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Re: Vista Lakes Community Development District Survey and evaluation

July 7, 2014 **In: 8:05 AM** **Out: 1:49 PM**

July 8, 2014 **In: 8:10 AM** **Out: 12:28 PM**

A. Introduction and preliminary evaluation: Vista Lakes Community is an attractive place to live with many amenities. It appears most plantings are approximately 15 years of age. This is the time when natural decline may be noted and replacements needed. It is during this time period the problem areas are noted and corrections need to be made by either modifying the growing conditions or selecting plants adapted to the sites. Pests also may determine the life span of plantings and the need for changes.

Many soil samples were taken to determine soil acidity and planting conditions. The soil consisted of fine sands typical of this area of Florida. Soil tests made along Lee Vista Boulevard among plantings and at entrances found a pH range of 6.5 to well above 7.0. A majority of the samples were 7 or above. At these pH ranges careful plant selection is needed. Azaleas, camellias and similar acid-loving plants are difficult to grow without major soil modification. Many of the sites were poorly drained or tended to hold water. This resulted in the flooding of plantings after rains and irrigation. More will be discussed under major concerns.

The community contains a goodly selection of plants. Trees included but were not limited to live oaks, magnolias, crape myrtle, tabebuia, elaeocarpus, sycamores, loquats, elms, sweet gums, ligustrums and similar. A large selection of shrubs has been planted including but not limited to Indian hawthorns, hollies, dwarf firebush, dwarf schefflera, pyracantha, junipers, jasmine, crotons, tea olive, photinia, gold mound duranta, hollies, viburnum and similar. Ground covers were mainly St. Augustine turf and both confederate and Asiatic jasmine. Problems with some will be noted under major concerns and throughout the inspections.

This report is divided into five sections – Introduction, Major Successes and Concerns, Community Survey, Recommendations and Plant Alternatives for testing.

B. Major Successes and Concerns: It was good to be able to visit this project over two

consecutive days. The first day was after a previous day of heavy rains. The extent of the water problems could be best detected and areas of poor drainage noted. The Second day was after a night of irrigation. Some of this enters into my concerns.

1. Tree plantings: Tree plantings appeared to be well maintained. The oaks are mainly live oaks that were likely not trained in the nurseries. Luckily these are very durable trees which resist wind and hurricanes. Of concern are some with 'V' angle crotches. These would be the first to split in storms. Lightening the limb loads on the more susceptible trees can be used to prevent this damage. In one area along Lee Vista Boulevard just below Chickasaw, poor limb removal was noted. Some trees had trunk damage but appeared to be healing. In general the crape myrtles were receiving good minimal pruning.

2. Flower plantings: Plantings of pentas were a good selection for summer. Only in one flooded bed were the pentas declining. Some coleus plantings were noted too. It may be worth investigating other seasonal plants for the beds. Stromanthes were doing well and recovering from winter. They need to be in full shade to very light sun for best growth. Some exhibited sunburn.

3. Areas of flooding and excessive irrigation: Many wet areas were noted including but not limited to entrance Fountain areas, Warwick entrance, Amhurst Park entrance and many areas along Lee Vista Boulevard. These were wet on the first day of visitation and most were worst on the second day due to excessive irrigation. Areas at the northeast entrance fountain were badly flooded and plant decline very obvious. Irrigation problems may be one of the major causes for plant decline. Some plants were literally sitting in water. Roots of many were rotting. Considerable money could be saved by reevaluating the irrigation system. At this time of the year and with a naturally wet soil, the irrigation system could be turned off and just monitored as to needs. Also, if needed water sensors could be used to determine the best time to utilize the system.

4. Indian hawthorn decline: Indian hawthorns are a major planting in shrub beds. Many were used in the wet areas and the root systems were overly moist. This leads to root decline or rot. Some low areas can be filled and new plantings added. Almost all plantings were infected with entomosporium leaf spot. This fungus has been bad this year. It is controllable with sprays. See recommendation section. A major decision is going to be needed as to replacing these plants or finding suitable substitutes.

