



PROJECT: RADIO ROAD EAST MSTU MAINTENANCE

FIELD REPORT No. 4

CONTRACT: LANDSCAPE & IRRIGATION MAINTENANCE, AFFORDABLE LANDSCAPING SERVICE & DESIGN LLC

MAINTENANCE FIELD VISITS PERFORMED ON 11/15/13 AND 12/5/13

PRESENT AT SITE 11/15/13	Ray Leonard, NEMW	Tom Miller, Miller Well Drilling
Darryl Richard, Collier County ATM	Harry Sells, CC ATM Dayna Fendrick, UGS	Al Benarroch, ALS

GENERAL NOTES

This month's maintenance activities have been dominated by irrigation issues, specifically with the pump and with the DC Controller at the west end.

As noted in last months' report, Al notified us on 11/4/13 that there was a problem with the pump. Naples Electric Motorworks investigated and determined the pump had come off the drop pipe. The pump was pulled on 11/15/13. See further details below.

On 11/6/13, Roger Dick reported to Darryl that there had been a problem with the DC controller that previously had issues. See details below.

November has been another dry month, which is typical for the season. The lack of natural rainfall, coupled with the irrigation issues, has caused challenges in getting sufficient water to the plant material. An emergency P.O. was issued to ALS to contract for a water truck to water the plant materials that were showing the most stress (Pigeon Plum trees) while the pump issues were being solved.

ALS has ordered and received shipment of the fertilizer. However, application of the fertilizer to the overall shrub beds has been delayed until the irrigation issues have been resolved. ALS has applied the Magnesium Sulphate fertilizer to the Royal Palms and Buccaneer Palms, once the pump was back in operation and bubblers could be activated.

IRRIGATION ISSUES

PUMP

NEMW pulled the pump and investigated the conditions on 11/15/13. The well is still producing a lot of sand and rocks, which is clogging the check valve and causing the pump to cycle on & off. According to the well driller, Tom Miller, this area is known for being a difficult area to achieve a well with the right conditions, and it may take some time to develop the well.

The group discussed the fact that the system was set up to provide constant pressure to the mainline, which is the County standard, but may not be necessary or efficient.

Per email from NEMW on 11/15/13:

This system was put back into service at 12:00 and is fully operational.

A new flapper type check valve has been installed to replace the poppet type at the pump discharge this valve hopefully will be more forgiving dealing with the sand that is being pumped

It was requested that a relay be installed so that it will start the pump only when a watering cycle is initiated this will be done by the end of today. In the event of a check valve failure the pump will not be cycling on and off when the system is idle.

Program feature has been added that will shut the system down if it is in a cycling condition before it heats up and comes off the pipe



Pump & drop pipe pulled



Pump

Following this action, there was still a problem with the system, as outlined below:

Filter Flush System: The filters are becoming clogged with debris too quickly for the system to operate. Additional sand keeps being pulled into the pump system and accumulating in the filters. Proposed Fix: Wire the filtration system into the Motorola System (Controlled by Roger) so that the filters can be backwashed at least 3 times a day.

NEMW accomplished the corrective action on 11/27/13: The wire connection from the Motorola control and the backwash filters is complete and has been tested.

---

#### DC CONTROLLER #3703

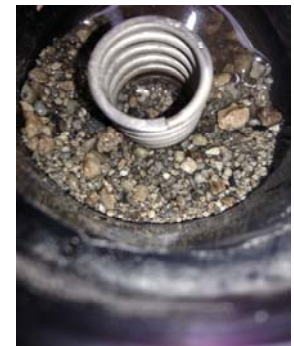
---

The controller was not functioning properly, and Roger Dick sent it back to Motorola for service and testing. Upon its return, Roger re-installed it and found the controller to be functioning properly and determined that the problem must be in the field wiring.

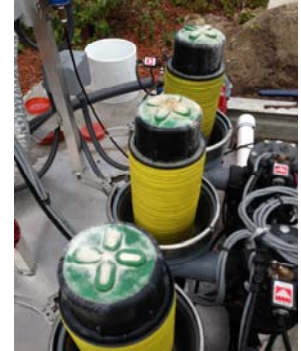
Roger Dick, Al. B., Darryl R., Harry S. and Pedro (ALS) conducted testing in the field on 11/27/13 and found there is an issue with zones 7, 8, 9, 10, and potentially 12.

Additional field wiring needs to be tested in coordination with Hannula Landscaping, Hannula Landscaping & Irrigation is to conduct Wire Trouble-Shooting for the DC Controller on Monday Dec. 9 at 9:00 am

In the meantime, ALS will be manually operating the zones identified on the DC controller, on M-W-F.



