

Public Facilities Report

For the:

MADEIRA COMMUNITY DEVELOPMENT  
DISTRICT

ST. JOHNS COUNTY, FLORIDA

May 31, 2019

## **Purpose and Scope**

This report has been prepared at the request of the Madeira Community Development District (the "District") to comply with the requirement of 189.08, Florida Statutes, regarding the Special District Public Facilities Report. This report provides general descriptions of the public facilities owned and operated by the District. The Community is partially completed therefore this report is limited to existing infrastructure.

## **General Project Information**

Madeira is a mixed-use Planned Unit Development ("PUD") which was annexed into the City of St. Augustine in June, 2001. (Master Site Plan approval was awarded March 15, 2004, for 749 residential units consisting of 473 single-family lots, 166 townhome units and 110 condominium units in addition to 170,000 square feet of commercial, retail and service facilities). The property encompasses 1,010 acres including over 600 acres of marsh, wetlands, a tidal creek, numerous lakes and preserved natural areas under Conservation Easement.

The District was established in December of 2006 and granted the ability to issue Special Assessment Revenue Bonds for infrastructure needs of the District. In May of 2007 Special Assessment Revenue Bonds were sold to partially fund the costs of acquisition, construction, installation and equipping of a portion of the infrastructure and improvements. The District currently owns and operates the storm water management system, roadways, common area landscape, entry features and hardscape.

To date approximately 131 acres of the site has been developed with 249 single-family lots consisting of 71 - 55' lots, 83 - 65' lots, 74 - 75' lots and 21 - 85' lots of the 473 approved. To date, 249 lots have been closed or are under contract. Currently there are four builders in the community - Riverside Homes (65' 75' & 85' Lots), Mastercraft Homes (65' 75' & 85' Lots), Elacora/Dream Finders Homes, (55' & 65' Lots) and Poseidon Builders (75" Lots).

## **Public Facilities**

The District improvements are constructed in accordance with all applicable federal, state, local, administrative, regulatory and environmental laws, rules, regulations, policies, procedures, guidelines, standards and permits including, without limitation, those of the St. Johns River Water Management District, Florida Department of Environmental Protection, Environmental Protection Agency, Department of Health, Army Corps of Engineers, United States Coast Guard, Florida Department of Transportation, the City of St. Augustine and St. Johns County for the development of the completed 249 single-family residential lots, related infrastructure and hardscape.

The District currently owns and operated the following public facilities: roadways, storm water retention facilities, common area landscaping, hardscapes and entrance features.

## **Retention Facilities**

Storm Water retention facilities are functioning as designed, over the past number of years there have been significant storm events to test the facilities which have proven to meet or exceed the

engineering design standards. The storm water facilities are inspected annually. During the 1<sup>st</sup> quarter of 2109, d inlets and structures associated with the developed lots were cleaned and inspected. Additionally, the facilities receive aquatic treatment as necessary to keep the pond in compliance with permit criteria.

### **Common area Landscape**

Common area landscape is maintained by the District. Specifically, the District has retained a landscape maintenance company that has maintenance crews assigned to the project on a weekly basis and consistently address the maintenance requirements i.e. mowing, trimming, edging, irrigation etc.

### **Hardscapes**

Hardscapes consist of pavers, trellises and benches which receive periodic inspection and deficiencies, if any, are addressed as needed.

### **Entry Feature**

Entrance features consist of structures and access control gates, these facilities receive a higher degree of maintenance due to the type of usage. The District manager is involved in the daily maintenance as needed. The gate system operation incorporates the latest control software by ENVERA and is managed by ENVERA'S local staff.

### **Potable Water**

The District is supplied potable water and fire protection from the City of St. Augustine Public Works Department ("PWD"). The treatment plant is located on West King Street and the potable water is served from the Woodlawn Road facility. The future improvements intend on looping the interior water system with a 10" water main.

All waterlines in Phase 1 have been accepted by the PWD which currently operates and maintains the system. The future lines will be dedicated upon completion as required.

### **Waste Water Facilities**

Wastewater collection facilities are also located throughout the District. Generally, this consists of a network of underground sewer pipes and manholes which collect the individual household wastewater. The wastewater then flows through the system by gravity to an intermediate location, known as a master lift station. From the lift station the wastewater is mechanically lifted through the use of pumps. The discharge (effluent) from each lift station is manifold into a PWD force main to the Woodlawn facility.

Like the potable water system, all wastewater facilities are owned and operated by the PWD. The Phase I system is accepted and currently is operated and maintained by the PWD. The addition of future lines will be dedicated upon completion as necessary.

