



**SEXTON ENGINEERING ASSOCIATES, INC.**

Consulting Engineers and Surveyors

# **DRAINAGE STATEMENT**

*for*

**EQUESTRIAN VILLAGE ESTATES**

**WELLINGTON, FLORIDA**

*Prepared by*

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**SEA PROJECT NO: 2242T16**

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**Revised: October 5, 2022**

## **DRAINAGE STATEMENT**

### *Introduction:*

The 155.24-acre property is located at the northwest corner of South Shore Boulevard and Lake Worth Road and is currently vacant with the exception of a polo fields. The property drains to the existing ACME canal system. An ACME Canal Easements identify as C-23B is located along a portion of the north boundary of the subject property and within the west limits of the adjoining park property. An existing canal is located within the project along the northerly boundary with Malett Hill of Wellington Country Place PUD connecting the ACME C-23B Canal at the Park to the existing ACME C-4 Canal along the west boundary of the subject property.

### *Project Description:*

The proposed Equestrian Village Estates is a residential development that will incorporate 197 single family residential units.

### *Existing SFWMD Permit:*

Permit No. 50-00548-S-204 was issued for a surface water management system to serve 238.4 acres of residential development known as Parcel B, Pod E and F, Wellington Country Place PUD. The residential development is partially developed in Pod F and has not been constructed within Pod E and Parcel B This permit consisted of equestrian/residential lots of various acreages and roadway improvements and storm water management lakes. The permitted lake system provided water quality treatment and water quantity storage prior to discharging offsite to the adjacent ACME canal system.

### *Drainage Methodology:*

The surface water management design for the proposed project shall be based on the "Permit Criteria and Best Management Practices Manual for Woks in the Village of Wellington" as revised in April, 2010 and adopted by the Village of Wellington under Ordinance 2010-14 on June 8, 2010.

Based on the ACME Basin B Design Criteria for minimum flood protection, an applicant must demonstrate that the proposed project will provide a minimum of the established storage requirements as follows:

Storage at Elevation 16.0' NGVD	0.11 acre-feet/acre
Storage at Elevation 17.0' NGVD	0.86 acre-feet/acre

Any reduction in soil storage shall be compensated for by excess site storage in order to provide an overall storage in excess of the ACME Basin B requirements.

Per the Village of Wellington and SFWMD permit criteria, the project shall provide the greater of 1" of water quality treatment over the drainage area, or 2.5" of water quality treatment times the percentage of imperviousness. Projects within ACME Basin B shall provide for a 50% increase in water quality treatment volume.

As requested by the Village of Wellington Engineering Department the existing C-23B Canal along the north 100 feet of the subject property will remain and will be dedicated as a Drainage Easement to ACME Improvement District.

*Conclusion:*

The stormwater management system for the proposed Equestrian Village Estates project will provide the water quality treatment and water quantity storage required by the SFWMD and the ACME Improvement District within the limits of the proposed project. It is anticipated that approximately 17 acres of wet detention lakes will be provided within the development to provide the required stormwater treatment and protection with an outfall to the existing ACME C-4 Canal at the southwest corner of the property. All conveyance swales shall be graded away from the top of bank of the existing canal and proposed lakes along the property line to avoid direct discharge and comply with the SFWMD and the ACME Improvement District design criteria.