## **Fieldstone Creek Townhomes**

### **Summary**

- A total of 43 irrigation zones
- Two irrigation controllers
  - 1. East side of Elm Creek Lane (16484 Elm Creek Lane)
  - 2. West side of Elm Creek Lane (16423 Elm Creek Lane)
- Two, two-inch water sources; one at each controller location. The eastern water source has a one and a half horsepower booster pump installed. The western source has no booster pump. Both sources have green enclosures.

The irrigation system as a whole was built very well, and the efficiency of this system is above average. The installing company built the zones so that similar microclimates (front yards, side yards, and backyards having different drier/sunnier or wetter/shadier conditions) and sprinklers with similar precipitation rates are running together. There are only a couple of areas that should be separated due to different microclimates being irrigated with the same amount of water. I would separate them because the areas need different amounts of water and running them together for the same amount of time doesn't give each area the correct amount of water. The eastern should be re-programmed to water less often and increase overall water efficiency. The two irrigation controllers were not smart/weather-based controllers. It is recommended that smart/weather-based controllers are installed.

### **West Controller**

Recommendation	Management Type	Improvement	Estimated Cost
1	Weather sensing technology	Install and program a smart controller	\$1,000- \$1,400*
2	Wiring retrofit 1	Rebuild zones 1 and 2 to direct water away from natural areas	\$1,500
3	Wiring retrofit 2	Split front and backyard of zone 3	\$2,000
4	Water distribution	Fix heads in zones 7 and 8	Variable

<sup>\*</sup> Cost does not include mobile hotspot one-time fee and the \$10-\$15 monthly internet fee (internet can be suspended during winter months)

### **East Controller**

Recommendation	Management Type	Improvement	Estimated Cost
1	Weather sensing technology	Install a new rain sensor	\$270
2	Weather sensing technology	Install and program a smart controller	\$1,600- \$2,200*
3	Controller programming	Reconfigure zone sequencing	\$600
4	Wiring retrofit	Rebuild zones: 4, 9 and 10 to direct water away from natural areas.	\$2,000
5	Water distribution	Add an additional row of sprinkler heads to reduce waste on boulevards on zones: 1, 2, 5, 7, 8, 21, 27, 28, and 29.	\$6,000
6	Water distribution	Fix heads and rotors in zones 4, 19, 20, and 22	Variable

<sup>\*</sup> Cost does not include mobile hotspot one-time fee and the \$10-\$15 monthly internet fee (internet can be suspended during winter months)

