2 (Central)
ı	210	J-2056	4,721.00	81	4	Zone-2 (Central)
ı				102	8	Zone-2 (Central)
ı	201	J-2057	4,672.00			
ı	200	J-2058	4,681.00	98	5	Zone-2 (Central)
ı	199	J-2059	4,682.00	97	7	Zone-2 (Central)
ı		J-2060	4,685.00	96	8	Zone-2 (Central)
ı	198	1			9	Zone-2 (Central)
ı	197	J-2061	4,687.00	95	9	
ı	215	J-2062	4,681.00	98	2	Zone-2 (Central)
ı	211	J-2063	4,674.00	101	7	Zone-2 (Central)
١				101	7	Zone-2 (Central)
ı	212	J-2064	4,678.00			
ı	216	J-2065	4,697.00	91	8	Zone-2 (Central)
l	217	J-2066	4,701.00	88	8	Zone-2 (Central)
İ			4,708.00	85	13	Zone-2 (Central)
ı	218	J-2067				
ı	219	J-2068	4,696.00	91	4	Zone-2 (Central)
۱	220	J-2069	4,703.00	88	6	Zone-2 (Central)
ı	221	J-2070	4,706.00	87	8	Zone-2 (Central)
ı				76	16	Zone-2 (Central)
l	222	J-2071	4,730.00	1		
١	223	J-2072	4,737.00	73	10	Zone-2 (Central)
ı	224	J-2073	4,729.00	77	8	Zone-2 (Central)
ı			4,719.00	82	8	Zone-2 (Central)
ı	225	J-2074			19	Zone-2 (Central)
١	230	J-2075	4,727.00	78		
ı	231	J-2076	4,746.00	70	15	Zone-2 (Central)
ı	232	J-2077	4,750.00	68	8	Zone-2 (Central)
۱			4,713.00	85	5	Zone-2 (Central)
ı	226	J-2078			6	Zone-2 (Central)
I	227	J-2079	4,706.00	88		
١	228	J-2080	4,701.00	91	9	Zone-2 (Central)
1	229	J-2081	4,710.00	87	8	Zone-2 (Central)
١			4,718.00	83	11	Zone-2 (Central)
١	237	J-2082			9	Zone-2 (Central)
١	236	J-2083	4,722.00	81		
١	233	J-2084	4,740.00	73	7	Zone-2 (Central)
١	234	J-2085	4,736.00	74	8	Zone-2 (Central)
ı			4,731.00	77	8	Zone-2 (Central)
I	235	J-2086			9	Zone-2 (Central)
ı	238	J-2087	4,770.00	60		
ı	239	J-2088	4,770.00	60	8	Zone-2 (Central)
١	240	J-2089	4,784.00	54	4	Zone-2 (Central)
١		1		57	13	Zone-2 (Central)
ı	241	J-2090	4,777.00			Zone-2 (Central)
١	244	J-2091	4,743.00	71	10	
١	242	J-2092	4,759.00	65	8	Zone-2 (Central)
ı	243	J-2093	4,759.00	65	2	Zone-2 (Central)
J				103		Zone-2 (Central)
J	276	J-2094	4,681.00			
١	277	J-2095	4,681.00	104	7	Zone-2 (Central)
١	278	J-2096	4,687.00	100	12	Zone-2 (Central)
ı	245	J-2097	4,692.00	97	6	Zone-2 (Central)
Į				98	3	Zone-2 (Central)
١	279	J-2098	4,700.00			
ı	280	J-2099	4,700.00	98	9	Zone-2 (Central)
ı	281	J-2100	4,681.00	107	2	Zone-2 (Central)
١		J-2101	4,693.00	96	18	Zone-2 (Central)
1	246			87	20	Zone-2 (Central)
	247	J-2102	4,708.00	01	20	20110 2 (00111141)
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1	J-2103	4,724.00	80	18	Zone-2 (Central)
249	J-2104	4,730.00	77	8	Zone-2 (Central)
251	J-2105	4,752.00	68	9	Zone-2 (Central)
250	J-2106	4,760.00	64	8	Zone-2 (Central)
297	J-2107	4,683.00	98	14	Zone-2 (Central)
300	J-2108	4,693.00	94	4	Zone-2 (Central)
299	J-2109	4,693.00	92	6	Zone-2 (Central)
298	J-2110	4,699.00	90	7	Zone-2 (Central)
285	J-2111	4,710.00	92	10	Zone-2 (Central)
286	J-2112	4,738.00	79	14	Zone-2 (Central)
291	J-2113	4,720.00	87	7	Zone-2 (Central)
270	J-2114	4,713.00	88	13	Zone-2 (Central)
269	J-2115	4,707.00	90	5	Zone-2 (Central)
267	J-2116	4,707.00	90	5	Zone-2 (Central)
266	J-2117	4,706.00	90	12	Zone-2 (Central)
265	J-2118	4,703.00	90	22	Zone-2 (Central)
261	J-2119	4,705.00	89	12	Zone-2 (Central)
252	J-2120	4,721.00	81	10	Zone-2 (Central)
257	J-2121	4,748.00	69	9	Zone-2 (Central)
256	J-2122	4,750.00	69	7	Zone-2 (Central)
290	J-2123	4,729.00	83	3	Zone-2 (Central)
287	J-2124	4,760.00	70	7	Zone-2 (Central)
289	J-2125	4,746.00	76	6	Zone-2 (Central)
288	J-2126	4,763.00	68	9	Zone-2 (Central)
292	J-2127	4,753.00	73	8	Zone-2 (Central)
293	J-2128	4,770.00	65	5	Zone-2 (Central)
294	J-2129	4,750.00	74	6	Zone-2 (Central)
295	J-2130	4,780.00	61	7	Zone-2 (Central)
296	J-2131	4,790.00	57	14	Zone-2 (Central)
271	J-2132	4,758.00	68	6	Zone-2 (Central)
272	J-2133	4,748.00	73	5	Zone-2 (Central)
273	J-2134	4,720.00	85	8	Zone-2 (Central)
268	J-2135	4,748.00	71	13	Zone-2 (Central)
263	J-2136	4,726.00	79	10	Zone-2 (Central)
264	J-2137	4,715.00	84	10	Zone-2 (Central)
254	J-2138	4,726.00	79	10	Zone-2 (Central)
253	J-2139	4,724.00	80	12	Zone-2 (Central)
262	J-2140	4,743.00	72	8 11	Zone-2 (Central) Zone-2 (Central)
255	J-2141	4,728.00	78	10	Zone-2 (Central)
259	J-2142	4,747.00	70	21	Zone-2 (Central)
258	J-2143	4,745.00	71	4	Zone-2 (Central)
260	J-2144	4,760.00	64 62	0	Zone-2 (Central)
339	J-2145	4,763.00		_	Zone-2 (Central)
338	J-2146	4,763.00	62 71	0	Zone-2 (Central)
552	J-2147	4,751.00	80	ő	Zone-2 (Central)
556	J-2148	4,727.00 4,683.00	98	ŏ	Zone-2 (Central)
558	J-2149	4,785.00	51	ő	Zone-2 (Central)
560	J-2150	4,810.00	40	ő	Zone-2 (Central)
557	J-2151	4,729.75	70	0	Zone-2 (Central)
1351	J-2152 J-2153	4,756.00	64	Ö	Zone-2 (Central)
559	J-2153 J-2154	4,755.00	66	Ö	Zone-2 (Central)
581	J-2154 J-2155	4,760.00	64	ő	Zone-2 (Central)
582	J-2156	4,745.00	71	Ō	Zone-2 (Central)
1327		4,681.00	106	Ŏ	Zone-2 (Central)
1380 303	J-2157 J-3001	4,648.00	146	Ö	Zone Exempt
303	J-3001 J-3002	4,648.00	146	Ö	Zone Exempt
	J-3002	4,645.00	148	Ō	Zone Exempt
126 305	J-3004	4,660.00	141	Ö	Zone Exempt
305	J-3004 J-3005	4,660.00	141	2	Zone Exempt
160	J-3006	4,662.00	140	5	Zone Exempt
156	J-3007	4,720.00	116	10	Zone-3 (Chocolate)
307	J-3008	4,840.00	64	4	Zone-3 (Chocolate)
308	J-3010	4,860.00	56	5	Zone-3 (Chocolate)
309	J-3010	4,827.00	70	7	Zone-3 (Chocolate)
310	J-3012	4,799.00	82	10	Zone-3 (Chocolate)
311	J-3013	4,790.00	86	5	Zone-3 (Chocolate)
1 1	1	1 '	I	ī	1

1	J-3014	4,820.00	73	2	Zone-3 (Chocolate)
0.40		· · · · · · · · · · · · · · · · · · ·		5	Zone-3 (Chocolate)
313	J-3015	4,820.00	73		
314	J-3016	4,826.00	70	5	Zone-3 (Chocolate)
315	J-3017	4,835.00	66	5	Zone-3 (Chocolate)
	J-3018	4,818.00	74	7	Zone-3 (Chocolate)
194					
316	J-3019	4,835.00	66	28	Zone-3 (Chocolate)
317	J-3020	4,840.00	64	6	Zone-3 (Chocolate)
318	J-3021	4,826.00	70	3	Zone-3 (Chocolate)
			74	10	Zone-3 (Chocolate)
319	J-3022	4,817.00			
320	J-3023	4,825.00	70	7	Zone-3 (Chocolate)
321	J-3024	4,833.00	67	1	Zone-3 (Chocolate)
322	J-3025	4,833.00	67	4	Zone-3 (Chocolate)
				οl	Zone Exempt
328	J-3026	4,892.00	41	I	
323	J-3027	4,801.00	81	10	Zone-3 (Chocolate)
324	J-3028	4,800.00	81	0	Zone-3 (Chocolate)
327	J-3029	4,827.00	69	7	Zone-3 (Chocolate)
				5	Zone-3 (Chocolate)
326	J-3030	4,822.00	72		
325	J-3031	4,801.00	81	4	Zone-3 (Chocolate)
329	J-3032	4,834.00	66	8	Zone-3 (Chocolate)
		1 '	54	9	Zone-3 (Chocolate)
330	J-3033	4,862.00			
331	J-3034	4,882.00	46	7	Zone-3 (Chocolate)
302	J-3035	4,648.00	146	0	Zone Exempt
332	J-3036	4,645.00	148	0	Zone Exempt
			140	3	Zone Exempt
333	J-3037	4,662.00			
334	J-3038	4,692.00	127	8	Zone Exempt
335	J-3039	4,776.00	91	7	Zone Exempt
336	J-3040	4,763.00	97	0	Zone Exempt
				11	Zone-3 (Chocolate)
337	J-3041	4,763.00	97		
340	J-3042	4,811.00	76	7	Zone-3 (Chocolate)
341	J-3043	4,811.00	76	6	Zone-3 (Chocolate)
		4,836.00	65	11	Zone-3 (Chocolate)
342	J-3044				
344	J-3045	4,792.00	85	6	Zone-3 (Chocolate)
343	J-3046	4,834.00	66	7	Zone-3 (Chocolate)
345	J-3047	4,784.00	88	4	Zone-3 (Chocolate)
		4,848.00	60	1	Zone-3 (Chocolate)
347	J-3048	1 ' 1			
348	J-3049	4,863.00	54	10	Zone-3 (Chocolate)
349	J-3050	4,882.00	46	3	Zone-3 (Chocolate)
350	J-3051	4,909.00	34	2	Zone Exempt
			27	ō	Zone Exempt
351	J-3052	4,925.00			•
371	J-3053	4,925.00	27	0	Zone Exempt
372	J-3054	4,921.00	29	0	Zone Exempt
373	J-3055	4,950.00	16	o l	Zone Exempt
			19	o l	Zone Exempt
374	J-3056	4,943.00			
346	J-3057	4,813.00	75	11	Zone-3 (Chocolate)
352	J-3058	4,834.00	66	5	Zone-3 (Chocolate)
353	J-3059	4,853.00	58	5	Zone-3 (Chocolate)
		4,863.00	54	3	Zone-3 (Chocolate)
354	J-3060				Zone-3 (Chocolate)
355	J-3061	4,863.00	54	1	
356	J-3062	4,881.00	46	6	Zone-3 (Chocolate)
357	J-3063	4,877.00	48	8	Zone-3 (Chocolate)
		4,875.00	49	4	Zone-3 (Chocolate)
358	J-3064			2	Zone-3 (Chocolate)
359	J-3065	4,888.00	43		
360	J-3066	4,863.00	54	4	Zone-3 (Chocolate)
362	J-3067	4,843.00	62	6	Zone-3 (Chocolate)
		4,847.00	61	4	Zone-3 (Chocolate)
361	J-3068			6	Zone-3 (Chocolate)
363	J-3069	4,821.00	72		
364	J-3070	4,811.00	76	2	Zone-3 (Chocolate)
365	J-3071	4,807.00	78	0	Zone-3 (Chocolate)
		4,807.00	78	2	Zone-3 (Chocolate)
366	J-3072				
367	J-3073	4,790.00	85	8	Zone-3 (Chocolate)
368	J-3074	4,790.00	85	5	Zone-3 (Chocolate)
369	J-3075	4,779.00	90	14	Zone-3 (Chocolate)
	I .		96	5	Zone-3 (Chocolate)
370	J-3076	4,765.00			
301	J-3077	4,759.00	99	1	Zone-3 (Chocolate)
375	J-3078	4,887.00	43	0	Zone Exempt
379	J-3079	4,876.00	48	4	Zone-3 (Chocolate)
380	J-3080	4,869.00	51	1	Zone-3 (Chocolate)
]	0-3000	1 -,000.00	٠	•	1 =22 2 (3222)

ı	1 10004	4 960 00 L	55	12	Zone-3 (Chocolate)
	J-3081	4,860.00		13	Zone-3 (Chocolate)
382	J-3082	4,848.00	60		
383	J-3083	4,838.00	65	12	Zone-3 (Chocolate)
384	J-3084	4,828.00	69	11	Zone-3 (Chocolate)
385	J-3085	4,816.00	74	12	Zone-3 (Chocolate)
386	J-3086	4,804.00	79	12	Zone-3 (Chocolate)
387	J-3087	4,792.00	84	4	Zone-3 (Chocolate)
388	J-3088	4,792.00	84	7	Zone-3 (Chocolate)
389	J-3089	4,785.00	87	0	Zone-3 (Chocolate)
390	J-3090	4,785.00	87	2	Zone-3 (Chocolate)
	J-3091	4,774.00	92	1	Zone-3 (Chocolate)
392	1		92	o l	Zone-3 (Chocolate)
391	J-3092	4,774.00		3	Zone-3 (Chocolate)
393	J-3093	4,776.00	91		
394	J-3094	4,784.00	88	6	Zone-3 (Chocolate)
395	J-3095	4,797.00	82	6	Zone-3 (Chocolate)
396	J-3096	4,810.00	77	9	Zone-3 (Chocolate)
397	J-3097	4,817.00	74	9	Zone-3 (Chocolate)
398	J-3098	4,826.00	70	0	Zone-3 (Chocolate)
399	J-3099	4,839.00	64	10	Zone-3 (Chocolate)
400	J-3100	4,848.00	60	7	Zone-3 (Chocolate)
401	J-3101	4,858.00	56	9	Zone-3 (Chocolate)
		4,867.00	52	7	Zone-3 (Chocolate)
402	J-3102		89	3	Zone-3 (Chocolate)
403	J-3103	4,781.00	89	8	Zone-3 (Chocolate)
404	J-3104	4,781.00		4	Zone-3 (Chocolate)
405	J-3105	4,787.00	87	- 1	
406	J-3106	4,789.00	86	11	Zone-3 (Chocolate)
407	J-3107	4,792.00	84	5	Zone-3 (Chocolate)
408	J-3108	4,798.00	82	6	Zone-3 (Chocolate)
409	J-3109	4,801.00	81	5	Zone-3 (Chocolate)
410	J-3110	4,806.00	78	1	Zone-3 (Chocolate)
411	J-3111	4,808.00	78	6	Zone-3 (Chocolate)
412	J-3112	4,814.00	75	6	Zone-3 (Chocolate)
413	J-3113	4,774.00	92	2	Zone-3 (Chocolate)
		4,763.00	97	11	Zone-3 (Chocolate)
414	J-3114		103	3	Zone-3 (Chocolate)
275	J-3115	4,748.00		0	Zone Exempt
283	J-3116	4,675.00	133		
282	J-3117	4,681.00	131	2	Zone Exempt
415	J-3118	4,681.00	131	2	Zone Exempt
416	J-3119	4,681.00	131	2	Zone Exempt
284	J-3120	4,700.00	123	0	Zone Exempt
417	J-3121	4,802.00	80	1	Zone-3 (Chocolate)
419	J-3122	4,751.00	102	3	Zone-3 (Chocolate)
420	J-3123	4,777.00	91	9	Zone-3 (Chocolate)
421	J-3124	4,773.00	92	12	Zone-3 (Chocolate)
422	J-3125	4,772.00	93	9	Zone-3 (Chocolate)
423	J-3126	4,773.00	92	11	Zone-3 (Chocolate)
		4,775.00	91	6	Zone-3 (Chocolate)
424	J-3127	4,777.00	91	6	Zone-3 (Chocolate)
425	J-3128	4,777.00	89	5	Zone-3 (Chocolate)
426	J-3129	1 ' 1		6	Zone-3 (Chocolate)
427	J-3130	4,765.00	96	17	Zone-3 (Chocolate)
428	J-3131	4,766.00	95		
429	J-3132	4,759.00	98	13	Zone-3 (Chocolate)
430	J-3133	4,766.00	95	12	Zone-3 (Chocolate)
431	J-3134	4,768.00	94	9	Zone-3 (Chocolate)
432	J-3135	4,766.00	95	19	Zone-3 (Chocolate)
433	J-3136	4,762.00	97	4	Zone-3 (Chocolate)
434	J-3137	4,759.00	98	18	Zone-3 (Chocolate)
435	J-3138	4,755.00	100	13	Zone-3 (Chocolate)
436	J-3139	4,760.00	98	12	Zone-3 (Chocolate)
		4,766.00	95	13	Zone-3 (Chocolate)
437	J-3140		89	4	Zone-3 (Chocolate)
438	J-3141	4,780.00			Zone-3 (Chocolate)
439	J-3142	4,770.00	94	0	
440	J-3143	4,770.00	94	1	Zone-3 (Chocolate)
463	J-3144	4,766.00	95	2	Zone-3 (Chocolate)
441	J-3145	4,771.00	93	2	Zone-3 (Chocolate)
442	J-3146	4,770.00	94	5	Zone-3 (Chocolate)
449	J-3147	4,770.00	94	0	Zone-3 (Chocolate)
1	I	1	ı	ı	1

