

# **ATTACHMENT # 11 - IRRIGATION / SPRINKLER SYSTEM REQUIREMENTS & GUIDELINES**

## **Irrigation System Design Components**

1. The point of connection (POC) for each individual Lot is a 1.5" water tap capable of 20 gallons per minute (gpm) coming from the community water main. The water main is divided out by the number of community meters. Each home is allocated four (4) separate zones with flows not to exceed 18 gpm through a master controller for the sprinkler system that is connected to each Lot by a two-wire component connection. Lots along the Intracoastal Waterway (ICW) have the option to add 2 additional zones if they chose to improve the easement area [for a total of six (6) zones]. Please contact the Tidelands Estates HOA landscape maintenance contractor to arrange for the installation of the two-wire components and the addition of the Lot to the system's watering schedule. Contact the Tidelands Estates HOA management company for the current fee. ***Individual home irrigation controllers are not allowed to be installed.***
2. Each zone should be designed to cover similar plant material without mixing sprinklers with different application rates. Do not mix rotors and conventional sprays on the same zone. MP rotators will not be permitted.
3. Head spacing should be head to head with 100% (one hundred percent) overlap.
4. When sizing lateral pipe, limit velocities to 5 fps.
5. Place sprinkler heads to minimize over-spray onto paved surfaces, structures or walls.
6. Mainline and lateral pipes should have a minimum of 12" cover.
7. All areas where pipes pass under concrete or other hard surfaces should be sleeved using Sch (Schedule) 40 PVC.
8. When utilizing drip irrigation, proper filtration and pressure regulation at 40 psi or less is required at the valve location.
9. Components to be installed in accordance with the manufacturers' guidelines.
10. The irrigation design should take into account the location of equipment relative to the landscape maintenance. Heads, emitters, pipes and sleeves should be located to minimize interference with traditional landscape maintenance practices.
11. Property owners will be responsible for the repair & maintenance of any irrigation system and components that are **not** connected to the Tidelands Estates designated irrigation system. (i.e. irrigation systems that are connected to the owners City of Palm Coast water meter).

## **Irrigation Specifications**

1. Use six inch (6") pop-up spray heads in turf areas. Twelve inch (12") pop-up sprays in ground cover areas, driplines for all shrub beds. All spray head bodies must be pressure compensating and have a check valve capable of holding back a minimum of ten feet (10') of elevation head. Spray heads bodies shall be Rain Bird 1800 series SAM-PRS or Hunter Institutional series with check valve. **Note:** Four inch (4") pop-up spray bodies will **not** be permitted.
2. Low volume drip tubing may be used if placed on its own irrigation control valve. The control valve for the drip zone should have a pressure regulator and filter installed in a twelve inch (12") valve box. Secure drip line tubing with six inch (6") metal soil staples.
3. Valves to be placed in a twelve inch (12") rectangular purple valve box.
4. Use Class 200 purple PVC pipe for all main and lateral irrigation lines. Use Schedule 40 PVC pipe for sleeves.

5. A flexible swing joint of swing pipe and spiral barbs or flexible PVC pipe with a solvent weld street ell will be required between the lateral pipe and the irrigation head. Do not make any hard pipe connections between laterals and irrigation heads.
6. All mainline and lateral piping to have twelve inches (12”) of cover. Assure that pipe sizes at the point of connection to the water source are properly sized to match the source line.