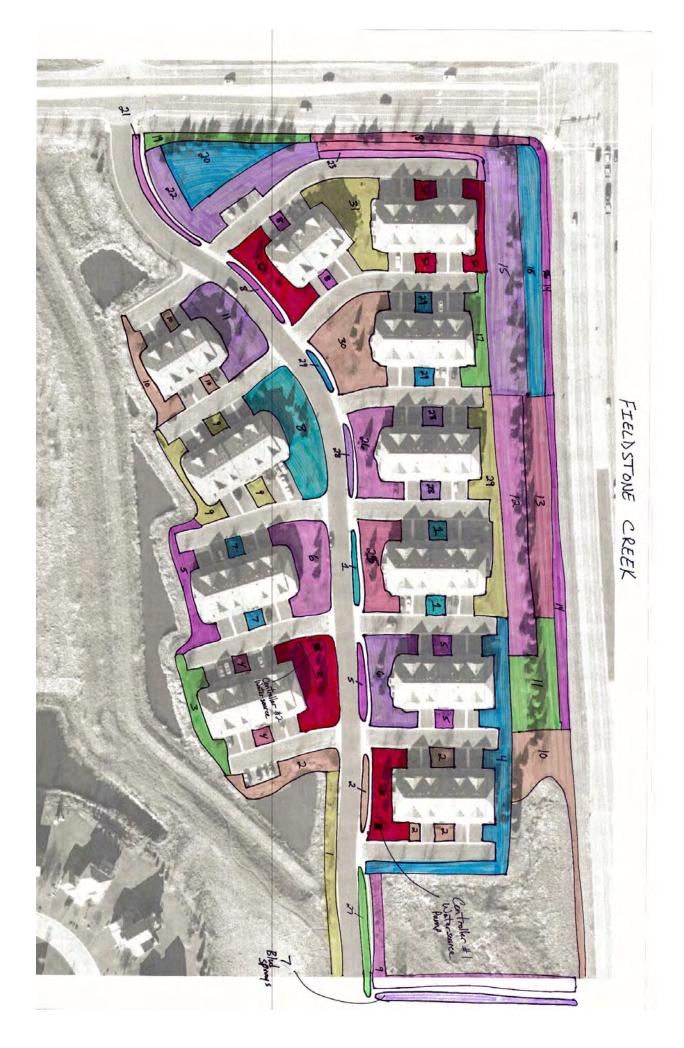
## Suggestions

### **West Controller**

- The controller has an operational rain sensor, so no change is recommended.
- The installation of a new weather-based controller is recommended. The cost for installing a new controller at this location would range from \$1,000 to \$1,400. This cost assumes that a Wi-Fi connection is available for the controller. If a Wi-Fi connection is not available, the cost of a mobile hotspot and data plan would need to be added. A mobile hotspot would be a one-time fee, and the monthly cost for a data plan ranges from \$10 to \$15 per month. A data plan through AT&T can be suspended over the winter months, which would provide additional cost savings.
- Zones 1 and 2 are rotor zones that are throwing water 15 to 20 feet into the tall grasses that do not require irrigation. A suggested remedy would be to change out and add additional heads with appropriately sized nozzles to minimize the overthrow into the non-turf areas. Additional heads would be needed because the current sprinklers throw 25 to 30 feet and are spaced that far apart. If changed, the sprinklers would have to be spaced 15 to 20 feet apart requiring additional sprinklers to fill in the gaps. The price range for this change is approximately \$1,000 to \$1,500.
- Zone 3 is running the front yard and backyard of the building that includes home #16461 and could be split into two zones to separate the front and back. The price range for this change is approximately \$1,400 to \$2,400.
- Zone 7 has a rotary nozzle that is not working properly, and zone 8 has a leaking rotor. These items should be fixed by an irrigation contractor providing service work during a normal service visit. The cost to address these items would be done at a time and material rate.

### **East Controller**

- Controller does not have an operational rain sensor. The price range for installing a rain sensor is \$225 to \$270.
- The installation of a new weather-based controller is recommended. The cost for installing a new controller at this location would range from \$1,600 to \$2,200. This cost assumes that a Wi-Fi connection is available for the controller. If a Wi-Fi connection is not available, the cost of a mobile hotspot and data plan would need to be added. A mobile hotspot would be a one-time fee, and the monthly cost for a data plan ranges from \$10 to \$15 per month. A data plan through AT&T can be suspended over the winter months, which would provide additional cost savings.
- Zones 4, 9, and 10 have rotors that are throwing water 15 to 20 feet into the tall grasses that do not require irrigation. A suggested remedy would be to change out and add additional heads with appropriately sized nozzles to minimize the overthrow into the nonturf areas. Additional heads would be needed because the current sprinklers throw 25 to 30 feet and are spaced that far apart. If changed, the sprinklers would have to be spaced 15 to 20 feet apart requiring additional sprinklers to fill in the gaps. The price range for this change is approximately \$1,500 to \$2,000.
- Zones 1, 2, 5, 7, 8, 21, 27, 28, and 29 are all boulevard spray zones that have sprinklers along the sidewalks irrigating toward the curb line. This is a very common way of irrigating boulevards, but a single row of heads means bigger nozzles to cover the curb lines, which means a considerable amount of water is thrown over the curbs and is wasted. A more efficient way of irrigating the boulevards would be to add a second row of sprinklers along the curb line. Both rows of sprinklers would be able to use smaller nozzles reducing the overthrow onto any hard surfaces. The price range for adding a second row of sprinklers on all boulevard zones is approximately \$4,000 to \$6,000.
- The east controller should be reprogrammed in order to create a more efficient watering schedule. Numerous zones are on both programs A and B, which makes them run every day and results in wet areas and wasted water. This process should take an hour for two technicians and should cost an estimated \$600.
- Zone 4 has a leaking head, zones 16 and 25 both have a broken rotor, zones 19, 20, and 22 each have a rotor that is not rotating. These items should be fixed by an irrigation contractor providing service work during a normal service visit. The cost to address these items would be done at a time and material rate.