Phase 1	
1914 1911 1917 1919 1922 1924 1927 1929 1932 1934 1936 1938 1940 1942 1944 1946 1948 1952 1954 1956 1958	443 444 445 446 447 418 450 451 274 376 377 378 452 453 454 455 456 466 464 465 467 468 469 462 547 548 550 561 562 563 564 569 570 572 573 585 585 585 585 585 585 585 585 585 58
J-3500 J-3501 J-3502 J-3503 J-3504 J-3505 J-3506 J-3507 J-3508 J-3510 J-3511 J-3512 J-3513 J-3514 J-3515 J-3516 J-3517 J-3518 J-3519 J-3520	J-3148 J-3149 J-3150 J-3151 J-3152 J-3153 J-3154 J-3155 J-3156 J-3157 J-3158 J-3160 J-3161 J-3162 J-3163 J-3164 J-3165 J-3165 J-3167 J-3168 J-3170 J-3171 J-3172 J-3173 J-3177 J-3178 J-3178 J-3178 J-3178 J-3180 J-3181 J-3181 J-3182 J-3183 J-3184 J-3185 J-3186 J-3191 J-3192 J-3193 J-3194 J-3195 J-3198 J-3199 J-3200 J-3201
4,967.50 4,942.00 4,892.00 4,866.00 4,841.00 4,824.00 4,834.00 4,846.00 4,858.00 4,869.00 4,870.00 4,844.00 4,828.00 4,819.00 4,823.00 4,809.00 4,809.00 4,791.00	4,771.00 4,758.00 4,758.00 4,760.00 4,755.00 4,755.00 4,810.00 4,770.00 4,770.00 4,880.00 4,861.00 4,869.00 4,840.00 4,843.00 4,820.00 4,843.00 4,843.00 4,870.00 4,848.00 4,648.00 4,750.00 4,816.70 4,828.00 4,807.00
9 20 42 53 64 63 71 67 62 56 52 47 51 57 62 69 73 72 73 78 85	93 99 99 98 100 76 90 94 47 55 64 67 63 72 46 61 63 51 146 40 90 66 103 74 97 73 62 68 78 68 78 68 78 68 78 68 78 78 78 78 78 78 78 78 78 7
0 0 0 5 0 8 4 4 5 5 6 5 5 5 5 5 6 5 4 4 0 0 5 0 5 0 5 5 6 5 6 5 7 6 5 7 6 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7	32101131034105731127534830000000000466665533300000
Zone Exempt Zone Exempt Zone-3 (Chocolate)	Zone-3 (Chocolate) Zone Exempt Zone Exempt Zone Exempt Zone Exempt Zone Exempt Zone Exempt Zone-3 (Chocolate)

1 acchg	1962 1964 1968 1968 1970 1972 1974 1977 1980 1982 1984 1986 1998 2002 2005 2008 2010 2012 2014 2016 2018 2023 2025 2027 2027 2029 2031 2034 2036 2041 2044 2048 2050 2053 2061 2064 2076 2081 2083 2102 2115	J-3521 J-3522 J-3523 J-3524 J-3525 J-3526 J-3527 J-3528 J-3529 J-3530 J-3531 J-3532 J-3533 J-3534 J-3535 J-3536 J-3537 J-3538 J-3539 J-3540 J-3541 J-3542 J-3544 J-3545 J-3545 J-3555 J-3556 J-3555 J-3556 J-3557 J-3556 J-3556 J-3566 J-3569 J-3560 J-3560 J-3560 J-3561 J-3566 J-3569 J-3560	4,777.00 4,773.00 4,778.00 4,778.00 4,783.00 4,783.00 4,778.00 4,778.00 4,774.00 4,774.00 4,790.00 4,801.00 4,804.00 4,962.00 4,800.00 4,962.00 4,800.00	91 93 91 89 89 89 91 93 91 88 86 83 81 80 85 61 65 75 64 86 87 87 88 81 80 85 86 87 88 88 88 88 88 88 88 88 88 88 88 88	6545447533775585546454365245411344030737402200 12200	Zone-3 (Chocolate)
	470 471 472 473 474 475 476 477 478 479 480 481	J-4001S J-4002S J-4003S J-4004S J-4005S J-4006S J-4007S J-4008S J-4009S J-4010S J-4011S J-4012S J-4013S	4,890.00 4,877.00 4,893.00 4,897.00 4,899.00 4,899.00 4,953.00 4,942.00 4,908.00 4,928.00 4,959.00 5,002.00	101 106 99 98 97 97 101 73 78 93 84 71 53	2586212324352	Zone-4 (Sidehill/Chimney)
	483 484 485 486 487 1331 489 490	J-4014S J-4015S J-4016S J-4017S J-4018 J-4020S J-4020S J-4021S	5,100.00 4,897.00 4,897.00 4,885.00 4,885.00 4,875.00 4,930.00 4,900.00	10 98 98 103 103 107 83 96	0 2 3 3 3 0 2	Zone Exempt Zone-4 (Sidehill/Chimney)

1.3	J-4022C	4,943.00	78	3 3	Zone-4 (Sidehill/Chimney
	J-4023C	4,959.00	71		Zone-4 (Sidehill/Chimney
	J-4024C	4,929.00	84	3	Zone-4 (Sidehill/Chimney
17.77	J-4025C	4,927.00	85	1	Zone-4 (Sidehill/Chimney
27 100	J-4026C	4,900.00	96	0	Zone-4 (Sidehill/Chimney
	J-4027C	4,971.00	65	3	Zone-4 (Sidehill/Chimney
- AL	J-4028C	4,999.00	53	2 3	Zone-4 (Sidehill/Chimney
	J-4029C	4,966.00	68	3	Zone-4 (Sidehill/Chimney
7.7	J-4030C	4,963.00	69	2	Zone-4 (Sidehill/Chimney
		4,980.00	62	1	Zone-4 (Sidehill/Chimney
	J-4031C	4,961.00	70	4	Zone-4 (Sidehill/Chimney
	J-4032C		80	5	Zone-4 (Sidehill/Chimney
	J-4033C	4,938.00	90	7	Zone-4 (Sidehill/Chimney
75.	J-4034C	4,914.00 4,917.00	89	1	Zone-4 (Sidehill/Chimney
	J-4035C		87	2	Zone-4 (Sidehill/Chimne
2 5 0 0 11 0 0	J-4036C	4,921.00	85	2	Zone-4 (Sidehill/Chimne
	J-4037C	4,925.00	84	5	Zone-4 (Sidehill/Chimne
	J-4038C	4,928.00	141 2	5 3	Zone-4 (Sidehill/Chimne
	J-4039C	4,923.00	86	4	Zone-4 (Sidehill/Chimne
	J-4040C	4,963.00	69	ŏ	Zone-4 (Sidehill/Chimne
	J-4041C	4,975.00	64	7	Zone-4 (Sidehill/Chimne
	J-4042C	4,952.00	74	, í	Zone-4 (Sidehill/Chimne
6.6.6	J-4043C	4,987.00	59	3	Zone 4 (Sidehill/Chimne
5.5.51	J-4044C	4,911.00	91	8 3	Zone-4 (Sidehill/Chimne
7.5.0	J-4045C	4,911.00	91	3	Zone-4 (Sidehill/Chimne
514	J-4046C	4,963.00	69	2	Zone-4 (Sidehill/Chimne
- 2) - 1	J-4047C	4,968.00	67	5	Zone-4 (Sidehill/Chimne
516	J-4048C	5,004.00	51	4	Zone-4 (Sidehill/Chimne
517	J-4049C	5,010.00	49	0	Zone Exempt
518	J-4050C	5,100.00	10	0	Zone Exempt
523	J-4051C	5,011.00	48	5	Zone-4 (Sidehill/Chimne
521	J-4052C	4,993.00	56	6	Zone-4 (Sidehill/Chimne
522	J-4053C	4,961.00	70	4	Zone-4 (Sidehill/Chimne
520	J-4054C	4,959.00	71	6	Zone-4 (Sidehill/Chimne
519	J-4055C	4,944.00	77	3	Zone-4 (Sidehill/Chimne
524	J-4056C	4,917.00	89	6	Zone-4 (Sidehill/Chimne
	J-4057C	4,897.00	97	10	Zone-4 (Sidehill/Chimne
	J-4058C	4,884.00	103	3	Zone-4 (Sidehill/Chimne
	J-4059C	4,900.00	96	10	Zone-4 (Sidehill/Chimne
	J-4060C	4,897.00	97	3	Zone-4 (Sidehill/Chimne
	J-4061C	4,910.00	92	13	Zone-4 (Sidehill/Chimne
	J-4062C	4,923.00	86	15	Zone-4 (Sidehill/Chimne
	J-4063C	4,917.00	89	11	Zone-4 (Sidehill/Chimne
	J-4064C	4,915.00	90	0	Zone-4 (Sidehill/Chimne
	J-4065C	4,955.00	72	11	Zone-4 (Sidehill/Chimne
	J-4066C	4,892.00	100	4	Zone-4 (Sidehill/Chimne
	J-4067C	4,873.00	108	9	Zone-4 (Sidehill/Chimne
	J-4068C	4,910.00	92	12	Zone-4 (Sidehill/Chimne
	J-4069C	4,871.00	109	8	Zone-4 (Sidehill/Chimne
	J-4070C	4,889.00	101	3	Zone-4 (Sidehill/Chimne
	J-4071C	4,892.00	99	1	Zone-4 (Sidehill/Chimne
	J-4072C	4,902.00	95	0	Zone-4 (Sidehill/Chimne
541	J-4073C	4,896.00	98	3	Zone-4 (Sidehill/Chimne
542	J-4074C	4,906.00	93	4	Zone-4 (Sidehill/Chimne
543	J-4075C	4,879.00	105	4	Zone-4 (Sidehill/Chimne
545	J-4076C	4,851.00	117	4	Zone-4 (Sidehill/Chimne
546	J-4077C	4,851.00	117	7	Zone-4 (Sidehill/Chimne
		4,892.00	99	6	Zone-4 (Sidehill/Chimne
544	J-4078C	4,935.00	81	Ŏ	Zone-4 (Sidehill/Chimne
553	J-4079S		81	ő	Zone-4 (Sidehill/Chimne
554	J-4080S	4,935.00	83	ő	Zone-4 (Sidehill/Chimne
555	J-4081S	4,930.00	60	3	Zone-4 (Sidehill/Chimne
578	J-4085S	4,983.00	101	3	Zone-4 (Sidehill/Chimne
580	J-4086S	4,890.00	10	Ö	Zone Exempt
619	J-4087C	5,100.00		0	Zone-4 (Sidehill/Chimne
1409	J-4106 School	4,915.00	90	0	Zone-4 (Sidehill/Chimne
431	J-4107 School	4,915.00	90 82	0	Zone-4 (Sidehill/Chimne
437	J-4108 School	4,933.30	68	6	Zone-4 (Sidehill/Chimne

i	1824	J-4501 J-4502	4,956.00 4,948.00	71 75	7 6	Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney)
	1826	J-4503	4,943.00	77	5	Zone-4 (Sidehill/Chimney)
- 1	1828	J-4504	4,970.00	65	8	Zone-4 (Sidehill/Chimney)
- 1	1830	J-4505	4,984.00	59	8	Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney)
	1832	J-4506	4,984.00	59	8	Zone-4 (Sidehill/Chimney)
	1834	J-4507	4,981.00	61	8	Zone-4 (Sidehill/Chimney)
	1839	J-4508	4,956.00	71 77	6	Zone-4 (Sidehill/Chimney)
- 1	1841	J-4509	4,942.00	83	6	Zone-4 (Sidehill/Chimney)
	1843	J-4510	4,930.00 4,920.00	87	4	Zone-4 (Sidehill/Chimney)
	1845	J-4511	4,934.00	81	2	Zone-4 (Sidehill/Chimney)
	1847	J-4512 J-4513	4,922.00	86	8	Zone-4 (Sidehill/Chimney)
	1849 1851	J-4514	4,880.00	104	8 9 7	Zone-4 (Sidehill/Chimney)
	1853	J-4515	4,908.00	92	7	Zone-4 (Sidehill/Chimney)
	1855	J-4516	4,944.00	77	9	Zone-4 (Sidehill/Chimney)
	1857	J-4517	4,950.00	74		Zone-4 (Sidehill/Chimney)
	1859	J-4518	4,938.00	79	4 2 5 3 2 5 3	Zone-4 (Sidehill/Chimney)
2	1861	J-4519	4,940.00	78	5	Zone-4 (Sidehill/Chimney)
	1863	J-4520	4,906.00	93	3	Zone-4 (Sidehill/Chimney)
N	1865	J-4521	4,928.00	84	2	Zone-4 (Sidehill/Chimney)
-	1867	J-4522	4,944.00	77	5	Zone-4 (Sidehill/Chimney)
Phose	1870	J-4523	4,896.00	97	3	Zone-4 (Sidehill/Chimney)
7	1872	J-4524	4,976.00	63	6	Zone-4 (Sidehill/Chimney)
(7	1874	J-4525	4,969.00	66	6 8 8	Zone-4 (Sidehill/Chimney)
	1876	J-4526	4,959.00	70	8	Zone-4 (Sidehill/Chimney)
	1878	J-4527	4,952.00	73	6 7	Zone-4 (Sidehill/Chimney)
	1881	J-4528	4,970.00	65 77	10	Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney)
	1883	J-4529	4,942.00	95	3	Zone-4 (Sidehill/Chimney)
	1887	J-4530	4,902.00	88	5	Zone-4 (Sidehill/Chimney)
	1889	J-4531	4,918.00 4,942.00	77	5 7	Zone-4 (Sidehill/Chimney)
	1891	J-4532 J-4533	4,966.00	67	5	Zone-4 (Sidehill/Chimney)
	1893 1896	J-4534	4,917.00	88	12	Zone-4 (Sidehill/Chimney)
	1901	J-4535	4,950.00	74	4	Zone-4 (Sidehill/Chimney)
	1903	J-4536	4,932.00	82	6	Zone-4 (Sidehill/Chimney)
	1905	J-4537	4,952.00	73	5	Zone-4 (Sidehill/Chimney)
	1907	J-4538	4,968.00	66	6	Zone-4 (Sidehill/Chimney)
	1313	J-5001	5,066.00	69	- 1	Zone 5 (West7th)
	587	J-6001	5,106.13	86	0	Zone 6 (Boundary)
	589	J-6002	5,154.57	65	7	Zone 6 (Boundary)
	608	J-6003	5,179.37	54	3	Zone 6 (Boundary)
	590	J-6004	5,152.08	66	8	Zone 6 (Boundary)
	609	J-6005	5,155.32	64	7	Zone 6 (Boundary)
	610	J-6006	5,168.84	59 70	5 6	Zone 6 (Boundary) Zone 6 (Boundary)
	591	J-6007	5,142.51	78	7	Zone 6 (Boundary)
	592	J-6008	5,123.20 5,136.51	73	3	Zone 6 (Boundary)
	611	J-6009 J-6010	5,115.09	82	3	Zone 6 (Boundary)
	612 1458	J-6010	5,131.00	75	5	Zone 6 (Boundary)
	1460	J-6012	5,146.00	68	1	Zone 6 (Boundary)
	1481	J-6024	5,190.00	49	5	Zone 6 (Boundary)
	1483	J-6028	5,174.00	56	6	Zone 6 (Boundary)
	1485	J-6029	5,148.00	68	6	Zone 6 (Boundary)
	1487	J-6030	5,152.00	66	6	Zone 6 (Boundary)
	1505	J-6031	5,160.00	62	4	Zone 6 (Boundary)
	1490	J-6032	5,154.00	65	3	Zone 6 (Boundary)
	588	J-6034	5,194.00	48	0	Zone Exempt
	1308	J-6045	5,066.00	103	0	Zone Exempt
	586	J-6046	4,900.00	175	0	Zone Exempt
	1536	J-6047	5,200.00	45	5	Zone 6 (Boundary)
	1538	J-6048	5,210.00	41	6	Zone 6 (Boundary)
	1540	J-6049	5,212.00	40	2	Zone 6 (Boundary)
	1542	J-6050	5,164.00	61	8	Zone 6 (Boundary)
	1544	J-6051	5,178.00	55	6 5	Zone 6 (Boundary) Zone 6 (Boundary)
	1547	J-6052	5,144.00	69 69	3	Zone 6 (Boundary)
- 4	1553	J-6053	5,144.00	09	3	Zorie o (Dodridary)