5. Ligustrum with cercospora leaf spot: A common fungal leaf spot was found on all ligustrum plantings. The trees looked otherwise healthy. Consider not pruning the tree forms as tightly to allow new growths to hide the leaf spot. This is not usually a life threatening disease. Keeping the planting fed with an 8-2-12-4mg fertilizer can help the plantings resist and out grow the disease. Fungicides are available but likely not practical.

6. Flax lily with heavy rust: This was once a very reliable plant. It still can be but the rust is in need of control. The fungicide Heritage or similar can be used throughout the growing season

following label instructions.

7. Heavy pruning of shrubs: Most shrub plantings were being heavily pruned. Dwarf schefflera and dwarf firebush were so pruned that they were not attractive. The firebush had the new flowers pruned off. Consider less frequent or severe pruning to allow some new growth to remain. Heavy pruning as need to reduce height and width could be performed in late winter when many of these plantings suffer some winter decline.

C. Community Survey: All public areas under Community Development District management were traveled and evaluated. Only the major stops and concerns are noted here.

1. Plantings along Lee Vista Boulevard: This area was traveled extensively with stops along the sites and in the median areas.

Beds at Lee Vista & Chickasaw Trail - The pH of the soil was above 7. Stromanthe burn was noted in the more sunny spots. Flax lily was exhibiting rust a fungus. Philodendrons were showing minor nutrient deficiencies most likely due to high pH. Junipers were showing stem cankers and die-back. These latter are older plants and being over taken by the shade of the trees.

Live oaks and associated plantings along Lee Vista Boulevard southwest of Chickasaw. The pH in this area was 6.5 to above 7.0. Some oaks with 'V' crotch angles. Can see splits between the trunks developing. May expect damage during heavy storms. Professionals can lighten limb loads to reduce damage. Magnolias look good. Ligustrums with cercospora leaf spot but otherwise a good green color. Might consider not pruning as tightly to allow more growth to outgrow cercospora. Keep up feedings to encourage healthy growth. Sprays are possible but likely not practical as with good care this is usually not a life threatening disease of this shrub.

Anise hedge along wall southwest of Chickasaw. Showing nutrient deficiency and reduced vigor. Some filling with moss. May also be water related. Apply minor nutrient product. Also, tabebuia looks good. Cracking of trunk is normal. One did have major wound that appeared to be affecting growth.

Weeping willows at lake declining. Might replace with cypress. Willows are short lived and struggle in Central Florida.

2. Vista Lakes entrance - southwest end: Soil acidity pH 6.5. Mexican petunia with powdery mildew – a fungicide needed. Plumbago and jasmine showing minor nutrient deficiency. Mulch needs to be kept back from the base of the plants. Can cause crown rot problems. Good pruning noted on most of crape myrtle allowing to grow for best look. Median plantings - Soil above 7.0. Ixora showing iron & manganese deficiency. Minor nutrient treatment needed. Keep mulch back from base. Plant that appears to be the Japanese

holly, Ilex crenata is declining. Not a good choice for Florida. Replace with yaupon holly. Fill voids at end with ornamental grasses. Indian hawthorn in center sunken. Too much water. Dig and fill hollow and replant.

Pines at entrance island are declining. Soil pH of 6.5 to 7.0 too high for good growth. Not a good choice for high pH soils. Pines also do not like cultivated cultural conditions. Replace with cypress. Indian hawthorn has entomosporium and minor nutrient deficiency.

Fountain planter – A wet area. May have problem with excessive watering as irrigation appeared to have been on over night. No need for such irrigation with such naturally wet soil. Ilex crenata used a shrub declining. Replant with yaupon holly. Ixora needs minor nutrient application. Replace declining ornamental grass - use same but adjust irrigation. Photinia declining. Remove and replace with viburnum suspensum. Need to replace declining flax lily and control rust. Most likely declining due to low wet soils. Fill and replace. Date palms showing potassium and magnesium deficiency. Use an 8-2-12-4mg fertilizer

Anise hedge north of Fountain - declining but recovering. Appears to be irrigation problem. Prune out dead and allow new growth. Apply 8-2-12-4mg and minor nutrients.