M T W TH F SA S		Start times and water days:	Program
M T W TH F SA S		Start times and water days:	Program
SA SS CONT WO THOUSA S	11 Pm	Start times and water days:	Program B
M (TW (H) F(SA)S	10Pm	Program A Start times and water days: /	Program
1.5 MP Single phase	land size Berkley	Is there a pump? Yes If yes, pump make, model and size Berkley 1.5 HP	Is there a p
Location of water source Green box in front of 16484	Location of wat	Water source: City (RPZ) PVB) Size: 3", Other_	Water sour
164	d ESPLX Basic	Controller Make, Model and Location Rain Bird ESPLX Rasic	Controller
		Total number of zones for property: 32	Total numk
	/ District 19 20110	entireller and watersource #	East Co
n Evaluation Date:	RNR Irrigatio	Name/Address: Fieldstone Creek , RNR Irrigation Evaluation	Name/Addr

Zone #	Zone Location	Rotor/Spray Brand	Brand	_	Turf/Plants   Wire Color   Program	Program
/	Map	Spray		Turt	Red	A+B
Evaluation	Evaluation of the efficiency of zone operation: OK, Single pow of Sprays.	ingle pow of	sprays.		Double row would be	d be
More	More efficient as well as not spray on hord scapes as much	on hord scape	sas	much		
# of Head	# of Heads to replace # of Heads that are pitched/need adjustment	/need adjustment		# of Heads	# of Heads to add or move 8-10	1e 8-10
Time need	m repairs or	1 hour				

Zone #		Zone Location		Rotor/Spra	Rotor/Spray Brand	Turf/Plants	Turf/Plants   Wire Color   Program	Program
2	Mas			Sprau		Turt	Brown	A+B
Evaluation	of the efficiency of	Evaluation of the efficiency of zone operation: OK, Single Pau of, spreys. Duble row would be	simber 1	aw of, s	preus.	Souble row	bluces c	be
More	· Ricient	more efficient as well as not some on hardscapes a	neros to	on ha	rdscapes	as much		
# of Head	# of Heads to replace	# of Heads that are pitched/need adjustment	e pitched/need	adjustment		of.	add or move	e 8-10
Time need	Time needed to perform repairs on this zone 4 men / / hour	rs on this zone $\frac{q}{m}$	in / I have	7				

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Zone #	Zone Location	Rotor/Spray	Brand	lants	Wire Color	Program
W	Map	Kotar		Tust	Yellow	14+18
Evaluation o	Evaluation of the efficiency of zone operation: $6 \infty 1$	Some overspray		on hards	scapes	
# of Heads to replace	to replace # of Heads that are pitched/need adjustment	need adjustment		# of Heads to	Heads to add or move	ф 
Time needed	Time needed to perform repairs on this zone					
Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color Program	Program
4	Map	Rotor	y d	Tust	Blue	A+B
Evaluation o	Evaluation of the efficiency of zone operation: $\delta \circ d$	& I leaking	head			
# of Heads to replace	to replace / # of Heads that are pitched/need adjustment	need adjustment		# of Heads to add or move	add or mov	e
Time needed	Time needed to perform repairs on this zone S minutes	5				
Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
9	Map	Spray		tart	Black	A+B
Evaluation o	cy of zone operation: $\mathcal{OK}$ , $\mathcal{A}$	ends are spaced		15 apart	but ,	house
10'	Moreles					
# of Heads to replace	to replace # of Heads that are pitched/need adjustment	need adjustment		# of Heads to add or move	add or mov	œ .
Time needed	Time needed to perform repairs on this zone	Botos/Spray	Brand	Turf/Diante	Wire Color	Program
6	Mass	Retor			Blue	A
Evaluation o	Evaluation of the efficiency of zone operation:					
# of Heads to replace	to replace # of Heads that are pitched/need adjustment	need adjustment		# of Heads to add or move	add or mov	re
Time needed	Time needed to perform repairs on this zone					

