# East Lake Woodlands Community Association Drainage System Maintenance Plan

## **Introduction:**

Drainage systems can lose their carrying capabilities due to debris accumulation, sedimentation and the growth of vegetation. One proven approach to minimizing and preventing accumulation is a community program that routinely inspects and clears the drainage system. This work can include but may not be limited to the removal of trash, fallen trees and branches, trees growing in channels or other debris that could interrupt water flow and cause flooding. At times, particularly following major storms, silt removal may also be necessary. These efforts will benefit the community by easing the threat and the potential for damages associated with flooding.

### Intent:

The intent of this phase of the Drainage System Maintenance Plan is to address the management of the "quantity" of water. Future variations of this plan will not only address water "quantity," but may also address water "quality" and aesthetics.

### **System Description:**

The drainage system consists of all watercourses and storage areas including streets, swales, storm sewers, ditches, retention/detention basins, wetlands, streams and ponds that handle storm water from the point water hits the ground within East Lake Woodlands to where it leaves the community at:

- East Lake Road where it flows into Booker Creek
- Tampa Road where it flows through Oldsmar to Moccasin Creek

All work performed under this plan will be determined by the identification of Problem Areas, revisiting the original Work Scope of the 2017 Drainage Restoration Project and available budget money.

Note: Property ownership within East Lake Woodlands consists of three basic entities: East Lake Woodlands Community Association (ELWCA), East Lake Woodlands Country Club (including East Lake Water) and 59 separate Homeowner Associations. Consequently, East Lake Woodlands Community Association (ELWCA) is not responsible for maintaining and/or replacing every element of the drainage system supporting the community. This plan outlines what must be done by ELWCA, what must be done by East Lake Woodlands Country Club (ELWCC), and list the responsibilities of individual Home Owner Associations (HOA).

# East Lake Woodlands Community Association Drainage System Maintenance Plan

### **Identification of Problem Areas:**

This is a listing of sites that require regular inspection, i.e. swales, culverts, bridges, retention/detention basins, and other sites where debris naturally accumulates. Flood control structures, such as water leveling control weirs, will also be included. A record of each problem area identified will be maintained. It will include location and description of the problem, size and ownership of the site, area(s) affected by the problem (private homes, roads, facilities etc.) and documenting photographs.

### **Scope of Maintenance:**

Maintaining the ELW watershed to ensure uninterrupted water flow consists of, but not limited to, clearing debris and vegetation from work zones that were identified in the original scope at:

- EL Channel
- SOF Channel
- CT Channel and along NOF channel bridges
- 2BC Channel clear where it crosses ELW Parkway
- 1FL Channel around Green Haven Unit Two
- Woodlands Parkway
- Lakes along Tampa Rd (List is attached hereto)
- And keeping grates on weirs and basins free from debris and any overgrowth due to pepper trees
- Swales along all arterial roads
- Additional recommended work may be added with Board approval

## **Inspection Schedule:**

Inspections will be conducted twice a year (Spring & Fall) for all areas owned and maintained by the ELWCA. Sites that commonly flood should be inspected prior to and following all major storms.

## Inspection Responsibilities - ELWCA, HOA's, ELWCC:

## **ELWCA:**

ELWCA's Property Manager and Plan Administrator are responsible for inspecting all community owned watercourses and storage areas including streets, swales, storm sewers, ditches, retention/detention basins, wetlands, streams and ponds that handle storm water.

## East Lake Woodlands Community Association Drainage System Maintenance Plan

## Homeowner Associations (HOA's):

All HOA's are responsible for ensuring their street gutters, storm drains, weirs, pipes & roadways are clear of debris. Additionally, every three (3) years every HOA within East Lake Woodlands must provide the ELWCA Property Manager confirmation that their drainage system is clean and clear of debris. Leaves and lawn clippings are not to be disposed of in storm drains!

## **East Lake Woodlands Country Club (ELWCC):**

East Lake Woodlands Country Club and East Lake Water are responsible for ensuring that all areas, including but not limited to golf course, tennis court, and/or property owned by ELWCC, will be maintained in order to allow a clear flow of water through storm drains, ditches, creeks, lakes, ponds and drainage structures including but not limited to weirs, culverts & grates. Aquatic Invasive weeds are handled by contract and that contract includes but is not limited to: Algae and aquatic weed control, shoreline grass control to water's edge and monthly debris removal.

## Administrator, Contractor & Engineer Responsibilities:

All parties will conduct regular inspections as outlined above. Work Orders will be approved by the Lake & Drainage Committee, Property Manager and Administrator and assigned to Contractor(s) based on the needs identified. The Administrator will inspect the work at reasonable intervals and recommend to the Property Manager and the Committee Chair the payment of invoices.

**Note:** ELWCA may retain the services of an Engineer to use as necessary for technical issues requiring said expertise.

## Plan Funding / Budget:

Budget money will be prioritized and directed towards areas and waterways requiring exceptional attention. However, subsequent regular maintenance could involve a larger number of smaller individually less costly work. The annual budget must also include projected contractor and administrator costs.

