BNR IRRIGATION SERVICES INC.
PO Box 409
St. Bonifacius MN 55375
Office: 952-446-1519
Fax: 952-446-1587

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

* 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

* 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 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 $1,500 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.

FIELDSTONE CREEK

Name/Address: Fieldstone Creek East controller and watersource #1

BNR Irrigation Evaluation

Date: _____

Total number of zones for property: 32

Controller Make, Model and Location RainBird ESPLX Basic 16484 Elm Creek Lane

Water source: City (RPZ) PVB) Size: 2", Other _____ Location of water source Green box in front of 16484

Is there a pump? Yes If yes, pump make, model and size Berkley 1.5 HP Single phase

Program A Start times and water days: 10PM — M (T) W (TH) F (SA) S

Program B Start times and water days: 11 PM — (M) T (W) TH (F) SA S

Program _____ Start times and water days: _____ — M T W TH F SA S

Program _____ Start times and water days: _____ — M T W TH F SA S

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
1	Map	Spray		Turf	Red	A + B

Evaluation of the efficiency of zone operation: OK, single row of sprays. Double row would be more efficient as well as not spray on hardscapes as much

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move 8-10

Time needed to perform repairs on this zone 4 men / 1 hour

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
2	Map	Spray		Turf	Brown	A+B

Evaluation of the efficiency of zone operation: OK, single row of sprays. Double row would be more efficient as well as not spray on hardscapes as much

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move 8-10

Time needed to perform repairs on this zone 4 men / 1 hour

Name/Address: Fieldstone Creek East Controller #1

BNR Irrigation Evaluation

Date: _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
3	Map	Rotor		Turf	Yellow	A+B

Evaluation of the efficiency of zone operation: Good, some overspray on hardscapes

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
4	Map	Rotor		Turf	Blue	A+B

Evaluation of the efficiency of zone operation: Good, & 1 leaking head

# of Heads to replace 1 # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone 5 minutes

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
5	Map	Spray		Turf	Black	A+B

Evaluation of the efficiency of zone operation: OK, heads are spaced 15' apart but have 12' nozzles

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
6	Map	Rotor		Turf	Blue	A

Evaluation of the efficiency of zone operation: Good

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Name/Address: Fieldstone Creek East Controller #1

BNR Irrigation Evaluation

Date: _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
7	Map	Spray		Turf	Green	A

Evaluation of the efficiency of zone operation: Single row, double row would be more efficient

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
8	Map	Sprays		Turf	Black	A

Evaluation of the efficiency of zone operation: Good

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
9	Map	Rotor		Turf	Orange	A

Evaluation of the efficiency of zone operation: Rotors throwing into weeds. Could change

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone 4 men / 1 hour

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
10	Map	Rotor		Turf	Red	A

Evaluation of the efficiency of zone operation: Good

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Name/Address: Fieldstone Creek East Controller #1

BNR Irrigation Evaluation

Date: _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
11	Map	Rotor		Turf	Black	A

Evaluation of the efficiency of zone operation: Good

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
12	Map	Rotor		Turf	Yellow	A

Evaluation of the efficiency of zone operation: Good

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
13	Map	Rotor		Turf	Blue	A

Evaluation of the efficiency of zone operation: Good

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
14	Map	Rotor		Turf	Orange	A

Evaluation of the efficiency of zone operation: Good

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Name/Address: Fieldstone Creek East Controller #1

BNR Irrigation Evaluation

Date: _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
15	Map	Rotor		Turf	Red	A

Evaluation of the efficiency of zone operation: Good

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
16	Map	Rotor		Turf	Brown	A

Evaluation of the efficiency of zone operation: Good. 1 broken Rotor

# of Heads to replace 1 # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone 5 minutes

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
17	Map	Rotor		Turf	Blue	A+B

Evaluation of the efficiency of zone operation: Good

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
18	Map	Rotor		Turf	Purple	A+B

Evaluation of the efficiency of zone operation: Good

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Name/Address: Fieldstone Creek East Controller #1

BNR Irrigation Evaluation

Date: _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
19	Map	Rotor		Turf	Green	A+B

Evaluation of the efficiency of zone operation: Good. 1 Rotor not rotating

# of Heads to replace 1 # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
20	Map	Rotor		Turf	Brown	A+B

Evaluation of the efficiency of zone operation: Good. 1 Rotor not rotating

# of Heads to replace 1 # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
21	Map	Spray		Turf	Orange	A+B

Evaluation of the efficiency of zone operation: OK. Single row of sprays. Double row more efficient

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
22	Map	Rotor		Turf	Brown	A+B

Evaluation of the efficiency of zone operation: Good. 1 Rotor not rotating

# of Heads to replace 1 # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Name/Address: Fieldstone Creek East Controller #1

BNR Irrigation Evaluation

Date: _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
23	Map	Spray		Turf	Green	A+B

Evaluation of the efficiency of zone operation: Good

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
24	Map	Rotor		Turf	Black	A+B