7 #	Zono Location	Rotor/Spray	Brand	Turf/Plants	Wire Color Program	Program
7	Moo	Spray		turt	Green	A
Evaluation	Evaluation of the efficiency of zone operation: عنور عالية المعادية المعاد	double	Husen world	ld be more	r efficient	+
# of Heads	# of Heads to replace # of Heads that are pitched/need adjustment	need adjustment		# of Heads to add or move	add or move	
Time need	Time needed to perform repairs on this zone					
Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
×	Map	Sprays		Tust	Black	A
Evaluation	Evaluation of the efficiency of zone operation:					
# of Head:	# of Heads to replace # of Heads that are pitched/need adjustment	need adjustment		# of Heads to	f Heads to add or move	
Time need	Time needed to perform repairs on this zone					
Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
9	Map	Rotar		Tust	Crawa	14
Evaluation	zone operation: Raters		weeds. (	Could cha	change	
# of Head	# of Heads to replace # of Heads that are pitched/need adjustment Time needed to perform repairs on this zone  # Min	need adjustment		# of Heads to add or move	add or mov	Ф
Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
10	Mas	Rotor		Turt	Red	A
Evaluation	Evaluation of the efficiency of zone operation: $600$					
# of Head	# of Heads to replace # of Heads that are pitched/need adjustment	/need adjustment	Ī	# of Heads to add or move	add or mov	ē
Time need	Time needed to perform repairs on this zone					

020.	Con Haller 7	7 /					
Zone #		Zone Location	Rotor/Spray	Brand	Turf/Plants	rf/Plants Wire Color	Program
*	Map		Roze		turt	Black	4
Evaluation o	Evaluation of the efficiency of zone operation:	zone operation: &&d					
# of Heads to replace	# of Heads to replace # of Head Time needed to perform repairs on this zone	# of Heads that are pitched/need adjustment	/need adjustment		# of Heads to add or move	add or mov	e
Zone #		Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
12	Mas		Rotor		Tust	Yellow	A
Evaluation o	Evaluation of the efficiency of zone operation:	zone operation: 6 as d					
# of Heads to replace Time needed to perfo	# of Heads to replace # of Head Time needed to perform repairs on this zone	# of Heads that are pitched/need adjustment	/need adjustment		# of Heads to	f Heads to add or move	re
Zone #		Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
13	Mas		Rotor		tart	Blue	14
Evaluation c	Evaluation of the efficiency of zone operation:	f zone operation: $6$ d					
# of Heads to replace	# of Heads to replace # of Head	# of Heads that are pitched/need adjustment	s/need adjustment		# of Heads to add or move	add or mov	/e
Zone #		Zone Location	Rotor/Spray	Brand	Turf/Plants	12	Pro
14	Map		Rotor		tust	Oranyc	A
Evaluation o	Evaluation of the efficiency of zone operation:	f zone operation: bood					
# of Heads to replace	to replace	# of Heads that are pitched/need adjustment	d/need adjustment		# of Heads to add or move	o add or mov	ve
Time neede	Time needed to perform repairs on this zone	airs on this zone					

Casi	Controller #						
Zone #	7	Zone Location	Rotor/Spray	Brand	Turf/Plants	rf/Plants Wire Color Program	Program
21	Map		Rotor		turt	Red	A
Evaluation o	Evaluation of the efficiency of zone operation:	one operation: $600$					
# of Heads to replace	o replace	# of Heads that are pitched/need adjustment	need adjustment		# of Heads to	of Heads to add or move	
Time needed	Time needed to perform repairs on this zone	s on this zone					
Zone #	Z	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
7	Mes		Rotor		turt	Brown	A
Evaluation o	Evaluation of the efficiency of zone operation:	one operation: $6 \infty d$	1 broken	Rotor	1		
	, ,				t of Looks to add or more	2	
Time needed to perfo	Time needed to perform repairs on this zone	s on this zone & minutes	ν. ·				
Zone #	2	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
17	Mos		Rotar		turt	She	A+B
Evaluation o	Evaluation of the efficiency of zone operation:	one operation: &					
# of Heads to replace	o replace	# of Heads that are pitched/need adjustment	need adjustment		# of Heads to add or move	add or mov	e
Zone #	Zone # Zone Location	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
18	Map		Rotor		tust	Purple	A+B
Evaluation c	Evaluation of the efficiency of zone operation:	one operation: $\delta \infty d$					
					# of Boods to	of Boods to add or move	Ď
# of fleads to replace	to replace	# Of Heads clarate president free assumptions					
Time neede	Time needed to perform repairs on this zone	s on this zone					