## Record Keeping:

Written records of all inspections (problems & remedies), problem areas and resolution and identification of any budget constraints prohibiting the completion of identified work will be prepared by the Administrator and maintained by the Property Manager

## **East Lake Woodlands Community Association Drainage System Maintenance Plan**

## **Attachments:**

- > Template Inspection Form Exhibit "A"
- List & Map of Lake Ownership Exhibit "B"
   Channel Map Exhibit "C"
   Link to Overall Drainage Maps Exhibit "D"
   Contracts: Exhibit "E"

- - Contractor
  - Administrator
  - Engineer

The remainder of this page has been purposefully left blank

## PSA\_\_\_\_ HORTICULTURAL

Landscape Consulting & Contract Management "Protecting Your Landscape Investment"

720 Brooker Creek Blvd, Suite 206 Oldsmar, FL 34677

## DRAINAGE SYSTEM MAINTENANCE INSPECTION REPORT

Date:

May 15, 2018

Client:

EAST LAKE WOODLANDS COMMUNITY ASSOCIATION

Attended by: Drainage Committee-Jack Picker, Jeff Fosbrook

Management-Jaime Soderland

**AMI-Cary Williams** PSA-Tom Picciano

### **SCOPE**

This was the first of what will be regularly scheduled maintenance inspections of the drainage system. During the review we will inspect for issues that may adversely affect the flow of drainage water through the system. Items such as debris or silt build up in culverts, erosion, excessive vegetation, blocked drainage grates, and any pond control structures that may need maintenance shall be noted and prices for those corrective actions shall be provided.

### FOR AMI RECYC



Sun Trust at Woodlands Drive-clear mouth of culvert \$ 730.00



Woodlands Parkway at Cypress Estates 1-clear mouth of culvert \$ 685.00

1st SPRING INSPECTION 2018 **COMPLETED 5/15/2018** 



Woodlands Parkway at Cypress Estates 1-clear mouth of culvert \$ 550.00



Beneath Pine Lake Dr in Woodlands Estates-check water flow with dye test \$100.00



Elk Way off cartpath-re-seed from pole to cartpath \$1,200.00



Golf course at a south along WP-clear ditch culvert to culvert \$ 8,565.00



Course access rd between 4 and 15 N.-repair erosion \$ 1,860.00



Between 10and 11N on ELWP-clear 30'of ditch \$ 3,645.00



Between 10 and 11N on East Lake Woodlands Parkway-clear mouth of culvert. \$ 1.145.00



East Lake Woodlands Parkway clubhouse across from Woodlands Parkway-clear ditch \$ 2,300.00

There is water almost across the road on ELW Parkway between the club and Tampa Road. Open the small cuts to drain water from road. (not the main swales) \$ 800.00

East side of ELW Pkwy just N of the club. Water was almost completely across the road. Open the small cuts to drain water from road. (not the main swales) \$ 800.00



East Lake Woodlands Parkway behind pool-clear ditch \$875.00



Greenhaven 3 woodline -clean debris from sump \$ 992.00



East Lake Woodlands Parkway at Town Center-clear ditch \$ 1,245.00

Cypress Estates 1 investigate possible blockage of pipe at Cypress Estates 1. Blockage is between Lake Cypress Lane and/or Woodland Parkway.

### \$2,533.50

East Lake Woodlands Parkway at guardhouse exit side-cut and re-form curb and grade slope to allow standing water to drain from road. \$3,165.00

East Lake Woodlands Parkway at Kingsmill-clean out curb inlet.

\$ 1,800.00

### **PROPOSALS NEEDED:**

### **EAST LAKE WOODLANDS COMMUNITY ASSOCIATION**



Repair drainage under cartpath at 18 N at East Lake Woodlands Parkway \$ 26,985.00 - Estimate 181





Clear brush and tree from Tampa Rd. headwall to slope behind 14th tee box. Moccasin Creck \$ 22,885.00 - Estimate 178

Repair possible blockage of pipe at Cypress Estates 1. Blockage is between Lake Cypress Lane and/or Woodlands Parkway \$ N/A

### FOR LIBERTY LANDSCAPING:





Sun Trust at Woodlands Drive-rake out ditch up to mouth of culvert Between 10 and 11N on East Lake Woodlands Parkway behind split rail fence-line trim for access to pond structure.

East Lake Woodlands Parkway and Woodland Parkway and Woodlands Blvd-all swales leading to drainage ditches need to have excessive grass and sediment removed to allow water to drain from road.

### FOR EAST LAKE WATER:



WP at Cypress Estates 1- repair creek bottom from pump discharge which is disturbing bottom of creek and moving sediment. \$ 2,100.00



Nursery Rd-sandbags blocking weir to raise water level. Removed



Nursery Rd-fabricate grate for wet well.. Proposal requested by East Lake Water.

### \$ 2,400.00

### FOR CLUB:



15<sup>th</sup> south tee from bridge Remove low hanging tree limbs \$ 2.590.00 for both pictures



15th south tee from bridge



Channel on 3 north-repair creek bank Bermudagrass killed off by course personnel. The Association previously seeded the bank and installed geo-textile fabric to hasten the seeding. Erosion will now cause sediment to spill into the creek until the bank is again stabilized.

#### \$ 9,500.00



Bridge at 4 green-repair leaning wall and hole forming along cartpath. The wall behind the rip-rap is leaning, leaving a void between the two where rainfall can get between the wall and rip-rap causing erosion. The hole along the edge of the cartpath is weakening the structural integrity of the path.

### \$ 42,000.00

### **COST SUMMARY**

ELWCA Drainage System Maintenance \$32,990

ELWCA Drainage System Projects \$49.870\*

Club Drainage System Projects \$54,090

East Lake Water System Projects \$4500

\*Cypress Estates 1 pipe project not included

### **SUMMARY**

The items noted during this inspection that need attention were certain culverts and ditches that need to be cleared of silt and/or vegetation to allow improved water flow. There were no major concerns, but there are a few items that were beyond the normal scope of maintenance and separate prices are provided for these repairs. In addition, there were maintenance-related concerns that were not the responsibility of the community association to address. They have been included in this report. Overall, most of the concerns needing to be addressed by the association were preventative maintenance measures. The next drainage system inspection will be performed in the fourth quarter of 2018.

Respectfully submitted,

Tom Picciano

**PSA Horticultural**