Evaluation of the efficiency of zone operation: Good

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
25	Map	Rotor		Turf	Red	A+B

Evaluation of the efficiency of zone operation: Good. 1 Broken Rotor

# of Heads to replace 1 # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
26	Map	Rotor		Turf	Green	A+B

Evaluation of the efficiency of zone operation: Good

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Name/Address: Fieldstone Creek East Controller #1

BNR Irrigation Evaluation

Date: _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
27	Map	Spray		Turf	Red	A

Evaluation of the efficiency of zone operation: Single row. Double row more efficient

OK

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
28	Map	Spray		Turf	Brown	A+B

Evaluation of the efficiency of zone operation: OK. single row. Double row more efficient

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
29	Map	Spray		Turf	Yellow	A+B

Evaluation of the efficiency of zone operation: OK. single row. Double row more efficient

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
30	Map	Rotor		Turf	Orange	A+B

Evaluation of the efficiency of zone operation: Good

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Name/Address: Fieldstone Creek East Controller #1

BNR Irrigation Evaluation

Date: _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
31	Map	Rotor		Turf	Blue	A+B

Evaluation of the efficiency of zone operation: Good

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
32	Map	Rotor		Turf	Brown	A+B

Evaluation of the efficiency of zone operation: Good

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program

Evaluation of the efficiency of zone operation: _____

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program

Evaluation of the efficiency of zone operation: _____

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Name/Address: Fieldstone Creek East Controller + Water source #2

BNR Irrigation Evaluation

Date: _____

Total number of zones for property: 11

Controller Make, Model and Location Rain Bird ESPME 16423 Elm Creek Lane

Water source: City (RPZ) / PVB) Size: 2", Other _____ Location of water source Green enclosure in front of 16423

Is there a pump? No If yes, pump make, model and size —

Program A Start times and water days: 10 PM (M) T (W) TH (F) SA S

Program _____ Start times and water days: _____ M T W TH F SA S

Program _____ Start times and water days: _____ M T W TH F SA S

Program _____ Start times and water days: _____ M T W TH F SA S

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
1	Map	Rotor	Mix	Turf	Blue	A

Evaluation of the efficiency of zone operation: Would change from Rotors to sprays or rotating nozzles to reduce the amount of overspray into the weeds

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone 4 men / 1 hour

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
2	Map	Rotor	Mix	Turf	Lt. Blue	A

Evaluation of the efficiency of zone operation: Would change from rotors to sprays or rotating nozzles to reduce the amount of overspray into the weeds

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone 4 men / 1 hour

Name/Address: Fieldstone Creek East Controller #2

BNR Irrigation Evaluation

Date: _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
3	Map	Rotor		Turf	Orange	A

Evaluation of the efficiency of zone operation: Good - possibly move heads at corners to better cover without spraying the road as much. Also should seperate front from back

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
4	Map	Spray		Turf	Pink	A

Evaluation of the efficiency of zone operation: Good

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
5	Map	Rotor		Turf	Purple	A

Evaluation of the efficiency of zone operation: Good

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
6	Map	Rotor		Turf	Red	A

Evaluation of the efficiency of zone operation: Good - Pressure is a tiffle low. smaller nozzles in select rotors would help. Head not rotating

# of Heads to replace 1 # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone 5 minutes

Name/Address: Fieldstone Creek East controller #2

BNR Irrigation Evaluation

Date: _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
7	Map	Sprays		Turf	Yellow	A

Evaluation of the efficiency of zone operation: has 1 rotary nozzle with spray zone. needs to be changed

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone 5 minutes

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
8	Map	Rotor		Turf	Black	A

Evaluation of the efficiency of zone operation: 1 leaking head

# of Heads to replace 1 # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
9	Map	Rotor		Turf	Green	A

Evaluation of the efficiency of zone operation: Good

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
10	Map	Rotor		Turf	Brown	A

Evaluation of the efficiency of zone operation: Good

# of Heads to replace _____ # of Heads that are pitched/need adjustment _____ # of Heads to add or move _____

Time needed to perform repairs on this zone _____

Name/Address: Fieldstone Creek West controller #2

BNR Irrigation Evaluation

Date: ____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program
11	Map	Rotor		Turf	Brown	A

Evaluation of the efficiency of zone operation: Good

# of Heads to replace ____ # of Heads that are pitched/need adjustment ____ # of Heads to add or move ____

Time needed to perform repairs on this zone ____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program

Evaluation of the efficiency of zone operation: ____

# of Heads to replace ____ # of Heads that are pitched/need adjustment ____ # of Heads to add or move ____

Time needed to perform repairs on this zone ____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program

Evaluation of the efficiency of zone operation: ____

# of Heads to replace ____ # of Heads that are pitched/need adjustment ____ # of Heads to add or move ____

Time needed to perform repairs on this zone ____

Zone #	Zone Location	Rotor/Spray	Brand	Turf/Plants	Wire Color	Program

Evaluation of the efficiency of zone operation: ____

# of Heads to replace ____ # of Heads that are pitched/need adjustment ____ # of Heads to add or move ____

Time needed to perform repairs on this zone ____