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Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants Wire Color	Wire Color	
19	Map	Rotor		turk	breen	A+B
Evaluation	Evaluation of the efficiency of zone operation:	7	not 1	raterial		
	the fille date weekless / the fille de thet are pitched (pood adjustment			# of Heads to add or move	add or mov	ò
Time need	Time needed to perform repairs on this zone					
Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
y V	Was	Rother		tust	Brown	14+8
90	Thirt	110101		1	7	
Evaluation	Evaluation of the efficiency of zone operation:	Rotor	not	rotating		
# of Head	# of Heads to replace / # of Heads that are pitched/need adjustment	ed adjustment_		# of Heads t	of Heads to add or move	Ve
Time need	Time needed to perform repairs on this zone					
Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Turf/Plants Wire Color Program	Progra
16	Mas	Spray		turt	Oranyc	A+B
Evaluation	ncy of zone operation: $\mathcal{OL}$ .	Single red of	Shouts	Double	F	more efficient
# of Head	# of Heads to replace # of Heads that are pitched/need adjustment	ed adjustment		# of Heads t	of Heads to add or move	Ve
Zone #	Zone # Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
		2		++		
22	Map	Kon		Tur	Drown	4+1
Evaluation	Evaluation of the efficiency of zone operation: $\int \!$	1 Rotor	not o	wtahus		
# of Heac	# of Heads to replace / # of Heads that are pitched/need adjustment	eed adjustment		# of Heads t		N D
Time special to special service on this special				# Of Freday	of Heads to add or move	

1	Con 1/2/10/1						
Zone #		Zone Location	Rotor/Spray	Brand	Turf/Plants	rf/Plants Wire Color	Program
23	Map		Spray		七千	Green	A+8
Evaluatio	Evaluation of the efficiency of zone operation:	fzone operation: bood					
# of Hear	# of Heads to replace	# of Heads that are pitched/need adjustment	eed adjustment		# of Heads to add or move	add or mov	re
Time nee	Time needed to perform repairs on this zone	airs on this zone					
Zone #		Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
24	Mas		Rotar		Turp	Black	A+8
Evaluatio	Evaluation of the efficiency of zone operation:	f zone operation: $b \infty d$					
# of Hea	# of Heads to replace # of Head	# of Heads that are pitched/need adjustment	eed adjustment		# of Heads to add or move	add or mov	/e
Zone #		Zone Location	Rotor/Spray	Brand	Turf/Plants	rf/Plants Wire Color	Program
28	Map		Rotar		tur	Red	A+B
Evaluatio	Evaluation of the efficiency of zone operation:	of zone operation: $600$		Rotor			
# of Hea	# of Heads to replace /	# of Heads that are pitched/need adjustment	eed adjustment		# of Heads to add or move	add or mov	ve
Zone #	Zone # Zone Location	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
26	Mas		Rotar		tart	Green	A+B
Evaluatio	Evaluation of the efficiency of zone operation:	of zone operation: 600d					
# of Hea	# of Heads to replace	# of Heads that are pitched/need adjustment	eed adjustment		# of Heads to add or move	o add or mo	ve
Time nee	Time needed to perform repairs on this zone	airs on this zone					