3. Vista Park Boulevard & Lee Vista Boulevard entrance: Remove photinia and replant with another selection. Allow oleanders to recover and then decide if need replacement. Soil acidity above 7.0. Sand wet and with putrid smell. Area with too much irrigation. Was running the second day of visit. Tabebuia struggling - too wet - may need to replace. Juniper declining in shade. Will have to replace eventually.

4. Median across from shopping center on Lee Vista Boulevard: Agapanthus appears to need more fertilizer. Appears too wet in some areas with roots rotting. Check for excessive irrigation. Minor nutrients may help. Indian hawthorn with entomosporium Plumbago with declining plants that were planted too deep and roots were rotting. Ligustrum with heavy cercospora but good green growth.

5. Median across from Primrose School: Plumbago brown due to heavy pruning. Should recover. Consider less frequent pruning with major pruning in late winter. Photinia struggling full of moss. Will have to eventually replace. Agapanthus looks good but some yellowing. Try minor nutrients. Red blotch on crinums. Can be sprayed for control. Azaleas – yellow green likely due to high soil acidity above pH 7.0. Try minor nutrients to regreen.

6. South of Passaic Parkway: Viburnum hedge – Heavy downy mildew & some cercospora leaf spot. Needs immediate control Consider use of Subdue, Insignia or Heritage fungicides following label instructions. Cercospora leaf spot on ligustrums with heavy moss. May want to try a copper fungicide for control that will also help remove moss.

7. Median bed across from Residents Club: Indian hawthorn declining due to entomosporium leaf spot. Chinese holly with tea scale. Control with Safari insecticide following label instructions. Also apply minor nutrients

8. Median across from Odyssey Middle School: Soil acidity was 6.5 to above 7.0. Azaleas need minor nutrients. Some declining due to string trimmer damage. Agapanthus with some declining plants. Most likely too wet. Bulbine is doing well in this area and might be a good replacement. Tabebuia - most likely a root problem. May be pot bound. Can try minor nutrients. Feijoa is doing well but may not like the constant pruning. Consider less frequent pruning and allow some growth.

Hollies at school sign with sphaeropsis fungus – Need to pull and replace. See list of large shrubs or small trees.

Other median plantings with Indian hawthorn declining. Some too deep. All with root rot. May have been a transplant problem. Ixora with nutrient problem. Soil pH too high. Try minor nutrients.

9. Vista Lakes Entrance at Covington Cove Way: Appears to be a major leak at the Fountain. Also this is one area where the irrigation system was on the night before on the second day. Pentas were flooded with root rot. Chinese holly with tea scale insects - Treat with Safari following label instructions. Palms showing nutrient deficiency - apply 8-2-12-4mg palm fertilizer. Soil way too wet for oleander and flax lily. Flax lily with heavy rust. Philodendrons need minor nutrient treatment. Entomosporium leaf spot on Indian hawthorns. Soil acidity about 7.0.

10. Avon Entrance planting: North bed wet with putrid soil smell. Soil acidity above 7.0. Gold Mound duranta generally doing well but too wet. Some starting to decline due to too wet soil. Magnolias doing well. Mexican petunia has powdery mildew and one patch dead most likely due to excessive moisture. One bed to south doing better. Appears to be better drained. Dwarf schefflera recovering from heavy pruning. Some leaf spot on duranta – not heavy but watch.

11. Azalea planting in median south of Avon: Most dead and soil pH of 7.0. Appear to never have grown out of root ball into high pH soil. Plants were also pot bound at plantings. Try another plant. Or if you want azaleas try one of the Southern Indian varieties that appear to be more pH forgiving.

12. Entrance to Central Park on Lee Vista Boulevard: Indian hawthorn declining on north side. Likely a drainage problem. Hollies with sphaeropsis fungus galls – Need to replace. Coleus doing well. Dwarf yaupon holly doing well – one needs a dead section removed.

13. Residents Club entrance: Dwarf firebush declining. Appear to be planted too deep and roots are rotting. Would replant as doing well in other areas.

14. The Horizons Entrance: Crinum with red blotch fungus – can be prevented with fungicide

sprays. Wax myrtles with bleeding cankers. No good control except to minimize wounds. Thryallis shrubs need more sun but surviving.

