

Update: Storm Water Management System Review

Date: January 2020

The final Stormwater Management System Review was completed in December 2019. It contains a lot of helpful historical background and information to help us in drafting our formal inspection and maintenance plan.

Overall the system is working well and only relatively minor or cautionary maintenance was suggested. The inspection (form EN46) was certified and a copy is in the MSOA office should any agencies check our bi-annual inspection documentation. Our 2021 budget planning should include costs for another review of the system at the end of that year. (Budget approximately \$7,000).

Following are steps, based on the recommendations, that we should take now to ensure maximum system capability and operation:

1. Review the drafted inspection and maintenance plan and all assignments for carrying it out. Gain approval to execute according the schedule described in it.
2. Contact FDOT (Ferrell Hickson, Jr – P.E. District Drainage Design Engineer, District V to inspect and clean out the 4 storm catch basins in the A1A median in front of our property.
3. Review the littoral zone plantings at the Pond 1 (East – Surfview) and Pond 3 (West – Lakeside) ponds. Ponds 1 and 3 are required to have plantings per list of permitted plants providing 30% coverage of the surface area (for perpetuity). We are currently out of compliance with ponds 1 and 3. Our options for remediation are:
 - a. check depth of existing ponds to see if the permanent pool volume meets the requirements to not need plantings, and apply for a permit change
 - b. add additional plantings
 - c. or... wait and see if we will be required to make changes. This requirement has not been enforced.

Permitting requirements have changed, ponds 2 and 4 do not require this due to greater depth. Not noted in the report, but we should consider additional planting along the slopes of the Los Lagos and Las Casitas ponds to prevent erosion until the grass is established as the water level recedes.

4. Have Kuhar implement depth gauges in pond 2 and 4.
5. Check the depth of the dedicated sediment storage area in pond 3 and remove it if the 1 foot depth is reached. Bottom elevation -5.8 Sediment Removal Elevation -4.8.
6. Re-sod the area around the San Juan Gate at the south point where there is some natural erosion starting.
7. Remove the Primrose Willow stands from the East pond. Adjust grass cutting at the East pond to be no less than 6 inches near pond slope.
8. Slope elevations of the Las Casitas and Los Lagos properties as they back up to Lakeside or MSOA properties need to be monitored until sodded.
9. Tract C should be left in its natural state to provide a buffer, hold rainfall runoff and percolate the runoff quickly. (It is a naturally low sandy area with a high infiltration rate). The slope

transition between Las Casitas and Tract C is more than adequate to transition the new lot grades back to the existing grade.

10. Drainage around the tennis courts should be monitored until the vegetation on the transition slope is established. Drainage from the lots is toward the street, but there will be a small amount of permitted run off to this area. MSOA has redirected the water flow to protect the courts and monitoring is showing that these changes are working well.
11. Swales along San Pedro need to be inspected, at least one is partially blocked. A request will be made to the homeowner.
12. Storm drains, gutters and swales should be cleaned of yard debris. Lawn clippings should not be dropped into the storm drains or into the pond.
13. We are cautioned about overuse of fertilizers near the ponds, as they may kill the littoral zone plantings.