J-6054 1551 J-6055 1555 J-6056 1557 J-6057 1559 J-6058 1321 J-Section 5.3.2 1401 J-Tangberg	5,138.00 5,145.00 5,120.00 5,120.00 5,134.00 4,704.00 4,928.00	72 69 80 80 74 88 84	5 4 5 7 8 0	Zone 6 (Boundary) Zone-4 (Sidehill/Chimney)
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Residual Pressures Peak Hour

Shaw Engineering Appendix A

Scenario Summary Report Scenario: Existing SVGID System + 5 Ridges

Scenario Summary							
ID	64	Carrie and Aver					
Label	Existing	Existing SVGID System + 5 Ridges					
Notes							
Active Topology	Base-Act	Base-Active Topology					
Physical	Existing	Existing System					
Demand	8750 Pe	ak Hour Demand					
Initial Settings	Existing	System Pumps OFF Tanks at LWL					
Operational	Base						
Age	Base-Ag	e Alternative					
Constituent	Base-Co	nstituent					
Trace	Base-Tra	ace Alternative					
Fire Flow	All Node	All Nodes					
Energy Cost	Base-En	Base-Energy Cost					
Transient	Base Tra	Base Transient					
Pressure Dependent Demand	Base Pre	Base Pressure Dependent Demand					
Failure History	Base Fai	Base Failure History					
SCADA	Base SC	Base SCADA					
User Data Extensions	Base-Us	er Data					
Steady State/EPS Solver Calcula Options	ation Propose	d SVGID System					
Transient Solver Calculation Op	tions Base Ca	Base Calculation Options					
Hydraulic Summary							
Time Analysis Type	Steady State	Use simple controls during steady state?	True				
Friction Method	Hazen- Williams	Is EPS Snapshot?	False				
Accuracy	0.001	Start Time	12:00:00 AM				
Trials	40	Calculation Type	Fire Flow				

Scenario: Existing SVGID System + 5 Ridges Current Time Step: 0.000 h FlexTable: Tank Table

Label	Zone	Elevation (Base) (ft)	Elevation (Minimum) (ft)	Elevation (Initial) (ft)	Elevation (Maximum) (ft)	Diameter (ft)	Volume Full (Calculated) (gal)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
Eastside	Zone-1-2-3	4,963.00	4,963.00	4,989,25	4,992.92	90.00	1,423,863.12	1,281	4,989.25
Chocolate	Zone-1-2-3	4,964.25	4,964.25	4,989,25	4,992.92	74.00	922,386.13	698	4,989.25
Klondike	Zone-1-2-3	4,968.00	4,968.00	4,989,25	4,992.92	107.00	1,676,243.96	1,789	4,989.25
Juniper Terr. Tank	Zone-1-2-3	4,952.29	4,952.29	4,974,94	4,974.94	60.00	479,062.68	0	4,974.94
Sidehill	Zone-4 (Sidehill/Chimney)	5,104.00	5,104.00	5,123,59	5,134.41	40.00	285,863.06	173	5,123.59
Chimnev 1	Zone-4 (Sidehill/Chimney)	5,104.00	5,104.00	5,123,59	5,135.09	40.00	292,255.26	389	5,123.59
Westside Tank	Zone-3 (Chocolate) Zone 6 (Boundary) Zone-4 (Sidehill/Chimney)	4,961.90	4,961.90	4,989.25	4,992.92	90.00	1,476,211.03	1,258	4,989.25
Boundary Tank		5,279.50	5,279.50	5,304.50	5,315.50	80.00	1,353,642.89	255	5,304.50
Chimney 2		5,104.00	5,104.00	5,123.59	5,135.09	75.00	1,027,459.90	385	5,123.59

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Scenario: Existing SVGID System + 5 Ridges Current Time Step: 0.000 h FlexTable: Junction Table

ID	Label	Elevation	Pressure	Demand	Zone
,_		(ft)	(psi)	(gpm)	
127	J-1001	4,639.00	55	7	Zone-1 (Southern)
131	J-1002	4,662.00	45	9	Zone-1 (Southern)
132	J-1003	4,649.00	51	2	Zone-1 (Southern)
128	J-1004	4,662.00	45	7	Zone-1 (Southern)
133	J-1005	4,653.00	49	1	Zone-1 (Southern)
129	J-1006	4,664.00	44	7	Zone-1 (Southern)
130	J-1007	4,661.00	46	2	Zone-1 (Southern)
134	J-1008	4,635.00	57	9	Zone-1 (Southern)
135	J-1009	4,621.00	63	15	Zone-1 (Southern)
139	J-1010	4,618.00	64	5	Zone-1 (Southern)
136	J-1011	4,625.00	61	5	Zone-1 (Southern)
138	J-1012	4,619.00	64	11	Zone-1 (Southern)
137	J-1013	4,625.00	61	7	Zone-1 (Southern)
140	J-1014	4,658.00	47	6	Zone-1 (Southern)
141	J-1015	4,665.00	44	6	Zone-1 (Southern)
142	J-1016	4,636.00	57	13	Zone-1 (Southern)
143	J-1017	4,639.00	55	23	Zone-1 (Southern)
143	J-1017 J-1018	4,651.00	50	14	Zone-1 (Southern)
144	J-1019	4,653.00	49	2	Zone-1 (Southern)
145	J-1019 J-1020	4,653.00	49	8	Zone-1 (Southern)
	J-1020	4,662.00	45	3	Zone-1 (Southern)
148	J-1021 J-1022	4,659.00	47	1	Zone-1 (Southern)
147		4,720.00	73	9	Zone-1 (Southern)
149	J-2001	4,710.00	78 78	11	Zone-2 (Central)
150	J-2002		78 78	6	Zone-2 (Central)
151	J-2003	4,710.00	82	6	Zone-2 (Central)
152	J-2004	4,700.00		8	Zone-2 (Central)
153	J-2005	4,667.00	96 97	9	Zone-2 (Central)
155	J-2006	4,664.00	104	60	Zone-2 (Central)
154	J-2007	4,649.00		7	Zone-2 (Central)
157	J-2008	4,659.00	100 98	3	Zone-2 (Central)
158	J-2009	4,664.00	102	7	Zone-2 (Central)
159	J-2010	4,655.00		92	Zone-2 (Central)
161	J-2011	4,675.00	93		Zone-2 (Central)
162	J-2012	4,696.00	83	31	
163	J-2013	4,716.00	75	34	Zone-2 (Central)
164	J-2014	4,745.00	62	78	Zone-2 (Central)
165	J-2015	4,776.00	49	11	Zone-2 (Central)
166	J-2016	4,696.00	83	34	Zone-2 (Central)
167	J-2017	4,700.00	81	14 26	Zone-2 (Central) Zone-2 (Central)
168	J-2018	4,696.00	83		Zone-2 (Central)
169	J-2019	4,727.00	70	21	Zone-2 (Central)
190	J-2020	4,730.00	68	23	
170	J-2021	4,737.00	65	17	Zone-2 (Central)
175	J-2022	4,773.00	49	6	Zone-2 (Central)
171	J-2023	4,740.00	64	10	Zone-2 (Central)
172	J-2024	4,747.00	61	15	Zone-2 (Central)
174	J-2025	4,806.00	35	9	Zone-2 (Central)
173	J-2026	4,744.00	62	6	Zone-2 (Central)
176	J-2027	4,727.00	69	16	Zone-2 (Central)
179	J-2028	4,732.00	67	26	Zone-2 (Central)
177	J-2029	4,747.00	61	11	Zone-2 (Central)
178	J-2030	4,762.00	54	15	Zone-2 (Central)
180	J-2031	4,741.00	63	19	Zone-2 (Central)
191	J-2032	4,740.00	64	3	Zone-2 (Central)
181	J-2033	4,745.00	62	16	Zone-2 (Central)
182	J-2034	4,753.00	58	13	Zone-2 (Central)
183	J-2035	4,763.00	54	23	Zone-2 (Central)
1	1	i	I	i	1

106	12026	4,751.00	59	21	Zone-2 (Central)
186	J-2036			9	Zone-2 (Central)
192	J-2037	4,735.00	66		
184	J-2038	4,758.00	56	11	Zone-2 (Central)
187	J-2039	4,760.00	55	19	Zone-2 (Central)
188	J-2040	4,779.00	47	9	Zone-2 (Central)
		·	42	7	Zone-2 (Central)
189	J-2041	4,790.00			
185	J-2042	4,797.00	39	15	Zone-2 (Central)
193	J-2043	4,810.00	34	4	Zone-2 (Central)
195	J-2044	4,667.00	97	23	Zone-2 (Central)
			104	3	Zone-2 (Central)
196	J-2045	4,651.00			
202	J-2046	4,664.00	99	7	Zone-2 (Central)
203	J-2047	4,662.00	99	14	Zone-2 (Central)
204	J-2048	4,654.00	103	7	Zone-2 (Central)
			99	9	Zone-2 (Central)
213	J-2049	4,664.00			
214	J-2050	4,671.00	96	9	Zone-2 (Central)
205	J-2051	4,671.00	96	9	Zone-2 (Central)
206	J-2052	4,696.00	85	9	Zone-2 (Central)
	1		82	9	Zone-2 (Central)
207	J-2053	4,703.00			
208	J-2054	4,717.00	76	5	Zone-2 (Central)
209	J-2055	4,701.00	83	5	Zone-2 (Central)
210	J-2056	4,721.00	74	6	Zone-2 (Central)
			96	14	Zone-2 (Central)
201	J-2057	4,672.00			
200	J-2058	4,681.00	92	9	Zone-2 (Central)
199	J-2059	4,682.00	91	11	Zone-2 (Central)
198	J-2060	4,685.00	90	14	Zone-2 (Central)
		4,687.00	89	15	Zone-2 (Central)
197	J-2061				
215	J-2062	4,681.00	92	3	Zone-2 (Central)
211	J-2063	4,674.00	95	12	Zone-2 (Central)
212	J-2064	4,678.00	95	12	Zone-2 (Central)
		4,697.00	84	13	Zone-2 (Central)
216	J-2065			14	Zone-2 (Central)
217	J-2066	4,701.00	82		
218	J-2067	4,708.00	78	22	Zone-2 (Central)
219	J-2068	4,696.00	84	6	Zone-2 (Central)
		4,703.00	81	11	Zone-2 (Central)
220	J-2069			14	Zone-2 (Central)
221	J-2070	4,706.00	80		
222	J-2071	4,730.00	69	28	Zone-2 (Central)
223	J-2072	4,737.00	66	18	Zone-2 (Central)
224	J-2073	4,729.00	70	14	Zone-2 (Central)
			74	13	Zone-2 (Central)
225	J-2074	4,719.00			
230	J-2075	4,727.00	71	32	Zone-2 (Central)
231	J-2076	4,746.00	63	26	Zone-2 (Central)
232	J-2077	4,750.00	61	14	Zone-2 (Central)
			78	9	Zone-2 (Central)
226	J-2078	4,713.00			
227	J-2079	4,706.00	82	10	Zone-2 (Central)
228	J-2080	4,701.00	84	16	Zone-2 (Central)
229	J-2081	4,710.00	80	13	Zone-2 (Central)
	J-2082	4,718.00	76	19	Zone-2 (Central)
237				16	Zone-2 (Central)
236	J-2083	4,722.00	74		
233	J-2084	4,740.00	65	11	Zone-2 (Central)
234	J-2085	4,736.00	67	14	Zone-2 (Central)
235	J-2086	4,731.00	70	13	Zone-2 (Central)
	1			16	Zone-2 (Central)
238	J-2087	4,770.00	52		
239	J-2088	4,770.00	52	13	Zone-2 (Central)
240	J-2089	4,784.00	46	7	Zone-2 (Central)
241	J-2090	4,777.00	49	21	Zone-2 (Central)
	1		64	17	Zone-2 (Central)
244	J-2091	4,743.00			
242	J-2092	4,759.00	57	13	Zone-2 (Central)
243	J-2093	4,759.00	57	3	Zone-2 (Central)
276	J-2094	4,681.00	99	7	Zone-2 (Central)
			101	11	Zone-2 (Central)
277	J-2095	4,681.00			
278	J-2096	4,687.00	95	21	Zone-2 (Central)
245	J-2097	4,692.00	91	10	Zone-2 (Central)
279	J-2098	4,700.00	96	4	Zone-2 (Central)
		4,700.00	96	15	Zone-2 (Central)
280	J-2099			3	Zone-2 (Central)
281	J-2100	4,681.00	107		
246	J-2101	4,693.00	91	30	Zone-2 (Central)
247	J-2102	4,708.00	81	33	Zone-2 (Central)
1 -	1	1 ' '		I	ı

1	J-2103	4,724.00	73	31	Zone-2 (Central)
240			70	13	Zone-2 (Central)
249	J-2104	4,730.00		15	Zone-2 (Central)
251	J-2105	4,752.00	60		
250	J-2106	4,760.00	57	13	Zone-2 (Central)
297	J-2107	4,683.00	93	23	Zone-2 (Central)
300	J-2108	4,693.00	88	7	Zone-2 (Central)
299	J-2109	4,693.00	85	10	Zone-2 (Central)
298	J-2110	4,699.00	83	11	Zone-2 (Central)
		4,710.00	89	16	Zone-2 (Central)
285	J-2111		76	23	Zone-2 (Central)
286	J-2112	4,738.00			
291	J-2113	4,720.00	83	12	Zone-2 (Central)
270	J-2114	4,713.00	83	22	Zone-2 (Central)
269	J-2115	4,707.00	85	9	Zone-2 (Central)
267	J-2116	4,707.00	85	8	Zone-2 (Central)
266	J-2117	4,706.00	83	20	Zone-2 (Central)
		4,703.00	84	37	Zone-2 (Central)
265	J-2118		82	20	Zone-2 (Central)
261	J-2119	4,705.00			
252	J-2120	4,721.00	74	17	Zone-2 (Central)
257	J-2121	4,748.00	62	16	Zone-2 (Central)
256	J-2122	4,750.00	61	11	Zone-2 (Central)
290	J-2123	4,729.00	79	6	Zone-2 (Central)
287	J-2124	4,760.00	66	11	Zone-2 (Central)
289	J-2125	4,746.00	72	11	Zone-2 (Central)
		· '	65 65	16	Zone-2 (Central)
288	J-2126	4,763.00			
292	J-2127	4,753.00	69	13	Zone-2 (Central)
293	J-2128	4,770.00	61	8	Zone-2 (Central)
294	J-2129	4,750.00	70	11	Zone-2 (Central)
295	J-2130	4,780.00	57	11	Zone-2 (Central)
296	J-2131	4,790.00	53	23	Zone-2 (Central)
271	J-2132	4,758.00	63	11	Zone-2 (Central)
			67	9	Zone-2 (Central)
272	J-2133	4,748.00			
273	J-2134	4,720.00	79	14	Zone-2 (Central)
268	J-2135	4,748.00	65	21	Zone-2 (Central)
263	J-2136	4,726.00	72	18	Zone-2 (Central)
264	J-2137	4,715.00	77	17	Zone-2 (Central)
254	J-2138	4,726.00	72	16	Zone-2 (Central)
253	J-2139	4,724.00	73	21	Zone-2 (Central)
			65	13	Zone-2 (Central)
262	J-2140	4,743.00			
255	J-2141	4,728.00	71	19	Zone-2 (Central)
259	J-2142	4,747.00	63	18	Zone-2 (Central)
258	J-2143	4,745.00	63	35	Zone-2 (Central)
260	J-2144	4,760.00	57	7	Zone-2 (Central)
339	J-2145	4,763.00	55	0	Zone-2 (Central)
338	J-2146	4,763.00	55	Ō	Zone-2 (Central)
				ŏ	Zone-2 (Central)
552	J-2147	4,751.00	66		
556	J-2148	4,727.00	74	0	Zone-2 (Central)
558	J-2149	4,683.00	93	0	Zone-2 (Central)
560	J-2150	4,785.00	44	0	Zone-2 (Central)
557	J-2151	4,810.00	34	0	Zone-2 (Central)
1351	J-2152	4,729.75	70	0	Zone-2 (Central)
	J-2153	4,756.00	57	Ō	Zone-2 (Central)
559 501			59	ő	Zone-2 (Central)
581	J-2154	4,755.00			Zone-2 (Central)
582	J-2155	4,760.00	57	0	
1327	J-2156	4,745.00	63	0	Zone-2 (Central)
1380	J-2157	4,681.00	105	0	Zone-2 (Central)
303	J-3001	4,648.00	144	0	Zone Exempt
304	J-3002	4,648.00	144	0	Zone Exempt
126	J-3002	4,645.00	145	Ö	Zone Exempt
		4,660.00	139	Ö	Zone Exempt
305	J-3004			3	
306	J-3005	4,660.00	139		Zone Exempt
160	J-3006	4,662.00	138	9	Zone Exempt
156	J-3007	4,720.00	114	17	Zone-3 (Chocolate)
307	J-3008	4,840.00	64	6	Zone-3 (Chocolate)
308	J-3010	4,860.00	55	9	Zone-3 (Chocolate)
309	J-3011	4,827.00	70	11	Zone-3 (Chocolate)
	J-3011	4,799.00	81	17	Zone-3 (Chocolate)
310			85	9	Zone-3 (Chocolate)
311	J-3013	4,790.00	⁶⁵	ا	(Onlocolate)