### **Re-use Water Facilities**

Re-use water is not available from the City of St. Augustine Public Works Department.

### **Irrigation Facilities**

City of St Augustine Public Works Department prohibits the use of irrigation meters for irrigation. Furthermore, the St. Johns River Water Management (SJRWMD) regulates the use of aquifer wells. Therefore, the District utilizes potable water from the City of St. Augustine to irrigate common areas.

Phase I residences can obtain shallow irrigation wells, by applying for permits through the St. Johns County Health Department and the FDEP.

Phase I common areas are completed and are maintained by the District.

### **Storm Water Management Facilities**

The District wide storm drain system consists of wet detention ponds to capture and treat the stormwater run-off from developed areas. There are control structures, weirs and bleed-down orifices sized to allow ponds to recover at their normal design elevations. Additionally, the control structures are designed to regulate the volume of water detained. The orifices allow ponds to recover back to the normal water level in 72-hour period. All storm water ponds (top of bank and weirs) are set to meet the 25-year storm event guidance.

The stormwater system is engineered to meet pre and post conditions, i.e. post development flows must equal flows from the pre-development state. Madeira drainage flows are directed to the wetland tributaries surrounding Robinson Creek and the Intracoastal Waterway.

In general, the stormwater ponds will provide treatment to the water where by allowing the sediments and chemicals to float to the bottom prior to conveyance to the wetlands bodies.

The wetlands located adjacent to Robinson Creek have a tidal influence, with a mean high water level at 2.43' above sea level. During storm events there is tidal effect on the flows in either direction (increasing or decreasing). There is an increased flow with the outgoing tide which accelerates the discharge.

The roadway and drainage system is designed for 25-year storm events in that the design elevation for the lowest inlet is set at or above the 25-year elevation.

The finish floor designed elevations are set at the 100-year storm event plus one foot (above). Note the 100-year event relates to the recording of 11.5 inches of rain in a 24-hour period.

There are no Madeira building foundations within the FEMA flood zone, all constructed lots in Phase I have been elevated to the engineered design elevations. Additionally, the developer has formally received an approved conditional letter of map revision (CLOMR) from FEMA.

Lots adjacent to wetlands are designed to have rear yard swales, these swales are for the purpose of removing chemicals and other pollutants before discharging into the wetland system and waterbodies. The typical bottom elevations are set at 5.0' EL. and the tops set at 6.5' EL. This design allows water to pool and filter through the natural soils for specific periods of time; this is by design and is a permit criteria set-forth by the St. Johns River Water Management District (“SJRWMD”).

The Phase I stormwater system meets all regulatory requirements and has been accepted by SJRWMD and the City of St. Augustine PWD. The operations and maintenance are performed by the District.

**Future Development**

The District does not presently have any plans to build, improve, expand or replace any public facilities. The developer for the Madeira project may construct additional improvements similar to the ones described in this report and such improvements may be conveyed to the District for ownership and operation. The District will supplement this report to the extent it accepts any additional improvements from the developer

Per the Florida Legislature, Chapter 252.363, Florida Statutes, the developer is granted “development order extension” for the Madeira PUD due to the following emergency orders:

Executive Order	Date Issued	Notification Deadline	Tolling Period	Extension Period	Orig. Expiration Date	New Expiration Date
Tropical Storm Colin	6/6/2016	11/3/2016	179-days	6 months	1/1/2027	12/29/2027
Zika Virus	6/23/2016	5/14/2017	Not Req.	7 months	12/29/2027	6/29/2028
Hurricane Hermine	8/31/2016	1/28/2017	Not Req.	8 months	6/29/2028	12/29/2028
Hurricane Mathew	11/3/2016	6/26/2017	Not Req.	9 months	12/29/2028	6/29/2029

**Phase Development**

For purposes of understanding the capacity and demands of the District’s facilities, please note the following:

The following phases are approved by the governing agencies: 1C, 2-A and 3 and consists of 362 single family lots (50, 65, 75’ & 85’ Lots).

Phase 2A Unit I & II consisting of 131-Lots is fully permitted for site development, construction will commence 3<sup>rd</sup> quarter of 2019. The builders have under contract: Mastercraft Builder’s 66-Lots and Riverside Home’s 65-Lots.

As part of the phase 2A Unit I infrastructure the FDOT drainage easement will be relocated from an open ditch to a new location adjacent to Ponce Island Drive into a master pipe facility.

Phases 1C, 2-A & 3 earthwork and remediation is 95% complete.