15. Entrance to Warwick and beyond gate: Area was wet and soggy on day one. Visited the second day and appeared to have been irrigated the night before. Soil acidity pH 7.0. Philodendrons in water. Boxwood need fertilizer and minor nutrients. Entrance bed needs replacement or may try frequent but light feedings. Approach area to Warwick wet. Ligustrum with cercospora leaf spot- Needs fertilizer.

Entrance medians. Need new plantings. Suggest bush daisy, lantana and firebush. Dwarf schefflera struggling. Not best plant for these hot dry, sunny spots. Will survive better in shady areas of these beds. Second bed is worst but with some feedings might fill in. Suspensum viburnum in side beds has downy mildew. Control with Subdue, Insignia or Heritage fungicides following label instructions.

Podocarpus at one end of wall struggling - too wet and some too deep. Mulch too thick for these conditions. Most likely water night before visit. Jasmine with too much water. Showing nutrient deficiency due to root damage. Bottlebrush doing well.

Lift station too wet. Downy jasmine with few declining and need replacement. Awabuki viburnum way too wet and with downy mildew which needs treatment. A minor nutrient spray treatment may help too.

16. Amhurst Park Entrance: Visited on the second day. Irrigation had been on the night before. As wet as it was, it may be running each night. Median appeared to get the excessive irrigation and soil was flooded and with a putrid smell. Heavy algae in the roadside drains. Side beds do not appear as wet and may not be watered as much. Soil pH 7.0. Some dwarf schefflera declining. Surprised doing so well. Junipers declining in wet sites. Holly trees have sphaeropsis and need replacement. Coontie doing well. Indian hawthorn has entomosporium and root rot.

In Park median the ligustrum has heavy cercospora. Ixora looked good but starting to show minimal nutrient deficiency. Coontie looked good.

17. Colonie entrance: Crotons declining in one bed. Likely too much water. Dwarf schefflera declining most likely due to too much water. Clerya declining at wall. Replace with viburnum supensum. Indian hawthorns look good until edge near road. Getting good drainage until edge – too wet at edge and have root rot. Oleanders have been cut back – Looks like they will regrow. Encourage with fertilizer.

18. Entrance at Champlain: Hollies need fertilizer. Flax lilies have rust and need fertilizer. Palms showing magnesium deficiency. Use 8-2-12-4mg fertilizer. Mexican petunia needs fertilizer.

19. Median across from Vista Lakes Elementary School entrance: Ixora need minor nutrient treatment. Indian hawthorn with entomosporium leaf spot.

20. Wall with planting across from Vista Lakes Elementary School: Tea olive declining - replace with podocarpus. Hollies have sphaeropsis. Check large shrub small tree list for replacements. Some include chaste tree, tree ligustrum, upright junipers and tree feijoa.

21. Melrose Entrance: Rust on flax lilies. Pentas yellow and need fertilizer. May have dried out after planting as some are struggling. Bed with magnolias is a good spot for bromeliads as a ground cover. Viburnum hedge at wall wet. Appears irrigation had been on over night. Has downy mildew and needs treatment. A minor nutrient treatment may help too. Indian hawthorn too wet. Irrigation appeared to have been on.

22. The Horizons Entrance off Chickasaw: Wax myrtles with cankers. No good control except to avoid wounds. Jasmine getting pushed out by ligustrum. Might remove and just mulch or use small shrub like the dwarf yaupon holly. At right bed replace declining shiny jasmine and reduce watering. Too wet - got water before visit.

23. Lift Station on Chickasaw: Add new plantings. Apply 8-2-12-4mg fertilizer to shining jasmine. Maybe a good spot for abelia in void. Across a street at a fence. Indian hawthorn too wet. Most likely irrigated night before

24. Entrance to Gentry Park: Flax lily with rust. Hollies with sphaeropsis fungus gall. Indian hawthorn with entomosporium leaf spot. Across street planting. Too wet had been irrigated night before. Holly and hawthorn declining in flooded areas. Soil with putrid smell. Side walk slippery – A liability.

25. Beds along pond area of Town Center Linear Park: Way too wet. Appears to have been irrigated night before visit. Junipers and dwarf firebush declining due to wet feet. Few replacements needed but adjust water first.