*Filter cartridge w/ debris*



*Tops of filter cartridges w/ sand*

---

#### OBSERVATIONS TYPICAL THROUGHOUT MEDIANS 12/5/13

---

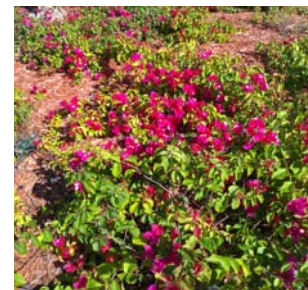
1. ALS has cut back the Beach Dune Sunflower, and it has come back with new growth in some places. The overall appearance is still not good, and is likely not acceptable to the surrounding communities. UGS has provided replacement options for consideration by the Committee, and comparative costs will be provided by ALS.



*Beach Dune Sunflower has been trimmed and still looks bad*

2. The Gumbo Limbo trees have been treated with injections of a systemic for the spiralling white fly. ALS still needs to rake out the shell where sooty mold has dropped under the trees.

3. The Pigeon Plum trees have been re-staked where needed. The replacements have not been made yet; ALS is currently getting prices from suppliers. Several of the Pigeon Plum are showing signs of improvement, and have new foliage flushing out. The Spider Lily and Golden Creeper under the Pigeon Plum are also looking better, with new foliage and more vigorous growth.



*Bougainvillea starting to bloom*

4. Al notified us that a couple of Buccaneer Palms had broken off at the base and fallen over. The cause was not immediately apparent. Al will scrape down the dirt at the base of the trunk of a few other Buccaneer Palms to see if they were planted too deep.

5. The beds of Dwarf Bougainvillea have started to bloom, and are enjoying the drier conditions.

6. The Silver Palms and Silver Thrinax Palms continue to show signs of new growth. Others have lost the heads and will need to be replaced; replacements were previously noted.

7. The Silver Saw palmetto still has some brown foliage; Tom Hecker previously recommended to not remove the brown foliage, as the dying fronds return nutrients to the plant. Once fertilizers are applied, the palmetto should put out more green foliage so the brown fronds will not be as noticeable.



*Bird of Paradise in bloom*

8. The Muhly grass is doing well and is in full bloom.

9. The Bird of Paradise are starting to bloom.

10. The Sunshine Mimosa ground cover is doing well and has been trimmed neatly.

11. Overall the shrub and ground covers are doing well, with a few certain beds of Spider Lily and Coontie that are struggling and having some die-out.

12. A number of the smaller Red Bromeliads are looking better and may be able to recover and be used in combination with additional plants. Most of the smaller yellowish Bromeliads are in poor condition and should be replaced. UGS and Tom Hecker have provided recommendations for replacement varieties that can better tolerate full sun and the reflection from the shell. The MSTU Advisory Committee has mentioned that the Bromeliad plantings seem sparse and would like to see more. The Committee may want to consider adding more Bromeliads at this time, using the orange and additional varieties recommended. We could also consider using some of the Purple Queen in addition to the Bromeliads to add more foliage and reduce the "stark" look of the shell areas.

13. ALS is to trim the fruit off the Buccaneer Palms.

14. ALS has removed the stakes from the Royal Palms, Gumbo Limbo trees and Silver Buttonwood trees.

15. ALS is to trim the Silver Buttonwood trees to remove lower leafy growth and maintain a multi-tunk treeform. Lift the foliage to about a 3-4' height, similar to the trees at The Shores. (Not done as of 12/5/13)

16. Several beds of Coontie under the Silver Buttonwood are turning brown & dying out. Al is to check for possible causes. This is the area covered by the DC Controller, so it may be due to a lack of water.

17. One Imperial Bromeliad was stolen on Median #32.

18. Several beds of Asian Jasmine and Golden Creeper on Medians #32 and 31 looked dry and had some browning foliage. This may be related to the DC Controller issue.

19. One Royal Palm on Median #34 looks very weak & thin.



*Pigeon Plum with new growth*



*Golden Creeper w/ new growth & filling in*



*Royal Palm on Median 34*



*Bromeliad stolen*



*Silver Palmetto still brown*



*Coontie under Silver Buttonwood browning out*

**INFORMATION OR ACTION REQUIRED**

1. ALS to provide quotes for the following:

Remove and replace (2) dead Pigeon Plum

2. ALS to proceed with fertilization as soon as DC Controller field wiring situation is repaired.

ATTACHMENTS

DISTRIBUTE TO

All attendees Dale Hannula, Hannula Landscape & Irrigation  
RRE MSTU Committee James Abney Irrigation Consultants

REPORT BY: Dayna Fendrick, Urban Green Studio 12/6/2013