Zone #	Zo	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color I	Program
27	Map		Spray		tirt	Ked	4
Evaluatio	Evaluation of the efficiency of zone operation:	ne operation: Single Now.		W W	ifte many	efficient	
SK							
# of Hea	# of Heads to replace	# of Heads that are pitched/need adjustment	ed adjustment		# of Heads to add or move	add or move	
Time nee	Time needed to perform repairs on this zone	on this zone					
Zone #	Z	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
26	Map		Spray		Turt	Brown	A+8
Evaluatio	Evaluation of the efficiency of zone operation:	ok.		Double	row more	efficient	+
# of Hea	# of Heads to replace	# of Heads that are pitched/need adjustment	ed adjustment		# of Heads to add or move	add or move	
Time nee	Time needed to perform repairs on this zone	on this zone					
Zone #	2.	Zone Location	Rotor/Spray	Brand	Turf/Plants	urf/Plants Wire Color	Program
29	Map		Spray		test	Yellow	4+8
Evaluatio	Evaluation of the efficiency of zone operation: $o\mathcal{K}$	one operation: OK. single	poul.	Double row	More	efficient	1
# of Hea	# of Heads to replace	# of Heads that are pitched/need adjustment	ed adjustment		# of Heads to add or move	add or move	
Time nee	Time needed to perform repairs on this zone	on this zone	5		_		Program
3 × #	W. W	Zone rocation	P. to	Di giid	A.A	Promo.	148
Evaluation	on of the efficiency of zo	Evaluation of the efficiency of zone operation: 600d					
# of Hea	# of Heads to replace	# of Heads that are pitched/need adjustment	ed adjustment		# of Heads to	of Heads to add or move	
Time nee	Time needed to perform repairs on this zone	on this zone					

-	Co. 1. 41/6.						
Zone #		Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
3/	Map		Rotor		turt	Blue	H+8
Evaluation	Evaluation of the efficiency of zone operation:	f zone operation: $6\infty$ d			le		
# of Head	# of Heads to replace	# of Heads that are pitched/need adjustment	eed adjustment		# of Heads to	Heads to add or move	©
					- 6/61	Win Calad	2
Zone #		Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
22	Map		Rotor		turt	Brown	A+B
Evaluatio	Evaluation of the efficiency of zone operation:	of zone operation: 6asd					
# of Head	# of Heads to replace # of Head	# of Heads that are pitched/need adjustment	eed adjustment		# of Heads to	f Heads to add or move	ď
Zone #		Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
Evaluatio	Evaluation of the efficiency of zone operation:	of zone operation:					
# of Hea	# of Heads to replace	# of Heads that are pitched/need adjustment	eed adjustment		# of Heads to	f Heads to add or move	le
Zone #	Zone # Zone Location	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
Evaluatio		of zone operation:					
# of Hea	of Heads to replace	# of Heads that are pitched/need adjustment	eed adjustment		# of Heads to add or move	add or mov	/e
Time nee	Time needed to perform repairs on this zone	airs on this zone					

Total number o	Total number of zones for property: //	ESPINE 16423 Elm Creek lane	
Water source:	Water source: City (RPZ)/ PVB) Size: 2" Other	Location of water source Green enclosure in front of 169	07/16
is there a pumi	Is there a pump? No If yes, pump make, model and size	and size	
Program A	Program A Start times and water days: /	10 Pm (M)TWO THE SAS	S
Program	Start times and water days:	M T W TH F SA S	S
Program	Start times and water days:	M T W TH F SA S	S
Program	Start times and water days:	M T W TH F SA S	S

Zone #	Zone Location	Rotor/Spray Brand	y Branc	Turf/Plants Wire Color Program	Wire Color	Progra
,	Map	Rotor	MIX	Turt	She	4
-	(h) -1	>				
Evaluatio	Evaluation of the efficiency of zone operation: Would change from Rators of	hange from	Rators	9,	sprays or rotation	otati
2000	mostles to reduce the amount of overspray into the weeds	rspray into	The	weeds		
# of Hea	# of Heads to replace # of Heads that are pitched/need adjustment	/need adjustmen		# of Heads to add or move	add or mov	é
Time nee	Time needed to perform repairs on this zone 4 mer / / hour	hour				

							1	//	2		0: ///			
move	# of Heads to add or move	leads to	# of h			justment	need ad	# of Heads that are pitched/need adjustment	that ar	of Heads	#	eplace	# of Heads to replace_	# of H
	eds	he weeds	E	p	ay	wer son	60	munt	ann	the	nozzles to reduce The amount of overspray into the	4	zles	no
3	ins to sprays or retained	4	tors	3	Jon S	7	hang	ald a	Wa	peration:	Evaluation of the efficiency of zone operation: Would change from 18to.	e efficien	tion of th	Evalua
lue	CT. ISHLE	1		×	/M	ROTOR MIX	8					Map		8
olor	urf/Plants Wire Color Program	Plants	Tur	Brand	Y	Rotor/Spray Brand	Ro			Zone Location	Zone L			Zone #