	1.004.4	4 920 00 1	72	4	Zone-3 (Chocolate)
	J-3014	4,820.00			
313	J-3015	4,820.00	72	9	Zone-3 (Chocolate)
314	J-3016	4,826.00	70	8	Zone-3 (Chocolate)
				8	Zone-3 (Chocolate)
315	J-3017	4,835.00	66		
194	J-3018	4,818.00	73	12	Zone-3 (Chocolate)
316	J-3019	4,835.00	66	48	Zone-3 (Chocolate)
					Zone-3 (Chocolate)
317	J-3020	4,840.00	64	11	
318	J-3021	4,826.00	69	5	Zone-3 (Chocolate)
319	J-3022	4,817.00	73	17	Zone-3 (Chocolate)
					Zone-3 (Chocolate)
320	J-3023	4,825.00	69	12	
321	J-3024	4,833.00	66	1	Zone-3 (Chocolate)
322	J-3025	4,833.00	66	6	Zone-3 (Chocolate)
					Zone Exempt
328	J-3026	4,892.00	40	0	
323	J-3027	4,801.00	79	18	Zone-3 (Chocolate)
324	J-3028	4,800.00	80	1	Zone-3 (Chocolate)
				- 1	
327	J-3029	4,827.00	68	11	Zone-3 (Chocolate)
326	J-3030	4,822.00	70	9	Zone-3 (Chocolate)
325	J-3031	4,801.00	79	6	Zone-3 (Chocolate)
329	J-3032	4,834.00	65	14	Zone-3 (Chocolate)
330	J-3033	4,862.00	53	15	Zone-3 (Chocolate)
	J-3034	4,882.00	44	11	Zone-3 (Chocolate)
331					
302	J-3035	4,648.00	144	0	Zone Exempt
332	J-3036	4.645.00	145	0	Zone Exempt
		4,662.00	138	6	Zone Exempt
333	J-3037				
334	J-3038	4,692.00	125	14	Zone Exempt
335	J-3039	4,776.00	90	12	Zone Exempt
		· · · · · · · · · · · · · · · · · · ·	96	0	Zone Exempt
336	J-3040	4,763.00			
337	J-3041	4,763.00	96	19	Zone-3 (Chocolate)
340	J-3042	4,811.00	75	11	Zone-3 (Chocolate)
			75	10	Zone-3 (Chocolate)
341	J-3043	4,811.00			
342	J-3044	4,836.00	64	19	Zone-3 (Chocolate)
344	J-3045	4,792.00	83	11	Zone-3 (Chocolate)
			65	11	Zone-3 (Chocolate)
343	J-3046	4,834.00			
345	J-3047	4,784.00	86	6	Zone-3 (Chocolate)
347	J-3048	4,848.00	59	2	Zone-3 (Chocolate)
			52	16	Zone-3 (Chocolate)
348	J-3049	4,863.00			
349	J-3050	4,882.00	44	6	Zone-3 (Chocolate)
350	J-3051	4,909.00	32	3	Zone Exempt
				Ö	Zone Exempt
351	J-3052	4,925.00	26		
371	J-3053	4,925.00	26	1	Zone Exempt
372	J-3054	4,921.00	27	0	Zone Exempt
				ŏ	Zone Exempt
373	J-3055	4,950.00	15		
374	J-3056	4,943.00	18	0	Zone Exempt
346	J-3057	4,813.00	74	19	Zone-3 (Chocolate)
					Zone-3 (Chocolate)
352	J-3058	4,834.00	65	9	Zone-5 (Chocolate)
353	J-3059	4,853.00	57	9	Zone-3 (Chocolate)
354	J-3060	4,863.00	52	6	Zone-3 (Chocolate)
			52	2	Zone-3 (Chocolate)
355	J-3061	4,863.00			
356	J-3062	4,881.00	44	10	Zone-3 (Chocolate)
357	J-3063	4,877.00	46	13	Zone-3 (Chocolate)
				7	Zone-3 (Chocolate)
358	J-3064	4,875.00	47		
359	J-3065	4,888.00	41	4	Zone-3 (Chocolate)
360	J-3066	4,863.00	52	6	Zone-3 (Chocolate)
			61	10	Zone-3 (Chocolate)
362	J-3067	4,843.00			
361	J-3068	4,847.00	59	7	Zone-3 (Chocolate)
363	J-3069	4,821.00	70	10	Zone-3 (Chocolate)
				4	Zone-3 (Chocolate)
364	J-3070	4,811.00	75		
365	J-3071	4,807.00	76	0	Zone-3 (Chocolate)
366	J-3072	4,807.00	76	4	Zone-3 (Chocolate)
					Zone-3 (Chocolate)
367	J-3073	4,790.00	84	14	
368	J-3074	4,790.00	84	9	Zone-3 (Chocolate)
369	J-3075	4,779.00	88	24	Zone-3 (Chocolate)
	1				Zone-3 (Chocolate)
370	J-3076	4,765.00	95	9	
301	J-3077	4,759.00	97	1	Zone-3 (Chocolate)
375	J-3078	4,887.00	42	0	Zone Exempt
			i i		Zone-3 (Chocolate)
379	J-3079	4,876.00	47	6	
380	J-3080	4,869.00	50	2	Zone-3 (Chocolate)
1 111	I	1 ' 1	I		

1	J-3081	4,860.00	54	20	Zone-3 (Chocolate)
				21	Zone-3 (Chocolate)
382	J-3082	4,848.00	59	I	
383	J-3083	4,838.00	63	20	Zone-3 (Chocolate)
384	J-3084	4,828.00	67	19	Zone-3 (Chocolate)
385	J-3085	4,816.00	73	20	Zone-3 (Chocolate)
		' '	78	20	Zone-3 (Chocolate)
386	J-3086	4,804.00		1	
387	J-3087	4,792.00	83	7	Zone-3 (Chocolate)
388	J-3088	4,792.00	83	12	Zone-3 (Chocolate)
389	J-3089	4,785.00	86	0	Zone-3 (Chocolate)
			86	4	Zone-3 (Chocolate)
390	J-3090	4,785.00			
392	J-3091	4,774.00	91	2	Zone-3 (Chocolate)
391	J-3092	4,774.00	91	0	Zone-3 (Chocolate)
393	J-3093	4,776.00	90	5	Zone-3 (Chocolate)
			86	10	Zone-3 (Chocolate)
394	J-3094	4,784.00			,
395	J-3095	4,797.00	81	11	Zone-3 (Chocolate)
396	J-3096	4,810.00	75	15	Zone-3 (Chocolate)
397	J-3097	4,817.00	72	16	Zone-3 (Chocolate)
			68	1	Zone-3 (Chocolate)
398	J-3098	4,826.00			
399	J-3099	4,839.00	63	18	Zone-3 (Chocolate)
400	J-3100	4,848.00	59	12	Zone-3 (Chocolate)
401	J-3101	4,858.00	55	16	Zone-3 (Chocolate)
			51	11	Zone-3 (Chocolate)
402	J-3102	4,867.00			
403	J-3103	4,781.00	88	6	Zone-3 (Chocolate)
404	J-3104	4,781.00	88	13	Zone-3 (Chocolate)
405	J-3105	4,787.00	85	6	Zone-3 (Chocolate)
			84	19	Zone-3 (Chocolate)
406	J-3106	4,789.00			
407	J-3107	4,792.00	83	9	Zone-3 (Chocolate)
408	J-3108	4,798.00	80	10	Zone-3 (Chocolate)
409	J-3109	4,801.00	79	8	Zone-3 (Chocolate)
			77	1	Zone-3 (Chocolate)
410	J-3110	4,806.00			
411	J-3111	4,808.00	76	10	Zone-3 (Chocolate)
412	J-3112	4,814.00	74	10	Zone-3 (Chocolate)
413	J-3113	4,774.00	91	3	Zone-3 (Chocolate)
		'		19	Zone-3 (Chocolate)
414	J-3114	4,763.00	95		
275	J-3115	4,748.00	102	5	Zone-3 (Chocolate)
283	J-3116	4,675.00	130	0	Zone Exempt
		4,681.00	127	3	Zone Exempt
282	J-3117			3	Zone Exempt
415	J-3118	4,681.00	128		
416	J-3119	4,681.00	128	3	Zone Exempt
284	J-3120	4,700.00	120	0	Zone Exempt
		4,802.00	78	1	Zone-3 (Chocolate)
417	J-3121			4	Zone-3 (Chocolate)
419	J-3122	4,751.00	100		
420	J-3123	4,777.00	89	16	Zone-3 (Chocolate)
421	J-3124	4,773.00	90	21	Zone-3 (Chocolate)
		4,772.00	91	15	Zone-3 (Chocolate)
422	J-3125		90	19	Zone-3 (Chocolate)
423	J-3126	4,773.00			
424	J-3127	4,775.00	89	10	Zone-3 (Chocolate)
425	J-3128	4,777.00	89	11	Zone-3 (Chocolate)
426	J-3129	4,781.00	87	9	Zone-3 (Chocolate)
			94	10	Zone-3 (Chocolate)
427	J-3130	4,765.00			
428	J-3131	4,766.00	93	28	Zone-3 (Chocolate)
429	J-3132	4,759.00	96	21	Zone-3 (Chocolate)
430	J-3133	4,766.00	93	20	Zone-3 (Chocolate)
			93	16	Zone-3 (Chocolate)
431	J-3134	4,768.00		32	Zone-3 (Chocolate)
432	J-3135	4,766.00	93		
433	J-3136	4,762.00	95	6	Zone-3 (Chocolate)
434	J-3137	4,759.00	96	30	Zone-3 (Chocolate)
•		4,755.00	98	22	Zone-3 (Chocolate)
435	J-3138				Zone-3 (Chocolate)
436	J-3139	4,760.00	96	21	
437	J-3140	4,766.00	93	21	Zone-3 (Chocolate)
438	J-3141	4,780.00	87	7	Zone-3 (Chocolate)
		4,770.00	92	Ö	Zone-3 (Chocolate)
439	J-3142				
440	J-3143	4,770.00	92	1	Zone-3 (Chocolate)
463	J-3144	4,766.00	94	3	Zone-3 (Chocolate)
441	J-3145	4,771.00	92	3	Zone-3 (Chocolate)
	1	4,770.00	92	8	Zone-3 (Chocolate)
442	J-3146			١ ٥	Zone-3 (Chocolate)
449	J-3147	4,770.00	92	l '	Zone-3 (Chocolate)
	1	•	•	•	

1		J-3148	4,771.00	92	6	Zone-3 (Chocolate)	Ĺ
	443	J-3149	4,758.00	97	37	Zone-3 (Chocolate)	
	444	J-3150	4,758.00	97	17	Zone-3 (Chocolate)	
- 1	445	J-3151	4,760.00	96	19	Zone-3 (Chocolate)	
	446	J-3152	4,755.00	98	23	Zone-3 (Chocolate)	
	447	J-3153	4,755.00	98	17	Zone-3 (Chocolate)	
	418	J-3154	4,810.00	75	5 7	Zone-3 (Chocolate) Zone-3 (Chocolate)	1
	450	J-3155	4,779.00	88 92	1	Zone-3 (Chocolate)	1
- 1	451 274	J-3156 J-3157	4,770.00 4,770.00	92	ò	Zone-3 (Chocolate)	l l
	376	J-3158	4,880.00	45	9	Zone Exempt	ı
	377	J-3159	4,861.00	54	11	Zone-3 (Chocolate)	
	378	J-3160	4,869.00	50	23	Zone-3 (Chocolate)	
	452	J-3161	4,840.00	63	1	Zone-3 (Chocolate)	l
	453	J-3162	4,834.00	66	19	Zone-3 (Chocolate)	
	454	J-3163	4,843.00	62	3	Zone-3 (Chocolate)	
	455	J-3164	4,820.00	71	11	Zone-3 (Chocolate) Zone-3 (Chocolate)	
	456	J-3165	4,882.00	44 61	8 4	Zone-3 (Chocolate)	
	466 464	J-3167 J-3168	4,848.00 4,870.00	51	7	Zone-3 (Chocolate)	1
	465	J-3169	4,843.00	63	13	Zone-3 (Chocolate)	1
	467	J-3170	4,870.00	51	6	Zone-3 (Chocolate)	
	468	J-3171	4,949.00	15	0	Zone Exempt	1
	458	J-3172	4,648.00	144	0	Zone Exempt	
	461	J-3173	4,648.00	40	0	Zone Exempt	1
	460	J-3174	4,648.00	144	0	Zone Exempt	1
- 11	459	J-3175	4,648.00	144	0	Zone Exempt	
	462	J-3176	4,648.00	40 89	0	Zone Exempt Zone-3 (Chocolate)	
	547 548	J-3177 J-3178	4,780.00 4,780.00	89	ő	Zone-3 (Chocolate)	
	583	J-3180	4,835.00	66	ŏ	Zone-3 (Chocolate)	
	550	J-3181	4,750.00	102	Ô	Zone Exempt	
	549	J-3182	4,817.00	73	0	Zone Exempt	
- 1	561	J-3183	4,762.00	95	6	Zone-3 (Chocolate)	
	562	J-3184	4,816.70	72	10	Zone-3 (Chocolate)	
	563	J-3185	4,842.90	60	11	Zone-3 (Chocolate)	1
- 1	564	J-3186	4,868.30	49	44	Zone-3 (Chocolate)	1
- 1	569	J-3191	4,844.00	60 67	42 8	Zone-3 (Chocolate) Zone-3 (Chocolate)	1
- 1	570 572	J-3192 J-3193	4,828.00 4,807.00	76	6	Zone-3 (Chocolate)	1
- 1	571	J-3194	4,807.00	76	5	Zone-3 (Chocolate)	1
- 1	573	J-3195	4,828.00	67	5	Zone-3 (Chocolate)	1
	584	J-3198	4,900.00	38	0	Zone Exempt	1
	585	J-3199	4,900.00	38	0	Zone Exempt	1
	1368	J-3200	4,875.00	47	0	Zone-3 (Chocolate)	1
	1370	J-3201	4,863.00	53	0	Zone-3 (Chocolate) Zone Exempt	-
	1914	J-3500	4,967.50 4,942.00	9 20	o	Zone Exempt	
	1911 1917	J-3501 J-3502	4,892.00	41	Ö	Zone Exempt	1
	1919	J-3503	4,866.00	53	8	Zone-3 (Chocolate)	
	1922	J-3504	4,841.00	63	0	Zone-3 (Chocolate)	
	1924	J-3505	4,844.00	62	13	Zone-3 (Chocolate)	1
	1927	J-3506	4,824.00	71	6	Zone-3 (Chocolate)	
	1929	J-3507	4,834.00	66	7	Zone-3 (Chocolate)	1
	1932	J-3508	4,846.00	61	9	Zone-3 (Chocolate)	1
_	1934	J-3509	4,858.00	56	9 10	Zone-3 (Chocolate) Zone-3 (Chocolate)	
	1936	J-3510	4,869.00	51 46	8	Zone-3 (Chocolate)	
Phase	1938 1940	J-3511 J-3512	4,880.00 4,870.00	51	9	Zone-3 (Chocolate)	
2	1940	J-3512 J-3513	4,857.00	56	9	Zone-3 (Chocolate)	
0	1944	J-3514	4,844.00	62	10	Zone-3 (Chocolate)	
1-	1946	J-3515	4,828.00	69	9	Zone-3 (Chocolate)	
	1948	J-3516	4,819.00	73	7	Zone-3 (Chocolate)	
	1952	J-3517	4,823.00	71	7	Zone-3 (Chocolate)	
	1954	J-3518	4,820.00	72	0	Zone-3 (Chocolate)	
	4050	1 1 2540	1 4 900 00 1	77	0	Zone-3 (Chocolate)	
	1956 1958	J-3519 J-3520	4,809.00 4,791.00	77 85	8	Zone-3 (Chocolate)	1