26. Trees and beds along Chickasaw: Ilex trees declining rapidly due to sphaeropsis fungus. Will have to replace. Magnolias and oaks look fine. Tea olive hedge needs to be replaced as it is in decline. Might be a good spot for podocarpus to complete planting started in other areas along wall. Or you could use viburnum suspensum. Loquats doing well.

27. Pembroke entrance: Soil acidity pH above 7.0. Indian hawthorn too much shade for some. Entomosporium leaf spot and root rot. Bottlebrush may be able to prune to give clear trunks and make room on walkways. Trees and palms looking good.

28. Vista Park Boulevard plantings: Replace tea olive hedge declining. Podocarpus might be good. Thryallis looking good - only use in full sun. Waverly Gate planting looks good. Palms need 8-2-12-4mg feeding.

29. Carlisle Entrances: Both look fine.

30. Lift station: Wet - appears to have been irrigated over night. Plantings look satisfactory.

31. Windsor entrance: Indian hawthorn with entomosporium leaf spot. Chinese fan palms need fertilizer. Very wet appears to have been watered over night. Indian hawthorns too wet. Let dry and replace those in decline. Magnolia yellowing - likely too wet in the confined area.

32. Plantings along Vista Lake: Indian hawthorn with entomosporium leaf spot. Some too wet. Ornamental grass declining in some areas – Need to replace with same. Most plantings were acceptable. Oleanders had been cut back, Junipers declining in shade will eventually have to replace. May want to replace society garlic declining.

33. Newport entrances: Northeast wall area well drained and plantings look good. Few Indian hawthorn need replacement. Most have entomosporium leaf spot. One area on southeast bed low. Indian hawthorns declining. Raise soil level and replant. Downy jasmine in west bed showing minor nutrient deficiency. Plantings may be wetter than others. Grass growing among ornamentals. Treat with Fusilade II following label instructions. Bulbine doing well – May use to fill voids in one bed area. Oleanders in shade at wall on west side south. Put on watch for possible replacement. Crotons might grow well here. Plantings at end of wall west side. Indian hawthorn too wet - ground flooded and roots rotting. Oleanders too shaded.

D. Recommendations: Following is information and recommendations I feel are critical to the reestablishment and maintenance of Vista Lakes public areas under the Community Development District.

1. Evaluate the irrigation system and reprogram: Much plant decline and flooding points to the irrigation program as affecting the plant growth. Irrigation was found running and flooding areas. It had operated the night or early morning after major rains a day or two before. Some areas look like it must be running at some time daily. Money and plant material can be saved if the system is reprogrammed or turned off for periods of time during the rainy season. Vista Lake is a naturally wet area and soil often poorly drained. Irrigation must be constantly monitored.

2. Test and utilize new plants to replace older selections: It is time to think outside the box and test some new plants for the planting areas. Older selections are often having pest and soil related problems. A list of time tested and newer plants are suggested. Some have been utilized in Vista Lakes and are doing well. More of these many be selected.

3. Control the major pest problems: Both Indian hawthorn and flax lily plantings have major disease problems. Begin a control program to get these fungal problems under control. The fungicides Armada and Eagle are giving good control of the entomosporium on Indian hawthorn. Both have a hawthorn label but not an Indian hawthorn label. Pest control operators are **not** reporting problems when used at label rate as instructed. Control flax lily rust with Heritage or

similar product labeled for rust. Apply all products following label instructions.

Ligustrums have often heavy cercospora leaf spot. Due to the size of the plantings spraying may not be practical. The plants generally appear healthy and making good growth. If allowed to grow a bit more before pruning the new growth would disguise the leaf disease. Keep up a good feeding program to increase plant vigor. If needed the fungicides Daconil and Heritage appear to be giving control in a regular spray program following label instructions.

Tree hollies had sphaeropsis galls. This fungus has caused major decline of many hollies. The native yaupon holly has not been affected. The disease is spread by many ways but pruners definitely move it between trees. If similar hollies are to be maintained pruners must be sterilized at least between trees.