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants   Wire Color		Program		
u	Map	Rotor		Turt	Orampe	4		
Evaluatio	Evaluation of the efficiency of zone operation:	possibly	more hu	heads at	Cormas	す		
better	ir cover without spraying the	~	much.	Also shu	ould seper	should seperate front	from	from back
# of Hea	# of Heads to replace # of Heads that are pitched/need adjustment	/need adjustment		# of Heads to	f Heads to add or move	(D)		
Time nee	Time needed to perform repairs on this zone							
Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color Program	Program		
4	Map	Spray		Turt	PINK	4		
Evaluatio	Evaluation of the efficiency of zone operation:							
# of Hea	# of Heads to replace # of Heads that are pitched/need adjustment	d/need adjustment		# of Heads to add or move	add or mov	ro 		
Time nee	Time needed to perform repairs on this zone					L		
Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program		
3	Mas	Rotor		Tust	Purple	14		
Evaluatio	Evaluation of the efficiency of zone operation:							
# of Hea	# of Heads to replace # of Heads that are pitched/need adjustment	d/need adjustment		# of Heads to	# of Heads to add or move	ñ		
Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program		
6	Map	Rotar		Turt	Red	74		
Evaluation	Evaluation of the efficiency of zone operation:	pressure is	٩	title bu.	smaller	1		
nozzles	_	Head	not pot	rotating				
# of Hea	# of Heads to replace / # of Heads that are pitched/need adjustment	d/need adjustment		# of Heads t	# of Heads to add or move	ie		
Time ne	Time needed to perform repairs on this zone S minutes	•						

The second of the second of the second							
Zone #	Zone Location	ation	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
7	Map		Sprays		100	Yellow	A
Evaluation o	Evaluation of the efficiency of zone operation:	has 1.	notary nozzle	le with		spray zone. n	needs
to be	change d						
# of Heads to replace		# of Heads that are pitched/need adjustment	ed adjustment		# of Heads to	# of Heads to add or move	
Time needed	Time needed to perform repairs on this zone	zone S minutes					
Zone #	Zone Location	ation	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
Ø	Map		Rotor		Turp	Black	A
Evaluation o	Evaluation of the efficiency of zone operation:	ration: / Kaking					
# of Heads to replace	_	# of Heads that are pitched/need adjustment	ed adjustment	ļ	# of Heads to	f Heads to add or move	U
Time needed	Time needed to perform repairs on this zone	zone					
Zone #	Zone Location	ation	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
9	Map		Rotor		Turt	Green	A
Evaluation o	Evaluation of the efficiency of zone operation:	ration: 600d					
# of Heads to replace Time needed to perfo	rm repairs on	# of Heads that are pitched/need adjustment this zone	ed adjustment		# of Heads to	# of Heads to add or move	O
Zone #	Zone Location	ation	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
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Evaluation c	Evaluation of the efficiency of zone operation:	eration: Sood					
# of Heads to replace		# of Heads that are pitched/need adjustment	ed adjustment_		# of Heads to	# of Heads to add or move	е
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Zone #		Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
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Evaluation	Evaluation of the efficiency of zone operation:	f zone operation: Sood					
# of Head	# of Heads to replace	# of Heads that are pitched/need adjustment	d/need adjustment		# of Heads to add or move	add or mov	е
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Zone #		Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
Evaluation	Evaluation of the efficiency of zone operation:	of zone operation:					
# of Head	# of Heads to replace	# of Heads that are pitched/need adjustment	d/need adjustment		# of Heads to add or move	add or mov	e
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Evaluation	Evaluation of the efficiency of zone operation:	of zone operation:					
# of Head	# of Heads to replace	# of Heads that are pitched/need adjustment	d/need adjustment		# of Heads to add or move	add or mov	/e
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# of Head	# of Heads to replace	# of Heads that are pitched/need adjustment	:d/need adjustment		# of Heads to add or move	add or mov	/e
Time nee	Time needed to perform repairs on this zone	airs on this zone					