1964	
1970	
1972	
1974	
1980	
1982	
1984 J-3532 4,797.00 82 11 Zone-3 (Chocolate) 1986 J-3533 4,801.00 80 8 Zone-3 (Chocolate) 1998 J-3535 4,808.00 77 13 Zone-3 (Chocolate) 1992 J-3536 4,811.00 76 8 Zone-3 (Chocolate) 1994 J-3537 4,807.00 78 8 Zone-3 (Chocolate) 1995 J-3538 4,802.00 80 6 Zone-3 (Chocolate) 1998 J-3539 4,801.00 79 7 Zone-3 (Chocolate) 2002 J-3540 4,804.00 79 7 Zone-3 (Chocolate) 2005 J-3541 4,804.00 79 7 Zone-3 (Chocolate) 2006 J-3543 4,804.00 79 7 Zone-3 (Chocolate) 2010 J-3543 4,804.00 79 9 Zone-3 (Chocolate) 2011 J-3544 4,848.00 68 5 Zone-3 (Chocolate) 2014 J-3545 4,838.00 64 9 Zone-3 (Chocolate) 2015 J-3540 4,816.00 74 4 Zone-3 (Chocolate) 2016 J-3546 4,816.00 74 4 Zone-3 (Chocolate) 2017 J-3547 4,840.00 79 Zone-3 (Chocolate) 2023 J-3549 4,812.00 74 4 Zone-3 (Chocolate) 2025 J-3550 4,798.00 74 4 Zone-3 (Chocolate) 2027 J-3551 4,798.00 75 7 Zone-3 (Chocolate) 2029 J-3552 4,808.00 77 1 Zone-3 (Chocolate) 2031 J-3553 4,802.00 80 6 Zone-3 (Chocolate) 2034 J-3555 4,884.00 60 7 Zone-3 (Chocolate) 2034 J-3555 4,886.00 77 1 Zone-3 (Chocolate) 2034 J-3555 4,886.00 77 1 Zone-3 (Chocolate) 2034 J-3555 4,886.00 77 2one-3 (Chocolate) 2034 J-3555 4,886.00 77 2one-3 (Chocolate) 2044 J-3557 4,848.00 60 7 Zone-3 (Chocolate) 2044 J-3557 4,848.00 60 7 Zone-3 (Chocolate) 2044 J-3557 4,848.00 60 7 Zone-3 (Chocolate) 2044 J-3559 4,785.00 87 0 Zone-3 (Chocolate) 2044 J-3550 4,785.00 87 0 Zone-3 (Chocolate) 2044 J-3550 4,785.00 7 Zone-3 (Chocolate) 2050 J-3560 4,654.00 46 Zone-1 (Southern)	
1986 J-3533	
1990 J-3535	
1992	
1994 J-3537 4,807.00 78 8 Zone-3 (Chocolate) 1996 J-3538 4,802.00 80 6 Zone-3 (Chocolate) 1998 J-3539 4,801.00 80 10 Zone-3 (Chocolate) 2002 J-3540 4,804.00 79 7 Zone-3 (Chocolate) 2005 J-3541 4,804.00 79 9 Zone-3 (Chocolate) 2010 J-3543 4,830.00 68 5 Zone-3 (Chocolate) 2011 J-3543 4,838.00 66 Zone-3 (Chocolate) 2012 J-3544 4,848.00 60 10 Zone-3 (Chocolate) 2014 J-3545 4,838.00 64 9 Zone-3 (Chocolate) 2015 J-3546 4,816.00 74 4 Zone-3 (Chocolate) 2018 J-3549 4,812.00 76 9 Zone-3 (Chocolate) 2025 J-3550 4,790.00 85 7 Zone-3 (Chocolate) 2027 J-3551 4,798.00 1 82 2 Zone-3 (Chocolate) 2029 J-3552 4,808.00 77 1 Zone-3 (Chocolate) 2031 J-3553 4,802.00 80 6 Zone-3 (Chocolate) 2031 J-3556 4,856.00 77 Zone-3 (Chocolate) 2034 J-3556 4,856.00 77 Zone-3 (Chocolate) 2044 J-3557 4,834.00 66 Zone-3 (Chocolate) 2048 J-3559 4,744.00 105 0 Zone-3 (Chocolate) 2050 J-3560 4,654.00 105 0 Zone-3 (Chocolate) 2050 J-3560 4,654.00 105 0 Zone-3 (Chocolate) 2060 Zone-3 (Chocolate) 207 Zone-3 (Chocolate) 207 Zone-3 (Chocolate) 208 Zone-3 (Chocolate) 209 J-3550 J-35	
1998	
2002	
2005	
2008	
2012 J-3544 4,848.00 464 9 Zone-3 (Chocolate) 2014 J-3545 4,816.00 64 9 Zone-3 (Chocolate) 2018 J-3547 4,840.00 64 6 Zone-3 (Chocolate) 2023 J-3549 4,812.00 64 6 Zone-3 (Chocolate) 2025 J-3550 4,790.00 85 7 Zone-3 (Chocolate) 2027 J-3551 4,798.00 J 82 2 Zone-3 (Chocolate) 2029 J-3552 4,808.00 77 1 Zone-3 (Chocolate) 2031 J-3553 4,802.00 80 6 Zone-3 (Chocolate) 2034 J-3554 4,848.00 60 7 Zone-3 (Chocolate) 2036 J-3555 4,856.00 57 7 Zone-3 (Chocolate) 2041 J-3556 4,785.00 87 0 Zone-3 (Chocolate) 2042 J-3557 4,834.00 66 6 Zone-3 (Chocolate) 2043 J-3559 4,744.00 105 0 Zone-3 (Chocolate) 2044 J-3559 4,744.00 105 0 Zone-3 (Chocolate) 2050 J-3560 4,654.00 1144 46 Zone-1 (Southern)	
2018 J-3547 4,840.00 4812.00 2023 J-3549 4,812.00 4 85 7 Zone-3 (Chocolate) 2025 J-3550 4,790.00 4 85 7 Zone-3 (Chocolate) 2027 J-3551 4,798.00 J-3552 4,808.00 77 J Zone-3 (Chocolate) 2031 J-3553 4,802.00 80 6 Zone-3 (Chocolate) 2034 J-3554 4,848.00 60 7 Zone-3 (Chocolate) 2036 J-3555 4,856.00 7 Zone-3 (Chocolate) 2041 J-3556 4,785.00 87 0 Zone-3 (Chocolate) 2044 J-3557 4,834.00 2044 J-3557 4,834.00 2048 J-3559 4,744.00 2050 J-3560 4,654.00 2050	
2018 J-3547 4,840.00 4812.00 2023 J-3549 4,812.00 4 85 7 Zone-3 (Chocolate) 2025 J-3550 4,790.00 4 85 7 Zone-3 (Chocolate) 2027 J-3551 4,798.00 J-3552 4,808.00 77 J Zone-3 (Chocolate) 2031 J-3553 4,802.00 80 6 Zone-3 (Chocolate) 2034 J-3554 4,848.00 60 7 Zone-3 (Chocolate) 2036 J-3555 4,856.00 7 Zone-3 (Chocolate) 2041 J-3556 4,785.00 87 0 Zone-3 (Chocolate) 2044 J-3557 4,834.00 2044 J-3557 4,834.00 2048 J-3559 4,744.00 2050 J-3560 4,654.00 2050	
2018 J-3547 4,840.00 64 6 Zone-3 (Chocolate) 2023 J-3549 4,812.00 76 9 Zone-3 (Chocolate) 2025 J-3550 4,790.00 85 7 Zone-3 (Chocolate) 2027 J-3551 4,798.00 182 2 Zone-3 (Chocolate) 2029 J-3552 4,808.00 77 1 Zone-3 (Chocolate) 2031 J-3553 4,802.00 80 6 Zone-3 (Chocolate) 2034 J-3554 4,848.00 60 7 Zone-3 (Chocolate) 2036 J-3555 4,856.00 57 7 Zone-3 (Chocolate) 2041 J-3556 4,785.00 87 0 Zone-3 (Chocolate) 2044 J-3557 4,834.00 66 2one-3 (Chocolate) 2048 J-3559 4,744.00 105 0 Zone-3 (Chocolate) 2050 J-3560 4,654.00 144 46 Zone-1 (Southern)	
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2029 J-3552 4,808.00 77 1 Zone-3 (Chocolate) 2031 J-3553 4,802.00 80 6 Zone-3 (Chocolate) 2034 J-3554 4,848.00 60 7 Zone-3 (Chocolate) 2036 J-3555 4,856.00 57 7 Zone-3 (Chocolate) 2041 J-3556 4,785.00 87 0 Zone-3 (Chocolate) 2044 J-3557 4,834.00 66 6 Zone-3 (Chocolate) 2048 J-3559 4,744.00 105 0 Zone-3 (Chocolate) 2050 J-3560 4,654.00 144 46 Zone-1 (Southern)	
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2044 J-3557 4,834.00 66 6 Zone-3 (Chocolate) 2048 J-3559 4,744.00 105 0 Zone-3 (Chocolate) 2050 J-3560 4,654.00 144 46 Zone-1 (Southern)	
2044 J-3557 4,834.00 66 6 Zone-3 (Chocolate) 2048 J-3559 4,744.00 105 0 Zone-3 (Chocolate) 2050 J-3560 4,654.00 144 46 Zone-1 (Southern)	- 4
2050 J-3560 4,654.00 144 46 Zone-1 (Southern)	
2053 J-3561 4,816.00 74 6 Zone-3 (Chocolate)	
2061 J-3564 4,832.00 67 11 Zone-3 (Chocolate)	
2064 J-3565 4,840.00 64 6 Zone-3 (Chocolate) 2076 J-3566 4,962.00 12 0 Zone Exempt	
2076 J-3566 4,962.00 12 0 Zone Exempt 2081 J-3569 4,800.00 79 207 Zone-3 (Chocolate)	
2083 J-3570 4,962.00 12 207 Zone Exempt	
2102 J-3579 4,823.52 71 0 Zone-2 (Central) 2115 J-3580 4,800.00 79 0 Zone-3 (Chocolate)	
2115 J-3580 4,800.00 79 0 Zone-3 (Chocolate) 470 J-4001S 4,890.00 100 3 Zone-4 (Sidehill/Chin	iney)
471 J-4002S 4,877.00 105 9 Zone-4 (Sidehill/Chin	
472 J-4003S 4,893.00 98 14 Zone-4 (Sidehill/Chin 473 J-4004S 4,897.00 97 10 Zone-4 (Sidehill/Chin	
473 J-4004S 4,897.00 97 10 Zone-4 (Sidehill/Chin 474 J-4005S 4,899.00 96 3 Zone-4 (Sidehill/Chin	
475 J-4006S 4,899.00 96 1 Zone-4 (Sidehill/Chin	
476 J-4007S 4,890.00 100 3 Zone-4 (Sidehill/Chin 477 J-4008S 4,953.00 73 6 Zone-4 (Sidehill/Chin	
477 J-4008S 4,953.00 73 6 Zone-4 (Sidehill/Chin 478 J-4009S 4,942.00 77 3 Zone-4 (Sidehill/Chin	
479 J-4010S 4,908.00 92 6 Zone-4 (Sidehill/Chin	nney)
480 J-4011S 4,928.00 84 5 Zone-4 (Sidehill/Chin	
481 J-4012S 4,959.00 71 8 Zone-4 (Sidehill/Chin 482 J-4013S 5,002.00 52 3 Zone-4 (Sidehill/Chin	
482 J-4013S 5,002.00 52 3 Zone-4 (Sidehill/Chin	
484 J-4015S 4,897.00 97 3 Zone-4 (Sidehill/Chin	
485 J-4016S 4,897.00 97 5 Zone-4 (Sidehill/Chin 486 J-4017S 4,885.00 102 6 Zone-4 (Sidehill/Chin	
486 J-4017S 4,885.00 102 6 Zone-4 (Sidehill/Chin 487 J-4018 4,885.00 102 6 Zone-4 (Sidehill/Chin	
1331 J-4019 4,875.00 106 0 Zone-4 (Sidehill/Chin	nney)
489 J-4020S 4,930.00 82 3 Zone-4 (Sidehill/Chin	iney)
490 J-4021S 4,900.00 95 1 Zone-4 (Sidehill/Chin	illey)

100	J-4022C	4,943.00	77	5	Zone-4 (Sidehill/Chimney
496	J-4023C	4,959.00	70	5	Zone-4 (Sidehill/Chimney
493	J-4024C	4,929.00	83	5 2	Zone-4 (Sidehill/Chimney
494	J-4025C	4,927.00	84	2	Zone-4 (Sidehill/Chimne)
495	J-4026C	4,900.00	95	0	Zone-4 (Sidehill/Chimney
497	J-4027C	4,971.00	65	5	Zone-4 (Sidehill/Chimney
498	J-4028C	4,999.00	52	3	Zone-4 (Sidehill/Chimney
499	J-4029C	4,966.00	67	6	Zone-4 (Sidehill/Chimney
500	J-4030C	4,963.00	68	3	Zone-4 (Sidehill/Chimney
505	J-4031C	4,980.00	61	3 2	Zone-4 (Sidehill/Chimney
501	J-4032C	4,961.00	69	6	Zone-4 (Sidehill/Chimney
502	J-4033C	4,938.00	79	8	Zone-4 (Sidehill/Chimney
504	J-4034C	4,914.00	89	12	Zone-4 (Sidehill/Chimne
503	J-4035C	4,917.00	88	2	Zone-4 (Sidehill/Chimne
491	J-4036C	4,921.00	86	3	Zone-4 (Sidehill/Chimne
	J-4037C	4,925.00	84	1	Zone-4 (Sidehill/Chimney
492			83	9	Zone-4 (Sidehill/Chimney
506	J-4038C	4,928.00 4,923.00	85	6	Zone-4 (Sidehill/Chimne)
507	J-4039C			6	Zone-4 (Sidehill/Chimne)
512	J-4040C	4,963.00	68	1	Zone-4 (Sidehill/Chimne)
513	J-4041C	4,975.00	63	11	Zone-4 (Sidehill/Chimne
510	J-4042C	4,952.00	73		
511	J-4043C	4,987.00	58	6	Zone-4 (Sidehill/Chimne
509	J-4044C	4,911.00	90	14	Zone-4 (Sidehill/Chimne
508	J-4045C	4,911.00	90	6	Zone-4 (Sidehill/Chimne
514	J-4046C	4,963.00	68	4	Zone-4 (Sidehill/Chimne
515	J-4047C	4,968.00	66	9	Zone-4 (Sidehill/Chimne
516	J-4048C	5,004.00	50	6	Zone-4 (Sidehill/Chimne
517	J-4049C	5,010.00	48	1	Zone Exempt
518	J-4050C	5,100.00	10	0	Zone Exempt
523	J-4051C	5,011.00	47	8	Zone-4 (Sidehill/Chimne
521	J-4052C	4,993.00	55	11	Zone-4 (Sidehill/Chimne
522	J-4053C	4,961.00	69	7	Zone-4 (Sidehill/Chimne
520	J-4054C	4,959.00	70	10	Zone-4 (Sidehill/Chimne
519	J-4055C	4,944.00	76	6	Zone-4 (Sidehill/Chimne
524	J-4056C	4,917.00	88	10	Zone-4 (Sidehill/Chimne
525	J-4057C	4,897.00	96	18	Zone-4 (Sidehill/Chimne
526	J-4058C	4,884.00	102	4	Zone-4 (Sidehill/Chimne
527	J-4059C	4,900.00	95	18	Zone-4 (Sidehill/Chimne
528	J-4060C	4,897.00	96	4	Zone-4 (Sidehill/Chimne
529	J-4061C	4,910.00	91	22	Zone-4 (Sidehill/Chimne
530	J-4062C	4,923.00	85	25	Zone-4 (Sidehill/Chimne
531	J-4063C	4,917.00	88	19	Zone-4 (Sidehill/Chimne
532	J-4064C	4,915.00	88	0	Zone-4 (Sidehill/Chimne
533	J-4065C	4,955.00	71	19	Zone-4 (Sidehill/Chimne
534	J-4066C	4,892.00	98	7	Zone-4 (Sidehill/Chimne
535	J-4067C	4,873.00	107	15	Zone-4 (Sidehill/Chimne
536	J-4068C	4,910.00	90	20	Zone-4 (Sidehill/Chimne
537	J-4069C	4,871.00	107	14	Zone-4 (Sidehill/Chimne
538	J-4070C	4,889.00	100	4	Zone-4 (Sidehill/Chimne
539	J-4071C	4,892.00	98	2	Zone-4 (Sidehill/Chimne
540	J-4072C	4,902.00	94	0	Zone-4 (Sidehill/Chimne
541	J-4073C	4,896.00	97	6	Zone-4 (Sidehill/Chimne
542	J-4074C	4,906.00	92	7	Zone-4 (Sidehill/Chimne
543	J-4075C	4,879.00	104	7	Zone-4 (Sidehill/Chimne
545	J-4076C	4,851.00	116	7	Zone-4 (Sidehill/Chimne
546	J-4077C	4,851.00	116	11	Zone-4 (Sidehill/Chimne
544	J-4078C	4,892.00	98	11	Zone-4 (Sidehill/Chimne
553	J-4079S	4,935.00	80	Ö	Zone-4 (Sidehill/Chimne
		4,935.00	80	ő	Zone-4 (Sidehill/Chimne
554	J-4080S	4,930.00	82	ŏ	Zone-4 (Sidehill/Chimne
555	J-4081S		60	6	Zone-4 (Sidehill/Chimne
578	J-4085S	4,983.00		5	Zone-4 (Sidehill/Chimne
580	J-4086S	4,890.00	100 10	0	Zone Exempt
619	J-4087C	5,100.00		0	Zone-4 (Sidehill/Chimne
1409	J-4106 School	4,915.00	88	0	Zone-4 (Sidehill/Chimne
1431 1437	J-4107 School	4,915.00	88	1	Zone-4 (Sidehill/Chimne
17/14/	J-4108 School	4,933.30	80 66	10	Zone-4 (Sidehill/Chimne