Other leaf spots and powdery mildew are noted in this report. They can be controlled by some of the fungicides suggested. Just follow the label.

Many plants were rotting. This is a water problem that needs to be corrected through proper irrigation and drainage.

4. Reexamine the fertilizer program: Apply a Lesco 8-2-12-4Mg palm & tropical ornamental granular slow release fertilizer. It is available locally. This product is reportedly changed in some areas to an 8-0-12-4mg which would be equally suitable. Apply in March, May, August and October. These applications should be made to all plantings and distributed uniformly over the root zones. Follow label rates.

5. Apply minor nutrient treatments to problem plantings noted: Make a minor nutrient application as a spray or soil application in March, May and September. Use either KeyPlex HG Plant Micronutrients Nutritional Supplement, or Harrell's Max Minors following label instructions. Soil applications would be best where water, sidewalks or structural features would be affected by drift. In some areas only sprays to the foliage should be used following label instructions due to poor soil conditions until soil water problems are corrected.

6. Make a repeat evaluation in four to six months: Use this time to determine the effectiveness of the treatments, survey for new problems and update recommendations. If major concerns are noted a consultant should be called back to reevaluate the problems.

E. Plant Alternatives: There is nothing like using plants that have been reliable performers in future plantings or replantings. However some plants develop problems over the years as to pests that may limit their use. Some like holly trees are not able to grow well due to diseases and some like tea olive are at their southern most limit. Indian hawthorn is having a real problem now due to a fungal leaf spot and wet soils. It may be time to gradually make a switch with this plant. Below are some possible trees and shrubs that might be kept for future use or to serve as new replacements.

Perennials & bedding plants (additions would be needed for the cooler times of the year)

African iris - durable but needs well-drained soils
Alternanthera – colorful foliage plant that should be tried
Bush daisy - blooms year-round, cold tolerant, moist soil but not wet.
Coleus - doing well in Vista Lakes plantings
Cuphia – good for sun areas, several types
Lantana – wide selection, needs sun, well-drained soil. Doing well in Vista Lakes communities.
Leopard plant - shade site best, likes moist soil
Pentas – doing well in Vista Lakes plantings
Torenia – good for sun or light shade
Wax and similar begonias – obtain sun resistant types
Yellow alder - durable plant to 2 feet tall, year-round color, well-drained soil

Ground covers

Beach sunflower - tolerates poor soils, needs full sun, well-drained sites.
Bromeliads – would be good for shady sites where root competition is heavy.
Purple queen setcreasea - grows in sun to filtered sun, tolerates poor soil but not wet soil

Shrubs

Coontie - doing well in all but overly wet soil.
Copperleaf shrub - performing well - can take some wet soil.
Cordgrass - doing well in all but very wet locations
Dwarf firebush - good in most areas but like a well-drained soil
Dwarf powderpuff - red and pink available, grow to 5 feet in sun to part shade.
Dwarf schefflera - has performed well- best used in shade or filtered sun.
Dwarf Walter viburnum - one to try in damp soils
Dwarf yaupon holly - tolerates damp soils
Fakahatchee Grass - tolerates wet soils
Feijoa – doing well as shrub in Vista Lakes
Gallberry - a native holly tolerates wet soil - Ilex glabra
Glossy abelia - full sun to part shade, get florida selection like Edward Goucher, moist soil
Oakleaf hydrangea - good for moist soils and filtered sun
Shining jasmine - been a good performer in all but real wet soil
Virginia willow - tolerates wet soils.

Small trees or tree forms of shrubs

Bottlebrush- full sun, doing well in Vista Lakes in well drained soil
Chaste tree - full sun to light shade
Elaeocarpus - doing well in most Florida plantings and Vista Lakes.
Fringe tree - tolerates poor drainage, sun to filtered sun
Junipers varieties Spartan, Torulosa or Brodie - full sun, well-drained soil

Lady palms – good for the shady sites

Simpson Stopper - small evergreen native tree, tolerates damp soils

Southern wax myrtle – good for wet sites, would continue to use

Tree feijoa - full sun, doing well in Vista Lakes as a shrub

Tree ligustrums - full sun to light shade

Yaupon holly trees - full sun, should be used more