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7	1 112.0	1 405000 1	70	44 1	Zone-4 (Sidehill/Chimney)
4004	J-4501	4,956.00	70 73	11	Zone-4 (Sidehill/Chimney)
1824	J-4502	4,948.00	75	9	Zone-4 (Sidehill/Chimney)
1826	J-4503	4,943.00	64	14	Zone-4 (Sidehill/Chimney)
1828	J-4504	4,970.00	57	14	Zone-4 (Sidehill/Chimney)
1830	J-4505	4,984.00 4,984.00	57	13	Zone-4 (Sidehill/Chimney)
1832	J-4506	4,981.00	59	13	Zone-4 (Sidehill/Chimney)
1834	J-4507 J-4508	4,956.00	70	14	Zone-4 (Sidehill/Chimney)
1839 1841	J-4509	4,942.00	76	10	Zone-4 (Sidehill/Chimney)
1843	J-4510	4,930.00	81	11	Zone-4 (Sidehill/Chimney)
1845	J-4511	4,920.00	85	6	Zone-4 (Sidehill/Chimney)
1847	J-4512	4,934.00	79	4	Zone-4 (Sidehill/Chimney)
1849	J-4513	4,922.00	84	14	Zone-4 (Sidehill/Chimney)
1851	J-4514	4,880.00	102	16	Zone-4 (Sidehill/Chimney)
1853	J-4515	4,908.00	90	12	Zone-4 (Sidehill/Chimney)
1855	J-4516	4,944.00	75	15	Zone-4 (Sidehill/Chimney)
1857	J-4517	4,950.00	72	7	Zone-4 (Sidehill/Chimney)
1859	J-4518	4,938.00	77	4	Zone-4 (Sidehill/Chimney)
N 1861	J-4519	4,940.00	76	9	Zone-4 (Sidehill/Chimney)
1863	J-4520	4,906.00	91	5	Zone-4 (Sidehill/Chimney)
1865	J-4521	4,928.00	82	4	Zone-4 (Sidehill/Chimney)
1867	J-4522	4,944.00	75	8	Zone-4 (Sidehill/Chimney)
1865 1867 1870 1872 1874	J-4523	4,896.00	96	5	Zone-4 (Sidehill/Chimney)
1872	J-4524	4,976.00	61	11	Zone-4 (Sidehill/Chimney)
		4,969.00	64	13	Zone-4 (Sidehill/Chimney)
1876	J-4526	4,959.00	68	14	Zone-4 (Sidehill/Chimney)
1878	J-4527	4,952.00	71	10	Zone-4 (Sidehill/Chimney)
1881	J-4528	4,970.00	64	12	Zone-4 (Sidehill/Chimney)
1883	J-4529	4,942.00	76	17	Zone-4 (Sidehill/Chimney)
1887	J-4530	4,902.00	93	4	Zone-4 (Sidehill/Chimney)
1889	J-4531	4,918.00	86	8	Zone-4 (Sidehill/Chimney)
1891	J-4532	4,942.00	76 65	12 9	Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney)
1893	J-4533	4,966.00	86	20	Zone-4 (Sidehill/Chimney)
1896	J-4534	4,917.00 4,950.00	72	7	Zone-4 (Sidehill/Chimney)
1901 1903	J-4535 J-4536	4,932.00	80	10	Zone-4 (Sidehill/Chimney)
1905		4,952.00	71	9	Zone-4 (Sidehill/Chimney)
1907		4,968.00	64	11	Zone-4 (Sidehill/Chimney)
1313		5,066.00	69	1	Zone 5 (West7th)
587		5,106.13	86	0	Zone 6 (Boundary)
589		5,154.57	65	11	Zone 6 (Boundary)
608	J-6003	5,179.37	54	6	Zone 6 (Boundary)
590		5,152.08	66	14	Zone 6 (Boundary)
609	J-6005	5,155.32	64	12	Zone 6 (Boundary)
610	J-6006	5,168.84	59	9	Zone 6 (Boundary)
591		5,142.51	70	10	Zone 6 (Boundary)
592		5,123.20	78	12	Zone 6 (Boundary)
611	J-6009	5,136.51	72	6	Zone 6 (Boundary)
612		5,115.09	82	5	Zone 6 (Boundary)
1458		5,131.00	75	9	Zone 6 (Boundary)
1460		5,146.00	68	1	Zone 6 (Boundary)
1481	J-6024	5,190.00	49	9	Zone 6 (Boundary)
1483		5,174.00	56	11	Zone 6 (Boundary)
1485		5,148.00	68	11	Zone 6 (Boundary) Zone 6 (Boundary)
1487		5,152.00	66 62	11 6	Zone 6 (Boundary)
1505		5,160.00	65	5	Zone 6 (Boundary)
1490		5,154.00	48	ő	Zone Exempt
588 1308		5,194.00 5,066.00	103	ŏ	Zone Exempt
				ŏ	Zone Exempt
				9	Zone 6 (Boundary)
			69	4	Zone 6 (Boundary)
586 1536 1538 1540 1542 1544 1547	J-6047 J-6048 J-6049 J-6050 J-6051 J-6052	4,900.00 5,200.00 5,210.00 5,212.00 5,164.00 5,178.00 5,144.00 5,144.00	175 45 41 40 61 55 69	9 11 4 13 10 9	Zone 6 (Boundary)

1551 1555 1557	J-6054 J-6055 J-6056 J-6057	5,138.00 5,145.00 5,120.00 5,120.00	72 69 80 80	9 6 8 11	Zone 6 (Boundary) Zone 6 (Boundary) Zone 6 (Boundary) Zone 6 (Boundary)
1559	J-6058	5,134.00	74	14	Zone 6 (Boundary)
1321	J-Section 5.3.2	4,704.00	81	0	Zone 6 (Boundary)
1401	J-Tangberg	4,928.00	83	0	Zone-4 (Sidehill/Chimney)

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Static Pressure Zero Demand

Shaw Engineering Appendix A

Scenario Summary Report Scenario: Existing SVGID System + 5 Ridges

Scenario Summary							
ID		64					
Label		Existing SVG	ID System + 5 Ridges				
Notes							
Active Topology		Base-Active 7	Гopology				
Physical		Existing Syste	em				
Demand		8750 Zero De					
Initial Settings		Existing Syste	em Pumps OFF Tanks at HWL				
Operational		Base					
Age		Base-Age Alt	ernative				
Constituent		Base-Constitu	uent				
Trace		Base-Trace Alternative					
Fire Flow		All Nodes					
Energy Cost		Base-Energy Cost					
Transient		Base Transient					
Pressure Dependent Dema	and	Base Pressure Dependent Demand					
Failure History		Base Failure History					
SCADA		Base SCADA					
User Data Extensions		Base-User Data					
Steady State/EPS Solver C Options	alculation	Proposed SVGID System					
Transient Solver Calculation	on Options	Base Calcula	tion Options				
Hydraulic Summary							
Time Analysis Type	Stead	dy State	Use simple controls during steady state?	True			
Friction Method		Hazen- Williams	Is EPS Snapshot?	False			
Accuracy		0.001	Start Time	12:00:00 AM			
Trials		40	Calculation Type	Fire Flow			

Scenario: Existing SVGID System + 5 Ridges Current Time Step: 0.000 h FlexTable: Tank Table

Label	Zone	Elevation (Base) (ft)	Elevation (Minimum) (ft)	Elevation (Initial) (ft)	Elevation (Maximum) (ft)	Diameter (ft)	Volume Full (Calculated) (gal)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
Eastside	Zone-1-2-3	4.963.00	4,963.00	4.992.50	4,992.92	90.00	1,423,863.12	0	4,992.50
Chocolate	Zone-1-2-3	4,964.25	4,964.25	4,992,50	4,992.92	74.00	922,386.13	0	4,992.50
Klondike	Zone-1-2-3	4.968.00	4.968.00	4,992,50	4,992.92	107,00	1,676,243.96	83	4,992.50
Juniper Terr, Tank	Zone-1-2-3	4,952.29	4,952.29	4,974,94	4,974.94	60.00	479,062.68	0	4,974.94
Sidehill	Zone-4 (Sidehill/Chimney)	5,104.00	5.104.00	5,134,41	5,134,41	40.00	285,863.06	0	5,134.41
Chimney 1	Zone-4 (Sidehill/Chimney)	5,104.00	5,104.00	5,135.09	5,135.09	40.00	292,255.26	12	5,135.09
Westside Tank	Zone-3 (Chocolate)	4.961.90	4,961.90	4,992.50	4,992.92	90.00	1,476,211.03	0	4,992.50
Boundary Tank	Zone 6 (Boundary)	5,279.50	5,279.50	5,315.50	5,315.50	80.00	1,353,642.89	6	5,315.50
Chimney 2	Zone-4 (Sidehill/Chimney)	5,104.00	5,104.00	5,135.09	5,135.09	75.00	1,027,459.90	12	5,135.09



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Scenario: Existing SVGID System + 5 Ridges Current Time Step: 0.000 h FlexTable: Junction Table

ID	Label	Elevation (ft)	Pressure (psi)	Demand (gpm)	Zone
127	J-1001	4,639.00	" ´55	0	Zone-1 (Southern)
		4,662.00	45	ŏ	Zone-1 (Southern)
131	J-1002		51	0	Zone-1 (Southern)
132	J-1003	4,649.00			Zone-1 (Southern)
128	J-1004	4,662.00	45	0	
133	J-1005	4,653.00	49	0	Zone-1 (Southern)
129	J-1006	4,664.00	45	0	Zone-1 (Southern)
130	J-1007	4,661.00	46	0	Zone-1 (Southern)
134	J-1008	4,635.00	57	0	Zone-1 (Southern)
135	J-1009	4,621.00	63	0	Zone-1 (Southern)
139	J-1010	4,618.00	64	0	Zone-1 (Southern)
136	J-1011	4,625.00	61	0	Zone-1 (Southern)
138	J-1012	4,619.00	64	0	Zone-1 (Southern)
137	J-1013	4,625.00	61	0	Zone-1 (Southern)
140	J-1014	4,658.00	47	0	Zone-1 (Southern)
141	J-1015	4,665.00	44	0	Zone-1 (Southern)
142	J-1016	4,636.00	57	0	Zone-1 (Southern)
143	J-1017	4,639.00	55	0	Zone-1 (Southern)
144	J-1018	4,651.00	50	Ō	Zone-1 (Southern)
145	J-1019	4,653.00	49	Ŏ	Zone-1 (Southern)
		4,653.00	49	ŏ	Zone-1 (Southern)
146	J-1020		45	Ö	Zone-1 (Southern)
148	J-1021	4,662.00	45 47	0	Zone-1 (Southern)
147	J-1022	4,659.00		0	Zone-1 (Southern)
149	J-2001	4,720.00	74		
150	J-2002	4,710.00	78 70	0	Zone-2 (Central)
151	J-2003	4,710.00	78	0	Zone-2 (Central)
152	J-2004	4,700.00	82	0	Zone-2 (Central)
153	J-2005	4,667.00	97	0	Zone-2 (Central)
155	J-2006	4,664.00	98	0	Zone-2 (Central)
154	J-2007	4,649.00	104	0	Zone-2 (Central)
157	J-2008	4,659.00	117	0	Zone-2 (Central)
158	J-2009	4,664.00	115	0	Zone-2 (Central)
159	J-2010	4,655.00	119	0	Zone-2 (Central)
161	J-2011	4,675.00	110	0	Zone-2 (Central)
162	J-2012	4,696.00	101	0	Zone-2 (Central)
163	J-2013	4,716.00	93	0	Zone-2 (Central)
164	J-2014	4,745.00	80	0	Zone-2 (Central)
165	J-2015	4,776.00	67	0	Zone-2 (Central)
166	J-2016	4,696.00	101	0	Zone-2 (Central)
167	J-2017	4,700.00	100	0	Zone-2 (Central)
168	J-2018	4,696.00	101	Ō	Zone-2 (Central)
169	J-2019	4,727.00	88	ő	Zone-2 (Central)
190	J-2020	4,730.00	87	Ö	Zone-2 (Central)
170	J-2020 J-2021	4,737.00	84	ő	Zone-2 (Central)
170	J-2021	4,773.00	68	Ö	Zone-2 (Central)
	J-2022 J-2023	4,740.00	82	ŏ	Zone-2 (Central)
171			79	Ö	Zone-2 (Central)
172	J-2024	4,747.00	54	0	Zone-2 (Central)
174	J-2025	4,806.00			Zone-2 (Central)
173	J-2026	4,744.00	81	0	
176	J-2027	4,727.00	88	0	Zone-2 (Central)
179	J-2028	4,732.00	86	0	Zone-2 (Central)
177	J-2029	4,747.00	79	0	Zone-2 (Central)
178	J-2030	4,762.00	73	0	Zone-2 (Central)
180	J-2031	4,741.00	82	0	Zone-2 (Central)
191	J-2032	4,740.00	82	0	Zone-2 (Central)
181	J-2033	4,745.00	80	0	Zone-2 (Central)
182	J-2034	4,753.00	77	0	Zone-2 (Central)
183	J-2035	4,763.00	72	0	Zone-2 (Central)
1	1	I	I	I	1

186	J-2036	4,751.00	78	0	Zone-2 (Central)
				ŏ	Zone-2 (Central)
192	J-2037	4,735.00	84		
184	J-2038	4,758.00	75	0	Zone-2 (Central)
187	J-2039	4,760.00	74	0	Zone-2 (Central)
188	J-2040	4,779.00	65	Ō	Zone-2 (Central)
189	J-2041	4,790.00	61	0	Zone-2 (Central)
185	J-2042	4,797.00	58	0	Zone-2 (Central)
193	J-2043	4,810.00	52	0	Zone-2 (Central)
			114	ŏ	Zone-2 (Central)
195	J-2044	4,667.00			
196	J-2045	4,651.00	121	0	Zone-2 (Central)
202	J-2046	4,664.00	115	0	Zone-2 (Central)
203	J-2047	4,662.00	116	0	Zone-2 (Central)
				i	
204	J-2048	4,654.00	120	0	Zone-2 (Central)
213	J-2049	4,664.00	115	0	Zone-2 (Central)
214	J-2050	4,671.00	112	0	Zone-2 (Central)
205		4,671.00	112	o l	Zone-2 (Central)
	J-2051				
206	J-2052	4,696.00	101	0	Zone-2 (Central)
207	J-2053	4,703.00	98	0	Zone-2 (Central)
208	J-2054	4,717.00	92	0	Zone-2 (Central)
			99	o l	Zone-2 (Central)
209	J-2055	4,701.00			
210	J-2056	4,721.00	91	0	Zone-2 (Central)
201	J-2057	4,672.00	112	0	Zone-2 (Central)
200	J-2058	4,681.00	108	0	Zone-2 (Central)
				ŏ	Zone-2 (Central)
199	J-2059	4,682.00	107		
198	J-2060	4,685.00	106	0	Zone-2 (Central)
197	J-2061	4,687.00	105	0	Zone-2 (Central)
			108	0	Zone-2 (Central)
215	J-2062	4,681.00			
211	J-2063	4,674.00	111	0	Zone-2 (Central)
212	J-2064	4,678.00	109	0	Zone-2 (Central)
216	J-2065	4,697.00	101	0	Zone-2 (Central)
			99	ō	Zone-2 (Central)
217	J-2066	4,701.00			
218	J-2067	4,708.00	96	0	Zone-2 (Central)
219	J-2068	4,696.00	101	0	Zone-2 (Central)
220	J-2069	4,703.00	98	0	Zone-2 (Central)
				ŏ	Zone-2 (Central)
221	J-2070	4,706.00	97		
222	J-2071	4,730.00	87	0	Zone-2 (Central)
223	J-2072	4,737.00	84	0	Zone-2 (Central)
224	J-2073	4,729.00	87	0	Zone-2 (Central)
				ŏ	
225	J-2074	4,719.00	91		Zone-2 (Central)
230	J-2075	4,727.00	88	0	Zone-2 (Central)
231	J-2076	4,746.00	80	0	Zone-2 (Central)
232	J-2077	4,750.00	78	0	Zone-2 (Central)
				ŏ	Zone-2 (Central)
226	J-2078	4,713.00	94		
227	J-2079	4,706.00	97	0	Zone-2 (Central)
228	J-2080	4,701.00	99	0	Zone-2 (Central)
229	J-2081	4,710.00	95	0	Zone-2 (Central)
			92	0	Zone-2 (Central)
237	J-2082	4,718.00			
236	J-2083	4,722.00	90	0	Zone-2 (Central)
233	J-2084	4,740.00	82	0	Zone-2 (Central)
234	J-2085	4,736.00	84	0	Zone-2 (Central)
			86	Ö	Zone-2 (Central)
235	J-2086	4,731.00			Zono 2 (Ocitial)
238	J-2087	4,770.00	69	0	Zone-2 (Central)
239	J-2088	4,770.00	69	0	Zone-2 (Central)
240	J-2089	4,784.00	63	0	Zone-2 (Central)
					Zone-2 (Central)
241	J-2090	4,777.00	66	0	
244	J-2091	4,743.00	81	0	Zone-2 (Central)
242	J-2092	4,759.00	74	0	Zone-2 (Central)
243	J-2093	4,759.00	74	0	Zone-2 (Central)
				38	Zone-2 (Central)
276	J-2094	4,681.00	108	0	
277	J-2095	4,681.00	108	0	Zone-2 (Central)
278	J-2096	4,687.00	105	0	Zone-2 (Central)
245	J-2097	4,692.00	103	Ö	Zone-2 (Central)
279	J-2098	4,700.00	100	0	Zone-2 (Central)
280	J-2099	4,700.00	100	0	Zone-2 (Central)
281	J-2100	4,681.00	108	0	Zone-2 (Central)
246	J-2101	4,693.00	103	0	Zone-2 (Central)
8		1 1		Ö	Zone-2 (Central)
247	J-2102	4,708.00	96	U	ZONG-Z (OCHUAI)
r	•	· '	•		

1	J-2103	4,724.00	89	0	Zone-2 (Central)
249	J-2104	4,730.00	87	Ō	Zone-2 (Central)
	J-2105	4,752.00	77	ő	Zone-2 (Central)
251		•	74	ŏ	Zone-2 (Central)
250	J-2106	4,760.00			
297	J-2107	4,683.00	107	0	Zone-2 (Central)
300	J-2108	4,693.00	103	0	Zone-2 (Central)
299	J-2109	4,693.00	103	0	Zone-2 (Central)
298	J-2110	4,699.00	100	0	Zone-2 (Central)
285	J-2111	4,710.00	95	0	Zone-2 (Central)
286	J-2112	4,738.00	83	0	Zone-2 (Central)
291	J-2113	4,720.00	91	0	Zone-2 (Central)
270	J-2114	4,713.00	94	0	Zone-2 (Central)
269	J-2115	4,707.00	97	Ö	Zone-2 (Central)
			97	ŏ	Zone-2 (Central)
267	J-2116	4,707.00	97	0	Zone-2 (Central)
266	J-2117	4,706.00			
265	J-2118	4,703.00	98	0	Zone-2 (Central)
261	J-2119	4,705.00	97	0	Zone-2 (Central)
252	J-2120	4,721.00	91	0	Zone-2 (Central)
257	J-2121	4,748.00	79	0	Zone-2 (Central)
256	J-2122	4,750.00	78	0	Zone-2 (Central)
290	J-2123	4,729.00	87	0	Zone-2 (Central)
287	J-2124	4,760.00	74	0	Zone-2 (Central)
289	J-2125	4,746.00	80	0	Zone-2 (Central)
288	J-2126	4,763.00	72	Ö	Zone-2 (Central)
		4,753.00	77	ŏ	Zone-2 (Central)
292	J-2127		69	ŏ	Zone-2 (Central)
293	J-2128	4,770.00			
294	J-2129	4,750.00	78	0	Zone-2 (Central)
295	J-2130	4,780.00	65	0	Zone-2 (Central)
296	J-2131	4,790.00	61	0	Zone-2 (Central)
271	J-2132	4,758.00	75	0	Zone-2 (Central)
272	J-2133	4,748.00	79	0	Zone-2 (Central)
273	J-2134	4,720.00	91	0	Zone-2 (Central)
268	J-2135	4,748.00	79	0	Zone-2 (Central)
263	J-2136	4,726.00	88	0	Zone-2 (Central)
264	J-2137	4,715.00	93	Ō	Zone-2 (Central)
254	J-2138	4,726.00	88	Ŏ	Zone-2 (Central)
		4,724.00	89	ŏ	Zone-2 (Central)
253	J-2139	4,743.00	81	ő	Zone-2 (Central)
262	J-2140		1		
255	J-2141	4,728.00	88	0	Zone-2 (Central)
259	J-2142	4,747.00	79	0	Zone-2 (Central)
258	J-2143	4,745.00	80	0	Zone-2 (Central)
260	J-2144	4,760.00	74	0	Zone-2 (Central)
339	J-2145	4,763.00	72	0	Zone-2 (Central)
338	J-2146	4,763.00	72	0	Zone-2 (Central)
552	J-2147	4,751.00	78	0	Zone-2 (Central)
556	J-2148	4,727.00	88	0	Zone-2 (Central)
558	J-2149	4,683.00	107	0	Zone-2 (Central)
560	J-2150	4,785.00	63	0	Zone-2 (Central)
557	J-2151	4,810.00	52	0	Zone-2 (Central)
1351	J-2152	4,729.75	70	0	Zone-2 (Central)
559	J-2153	4,756.00	75	Ō	Zone-2 (Central)
581	J-2154	4,755.00	76	Ŏ	Zone-2 (Central)
			74	ŏ	Zone-2 (Central)
582	J-2155	4,760.00			Zone-2 (Central)
1327	J-2156	4,745.00	80	0	
1380	J-2157	4,681.00	108	0	Zone-2 (Central)
303	J-3001	4,648.00	149	0	Zone Exempt
304	J-3002	4,648.00	149	0	Zone Exempt
126	J-3003	4,645.00	150	0	Zone Exempt
305	J-3004	4,660.00	144	0	Zone Exempt
306	J-3005	4,660.00	144	0	Zone Exempt
160	J-3006	4,662.00	143	0	Zone Exempt
156	J-3007	4,720.00	118	0	Zone-3 (Chocolate)
307	J-3008	4,840.00	66	Ō	Zone-3 (Chocolate)
308	J-3010	4,860.00	57	l ŏ	Zone-3 (Chocolate)
309	J-3010 J-3011	4,827.00	72	Ö	Zone-3 (Chocolate)
310	J-3012	4,799.00	84	Ö	Zone-3 (Chocolate)
310	J-3012 J-3013	4,790.00	88	Ö	Zone-3 (Chocolate)
311	0-0010	-,700.00	1	ı	

	J-3014	4,820.00	75	0	Zone-3 (Chocolate)
313	J-3015	4,820.00	75	0	Zone-3 (Chocolate)
314	J-3016	4,826.00	72	0	Zone-3 (Chocolate)
315	J-3017	4,835.00	68	0	Zone-3 (Chocolate)
194	J-3018	4,818.00	75	ŏ	Zone-3 (Chocolate)
316	J-3019	4,835.00	68	ő	Zone-3 (Chocolate)
		1 ' 1	66	ő	Zone-3 (Chocolate)
317	J-3020	4,840.00			
318	J-3021	4,826.00	72	0	Zone-3 (Chocolate)
319	J-3022	4,817.00	76	0	Zone-3 (Chocolate)
320	J-3023	4,825.00	72	0	Zone-3 (Chocolate)
321	J-3024	4,833.00	69	0	Zone-3 (Chocolate)
322	J-3025	4,833.00	69	0	Zone-3 (Chocolate)
328	J-3026	4,892.00	43	0	Zone Exempt
323	J-3027	4,801.00	83	0	Zone-3 (Chocolate)
324	J-3028	4,800.00	83	0	Zone-3 (Chocolate)
327	J-3029	4,827.00	72	0	Zone-3 (Chocolate)
326	J-3030	4,822.00	74	o	Zone-3 (Chocolate)
325	J-3031	4,801.00	83	ŏ	Zone-3 (Chocolate)
329	J-3032	4,834.00	69	ŏ	Zone-3 (Chocolate)
			56	ŏ	Zone-3 (Chocolate)
330	J-3033	4,862.00			Zone-3 (Chocolate)
331	J-3034	4,882.00	48	0	
302	J-3035	4,648.00	149	0	Zone Exempt
332	J-3036	4,645.00	150	0	Zone Exempt
333	J-3037	4,662.00	143	0	Zone Exempt
334	J-3038	4,692.00	130	0	Zone Exempt
335	J-3039	4,776.00	94	0	Zone Exempt
336	J-3040	4,763.00	99	0	Zone Exempt
337	J-3041	4,763.00	99	0	Zone-3 (Chocolate)
340	J-3042	4,811.00	79	0	Zone-3 (Chocolate)
341	J-3043	4,811.00	79	0	Zone-3 (Chocolate)
342	J-3044	4,836.00	68	0	Zone-3 (Chocolate)
344	J-3045	4,792.00	87	Ō	Zone-3 (Chocolate)
343	J-3046	4,834.00	69	ŏ	Zone-3 (Chocolate)
345	J-3047	4,784.00	90	ŏ	Zone-3 (Chocolate)
347	J-3048	4,848.00	62	ő	Zone-3 (Chocolate)
			56	ő	Zone-3 (Chocolate)
348	J-3049	4,863.00			
349	J-3050	4,882.00	48	0	Zone-3 (Chocolate)
350	J-3051	4,909.00	36	0	Zone Exempt
351	J-3052	4,925.00	29	0	Zone Exempt
371	J-3053	4,925.00	29	0	Zone Exempt
372	J-3054	4,921.00	31	0	Zone Exempt
373	J-3055	4,950.00	18	0	Zone Exempt
374	J-3056	4,943.00	21	0	Zone Exempt
346	J-3057	4,813.00	78	0	Zone-3 (Chocolate)
352	J-3058	4,834.00	69	0	Zone-3 (Chocolate)
353	J-3059	4,853.00	60	0	Zone-3 (Chocolate)
354	J-3060	4,863.00	56	0	Zone-3 (Chocolate)
355	J-3061	4,863.00	56	ŏ l	Zone-3 (Chocolate)
356	J-3062	4,881.00	48	ŏ	Zone-3 (Chocolate)
357	J-3063	4,877.00	50	ő	Zone-3 (Chocolate)
358	J-3064	4,875.00	51	ŏ	Zone-3 (Chocolate)
			45	ő	Zone-3 (Chocolate)
359	J-3065	4,888.00			Zone-3 (Chocolate)
360	J-3066	4,863.00	56	0	
362	J-3067	4,843.00	65	0	Zone-3 (Chocolate)
361	J-3068	4,847.00	63	0	Zone-3 (Chocolate)
363	J-3069	4,821.00	74	0	Zone-3 (Chocolate)
364	J-3070	4,811.00	79	0	Zone-3 (Chocolate)
365	J-3071	4,807.00	80	0	Zone-3 (Chocolate)
366	J-3072	4,807.00	80	0	Zone-3 (Chocolate)
367	J-3073	4,790.00	88	0	Zone-3 (Chocolate)
368	J-3074	4,790.00	88	0	Zone-3 (Chocolate)
369	J-3075	4,779.00	92	0	Zone-3 (Chocolate)
370	J-3076	4,765.00	98	0	Zone-3 (Chocolate)
301	J-3077	4,759.00	101	ō	Zone-3 (Chocolate)
375	J-3078	4,887.00	46	ŏ	Zone Exempt
379	J-3079	4,876.00	50	ŏ	Zone-3 (Chocolate)
380	J-3080	4,869.00	53	ŏ	Zone-3 (Chocolate)
	1 5 5550	1 .,555.56	55	٠	> (2300.0.0)

ı	J-3081	4,860.00	57	0	Zone-3 (Chocolate)
202	J-3082	4,848.00	63	ŏ	Zone-3 (Chocolate)
382	1		67	ŏ	Zone-3 (Chocolate)
383	J-3083	4,838.00			•
384	J-3084	4,828.00	71	0	Zone-3 (Chocolate)
385	J-3085	4,816.00	76	0	Zone-3 (Chocolate)
386	J-3086	4,804.00	82	0	Zone-3 (Chocolate)
387	J-3087	4,792.00	87	0	Zone-3 (Chocolate)
388	J-3088	4,792.00	87	0	Zone-3 (Chocolate)
389	J-3089	4,785.00	90	0	Zone-3 (Chocolate)
390	J-3090	4,785.00	90	ō	Zone-3 (Chocolate)
			95 95	ő	Zone-3 (Chocolate)
392	J-3091	4,774.00			
391	J-3092	4,774.00	95	0	Zone-3 (Chocolate)
393	J-3093	4,776.00	94	0	Zone-3 (Chocolate)
394	J-3094	4,784.00	90	0	Zone-3 (Chocolate)
395	J-3095	4,797.00	85	0	Zone-3 (Chocolate)
396	J-3096	4,810.00	79	0	Zone-3 (Chocolate)
397	J-3097	4,817.00	76	0	Zone-3 (Chocolate)
398	J-3098	4,826.00	72	0	Zone-3 (Chocolate)
399	J-3099	4,839.00	66	o l	Zone-3 (Chocolate)
		4,848.00	63	ő	Zone-3 (Chocolate)
400	J-3100				
401	J-3101	4,858.00	58	0	Zone-3 (Chocolate)
402	J-3102	4,867.00	54	0	Zone-3 (Chocolate)
403	J-3103	4,781.00	91	0	Zone-3 (Chocolate)
404	J-3104	4,781.00	91	0	Zone-3 (Chocolate)
405	J-3105	4,787.00	89	0	Zone-3 (Chocolate)
406	J-3106	4,789.00	88	0	Zone-3 (Chocolate)
407	J-3107	4,792.00	87	0	Zone-3 (Chocolate)
		4,798.00	84	Ö	Zone-3 (Chocolate)
408	J-3108		83	ŏ	Zone-3 (Chocolate)
409	J-3109	4,801.00			
410	J-3110	4,806.00	81	0	Zone-3 (Chocolate)
411	J-3111	4,808.00	80	0	Zone-3 (Chocolate)
412	J-3112	4,814.00	77	0	Zone-3 (Chocolate)
413	J-3113	4,774.00	95	0	Zone-3 (Chocolate)
414	J-3114	4,763.00	99	0	Zone-3 (Chocolate)
275	J-3115	4,748.00	106	0	Zone-3 (Chocolate)
283	J-3116	4,675.00	137	0	Zone Exempt
		4,681.00	135	ŏ	Zone Exempt
282	J-3117		135	ŏ	Zone Exempt
415	J-3118	4,681.00			
416	J-3119	4,681.00	135	0	Zone Exempt
284	J-3120	4,700.00	127	0	Zone Exempt
417	J-3121	4,802.00	82	0	Zone-3 (Chocolate)
419	J-3122	4,751.00	104	0	Zone-3 (Chocolate)
420	J-3123	4,777.00	93	0	Zone-3 (Chocolate)
421	J-3124	4,773.00	95	0	Zone-3 (Chocolate)
422	J-3125	4,772.00	95	0	Zone-3 (Chocolate)
423	J-3126	4,773.00	95	0	Zone-3 (Chocolate)
		'	94	ő	Zone-3 (Chocolate)
424	J-3127	4,775.00	93	0	Zone-3 (Chocolate)
425	J-3128	4,777.00			
426	J-3129	4,781.00	91	0	Zone-3 (Chocolate)
427	J-3130	4,765.00	98	0	Zone-3 (Chocolate)
428	J-3131	4,766.00	98	0	Zone-3 (Chocolate)
429	J-3132	4,759.00	101	0	Zone-3 (Chocolate)
430	J-3133	4,766.00	98	0	Zone-3 (Chocolate)
431	J-3134	4,768.00	97	0	Zone-3 (Chocolate)
432	J-3135	4,766.00	98	0	Zone-3 (Chocolate)
433	J-3136	4,762.00	100	ŏ	Zone-3 (Chocolate)
	1		100	0	Zone-3 (Chocolate)
434	J-3137	4,759.00		3	
435	J-3138	4,755.00	103	0	Zone-3 (Chocolate)
436	J-3139	4,760.00	101	0	Zone-3 (Chocolate)
437	J-3140	4,766.00	98	0	Zone-3 (Chocolate)
438	J-3141	4,780.00	92	0	Zone-3 (Chocolate)
439	J-3142	4,770.00	96	0	Zone-3 (Chocolate)
440	J-3143	4,770.00	96	0	Zone-3 (Chocolate)
463	J-3144	4,766.00	98	O	Zone-3 (Chocolate)
441	J-3145	4,771.00	96	Ö	Zone-3 (Chocolate)
442	J-3146	4,770.00	96	ő	Zone-3 (Chocolate)
		4,770.00	96	0	Zone-3 (Chocolate)
449	J-3147	7,770.00	30	ı	_0.10 0 (0.10001010)

	443 444 445 446 447 418 450 451 274 376	J-3149 J-3150 J-3151 J-3152 J-3153 J-3154 J-3155 J-3156 J-3157 J-3158	4,758.00 4,758.00 4,760.00 4,755.00 4,755.00 4,810.00 4,779.00 4,770.00 4,880.00	101 101 103 103 79 92 96 96 49	0 0 0 0 0 0 0	Zone-3 (Chocolate) Zone Exempt
	377 378 452 453 454 455 456 466 464	J-3159 J-3160 J-3161 J-3162 J-3163 J-3164 J-3165 J-3167 J-3168	4,861.00 4,869.00 4,840.00 4,834.00 4,843.00 4,820.00 4,882.00 4,848.00 4,870.00	57 53 66 69 65 75 48 63 53	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Zone-3 (Chocolate)
	465 467 468 458 461 460 459 462 547	J-3169 J-3170 J-3171 J-3172 J-3173 J-3174 J-3175 J-3176 J-3177	4,843.00 4,870.00 4,949.00 4,648.00 4,648.00 4,648.00 4,648.00 4,780.00	65 53 19 149 40 149 149 40 92	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Zone-3 (Chocolate) Zone-3 (Chocolate) Zone Exempt Zone-3 (Chocolate)
	548 583 550 549 561 562 563 564 569	J-3178 J-3180 J-3181 J-3182 J-3183 J-3184 J-3185 J-3186 J-3191	4,780.00 4,835.00 4,750.00 4,817.00 4,762.00 4,816.70 4,842.90 4,868.30 4,844.00	92 68 105 76 100 76 65 54 64	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Zone-3 (Chocolate) Zone-3 (Chocolate) Zone Exempt Zone Exempt Zone-3 (Chocolate) Zone-3 (Chocolate) Zone-3 (Chocolate) Zone-3 (Chocolate) Zone-3 (Chocolate)
	570 572 571 573 584 585 1368 1370	J-3192 J-3193 J-3194 J-3195 J-3198 J-3199 J-3200 J-3201	4,828.00 4,807.00 4,807.00 4,828.00 4,900.00 4,900.00 4,875.00 4,863.00 4,967.50	71 80 80 71 40 40 51 56	0 0 0 0 0 0	Zone-3 (Chocolate) Zone-3 (Chocolate) Zone-3 (Chocolate) Zone-3 (Chocolate) Zone Exempt Zone Exempt Zone-3 (Chocolate) Zone-3 (Chocolate) Zone Exempt
-	1914 1911 1917 1919 1922 1924 1927 1929 1932 1934 1936	J-3500 J-3501 J-3502 J-3503 J-3504 J-3505 J-3506 J-3507 J-3508 J-3509 J-3510	4,967.50 4,942.00 4,892.00 4,866.00 4,841.00 4,844.00 4,824.00 4,834.00 4,846.00 4,858.00 4,869.00	22 43 55 66 64 73 69 63 58 53	0 0 0 0 0 0 0	Zone Exempt Zone-3 (Chocolate)
Shore	1938 1940 1942 1944 1946 1948 1952 1954 1956 1958	J-3511 J-3512 J-3513 J-3514 J-3515 J-3516 J-3517 J-3518 J-3519 J-3520	4,880.00 4,870.00 4,857.00 4,844.00 4,828.00 4,819.00 4,823.00 4,820.00 4,809.00 4,791.00	49 53 59 64 71 75 73 75 79 87	000000000000000000000000000000000000000	Zone-3 (Chocolate)

1 afcyc	1962 1964 1968 1970 1972 1974 1977 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2002 2005 2008 2010 2012 2014 2016 2018 2023 2025 2027 2029 2031 2036 2041 2044 2048 2050 2053 2061 2064 2076 2083 2102 2115	J-3521 J-3522 J-3523 J-3524 J-3525 J-3526 J-3527 J-3528 J-3529 J-3530 J-3531 J-3532 J-3533 J-3534 J-3535 J-3536 J-3537 J-3540 J-3541 J-3542 J-3544 J-3545 J-3545 J-3555 J-3556 J-3557 J-3555 J-3556 J-3557 J-3566 J-3569 J-3569 J-3570 J-3579 J-3579 J-3579 J-3579 J-3580	4,777.00 4,773.00 4,778.00 4,778.00 4,783.00 4,783.00 4,778.00 4,778.00 4,778.00 4,778.00 4,778.00 4,790.00 4,797.00 4,801.00 4,804.00 4,802.00 4,804.00	93 95 93 91 91 93 95 93 99 98 88 88 89 80 89 80 88 88 88 88 89 80 88 88 88 88 88 88 88 88 88 88 88 88	000000000000000000000000000000000000000	Zone-3 (Chocolate)
	470 471 472 473 474 475 476 477 478 479 480 481	J-4001S J-4002S J-4003S J-4004S J-4005S J-4006S J-4007S J-4008S J-4009S J-4010S J-4011S J-4012S	4,890.00 4,877.00 4,893.00 4,897.00 4,899.00 4,899.00 4,890.00 4,953.00 4,942.00 4,908.00 4,928.00 4,959.00	106 112 105 103 102 102 106 79 84 98 90 76	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Zone-4 (Sidehill/Chimney)
	482 483 484 485 486 487 1331 489 490	J-4013S J-4014S J-4015S J-4016S J-4017S J-4018 J-4019 J-4020S J-4021S	5,002.00 5,100.00 4,897.00 4,897.00 4,885.00 4,885.00 4,875.00 4,930.00 4,900.00	58 15 103 103 108 108 113 89 102	0 0 0 0 0 0 0	Zone-4 (Sidehill/Chimney) Zone Exempt Zone-4 (Sidehill/Chimney)

J-	4022C	4,943.00	83	0	Zone-4 (Sidehill/Chimney
	4023C	4,959.00	76	0	Zone-4 (Sidehill/Chimney
	4024C	4,929.00	89	0	Zone-4 (Sidehill/Chimney
94 J-	4025C	4,927.00	90	0	Zone-4 (Sidehill/Chimney
5 J-	4026C	4,900.00	102	0	Zone-4 (Sidehill/Chimney
7 J-	4027C	4,971.00	71	0	Zone-4 (Sidehill/Chimney
98 J-	4028C	4,999.00	59	0	Zone-4 (Sidehill/Chimne)
9 J-	4029C	4,966.00	73	0	Zone-4 (Sidehill/Chimney
00 J-	4030C	4,963.00	74	0	Zone-4 (Sidehill/Chimney
)5 J-	4031C	4,980.00	67	0	Zone-4 (Sidehill/Chimney
01 J-	4032C	4,961.00	75	0	Zone-4 (Sidehill/Chimne
02 J-	4033C	4,938.00	85	0	Zone-4 (Sidehill/Chimne)
	4034C	4,914.00	96	0	Zone-4 (Sidehill/Chimne
	4035C	4,917.00	94	0	Zone-4 (Sidehill/Chimne
	4036C	4,921.00	93	0	Zone-4 (Sidehill/Chimne
	4037C	4,925.00	91	0	Zone-4 (Sidehill/Chimne
	4038C	4,928.00	90	0	Zone-4 (Sidehill/Chimne
	4039C	4,923.00	92	0	Zone-4 (Sidehill/Chimne Zone-4 (Sidehill/Chimne
	4040C	4,963.00	74 69	o	Zone-4 (Sidehill/Chimne
	4041C	4,975.00	79	ő	Zone-4 (Sidehill/Chimne
1 (2)	4042C 4043C	4,952.00 4,987.00	64	Ö	Zone-4 (Sidehill/Chimne
	4043C 4044C	4,911.00	97	Ö	Zone-4 (Sidehill/Chimne
	4045C	4,911.00	97	Ö	Zone-4 (Sidehill/Chimne
	4046C	4,963.00	74	ő	Zone-4 (Sidehill/Chimne
	4047C	4,968.00	72	ő	Zone-4 (Sidehill/Chimne
	4048C	5,004.00	57	ŏ	Zone-4 (Sidehill/Chimne
	4049C	5,010.00	54	Õ	Zone Exempt
	4050C	5,100.00	15	0	Zone Exempt
	4051C	5,011.00	54	0	Zone-4 (Sidehill/Chimne
	4052C	4,993.00	61	0	Zone-4 (Sidehill/Chimne
	4053C	4,961.00	75	0	Zone-4 (Sidehill/Chimne
20 J-	4054C	4,959.00	76	0	Zone-4 (Sidehill/Chimne
	4055C	4,944.00	83	0	Zone-4 (Sidehill/Chimne
	4056C	4,917.00	94	0	Zone-4 (Sidehill/Chimne
	4057C	4,897.00	103	0	Zone-4 (Sidehill/Chimne
	4058C	4,884.00	109	0	Zone-4 (Sidehill/Chimne
	4059C	4,900.00	102	0	Zone-4 (Sidehill/Chimne
	4060C	4,897.00	103	0	Zone-4 (Sidehill/Chimne Zone-4 (Sidehill/Chimne
	4061C	4,910.00 4,923.00	97 92	Ö	Zone-4 (Sidehill/Chimne
F174 11 11 11 11 11 11 11 11 11 11 11 11 11	4062C 4063C	4,917.00	94	ő	Zone-4 (Sidehill/Chimne
	4064C	4,915.00	95	Ö	Zone-4 (Sidehill/Chimne
	4065C	4,955.00	78	Ö	Zone-4 (Sidehill/Chimne
	4066C	4,892.00	105	ő	Zone-4 (Sidehill/Chimne
	4067C	4,873.00	113	ŏ	Zone-4 (Sidehill/Chimne
	4068C	4,910.00	97	ŏ	Zone-4 (Sidehill/Chimne
	4069C	4,871.00	114	0	Zone-4 (Sidehill/Chimne
	4070C	4,889.00	106	0	Zone-4 (Sidehill/Chimne
39 J-	4071C	4,892.00	105	0	Zone-4 (Sidehill/Chimne
	4072C	4,902.00	101	0	Zone-4 (Sidehill/Chimne
	4073C	4,896.00	103	0	Zone-4 (Sidehill/Chimne
42 J-	4074C	4,906.00	99	0	Zone-4 (Sidehill/Chimne
	4075C	4,879.00	111	0	Zone-4 (Sidehill/Chimne
	4076C	4,851.00	123	0	Zone-4 (Sidehill/Chimne
	4077C	4,851.00	123	0	Zone-4 (Sidehill/Chimne
	4078C	4,892.00	105	0	Zone-4 (Sidehill/Chimne
1,220,000	4079S	4,935.00	87	0	Zone-4 (Sidehill/Chimne
	4080S	4,935.00	87	0	Zone-4 (Sidehill/Chimne
	4081S	4,930.00	89	0	Zone-4 (Sidehill/Chimne
	4085S	4,983.00	66	0	Zone-4 (Sidehill/Chimne
	4086S	4,890.00	106	0	Zone-4 (Sidehill/Chimne Zone Exempt
	4087C	5,100.00 4,915.00	15 95	0	Zone-4 (Sidehill/Chimne
	4106 School 4107 School	4,915.00	95	ő	Zone-4 (Sidehill/Chimne
	4107 School	4,933.30	87	o	Zone-4 (Sidehill/Chimne
0"	4500	4,964.00	74	Ö	Zone-4 (Sidehill/Chimne

11/11/2019

	1824 1826 1828 1830	J-4501 J-4502 J-4503 J-4504 J-4505	4,956.00 4,948.00 4,943.00 4,970.00 4,984.00	77 81 83 71 65	0 0 0 0	Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney)
	1832 1834 1839 1841	J-4506 J-4507 J-4508 J-4509	4,984.00 4,981.00 4,956.00 4,942.00	65 67 77 84 89	0 0 0	Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney)
	1843 1845 1847	J-4510 J-4511 J-4512	4,930.00 4,920.00 4,934.00	09	0 0	Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney)
	1849 1851 1853	J-4513 J-4514 J-4515	4,922.00 4,880.00 4,908.00	93 87 92 	0 0 0	Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney)
2	1855 1857 1859	J-4516 J-4517 J-4518	4,944.00 4,950.00 4,938.00	> 80 > 85	0	Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney)
	1861 1863 1865 1867	J-4519 J-4520 J-4521 J-4522	4,940.00 4,906.00 4,928.00 4,944.00	84 99 90 83	0 0	Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney)
Physe	1870 1872 1874	J-4523 J-4524 J-4525	4,896.00 4,976.00 4,969.00	-103 69 72	0	Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney)
	1876 1878 1881	J-4526 J-4527 J-4528	4,959.00 4,952.00 4,970.00	76 79 71	0 0 0	Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney)
	1883 1887 1889 1891	J-4529 J-4530 J-4531 J-4532	4,942.00 4,902.00 4,918.00 4,942.00	84 101 94 84	0 0 0	Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney)
	1893 1896 1901	J-4533 J-4534 J-4535	4,966.00 4,917.00 4,950.00	73 94 80	0	Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney)
	1903 1905 1907	J-4536 J-4537 J-4538	4,932.00 4,952.00 4,968.00	88 79 72	0 0 0	Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney) Zone-4 (Sidehill/Chimney)
	1313 587	J-5001 J-6001	5,066.00 5,106.13	69 91	0	Zone 5 (West7th) Zone 6 (Boundary)
	589 608 590	J-6002 J-6003 J-6004	5,154.57 5,179.37 5,152.08	70 59 71	0	Zone 6 (Boundary) Zone 6 (Boundary) Zone 6 (Boundary)
	609 610 591	J-6005 J-6006 J-6007	5,155.32 5,168.84 5,142.51	69 63 75	0 0	Zone 6 (Boundary) Zone 6 (Boundary) Zone 6 (Boundary)
	592 611 612	J-6008 J-6009 J-6010	5,123.20 5,136.51 5,115.09	83 77 87	0	Zone 6 (Boundary) Zone 6 (Boundary) Zone 6 (Boundary)
	1458 1460 1481 1483	J-6011 J-6012 J-6024 J-6028	5,131.00 5,146.00 5,190.00 5,174.00	80 73 54 61	0 0 0	Zone 6 (Boundary) Zone 6 (Boundary) Zone 6 (Boundary) Zone 6 (Boundary)
	1485 1487 1505	J-6029 J-6030 J-6031	5,148.00 5,152.00 5,160.00	72 71 67	0	Zone 6 (Boundary) Zone 6 (Boundary) Zone 6 (Boundary) Zone 6 (Boundary)
	1490 588 1308	J-6032 J-6034 J-6045	5,154.00 5,194.00 5,066.00	70 53 108	0 0	Zone 6 (Boundary) Zone Exempt Zone Exempt
	586 1536 1538 1540	J-6046 J-6047 J-6048 J-6049	4,900.00 5,200.00 5,210.00 5,212.00	180 50 46 45	0 0 0	Zone Exempt Zone 6 (Boundary) Zone 6 (Boundary) Zone 6 (Boundary)
	1542 1544 1547 1553	J-6050 J-6051 J-6052 J-6053	5,164.00 5,178.00 5,144.00 5,144.00	66 59 74 74	0 0 0	Zone 6 (Boundary)

1	J-6054	5,138.00	77	0	Zone 6 (Boundary)
1551	J-6055	5,145.00	74	0	Zone 6 (Boundary)
1555	J-6056	5,120.00	85	0	Zone 6 (Boundary)
1557	J-6057	5,120.00	85	0	Zone 6 (Boundary)
1559	J-6058	5,134.00	79	0	Zone 6 (Boundary)
1321	J-Section 5.3.2	4,704.00	98	0	Zone 6 (Boundary)
1401	J-Tangberg	4,928.00	90	0	Zone-4 (Sidehill/Chimney)

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