# **Kimley»Horn**

## ENGINEER'S DRAINAGE STATEMENT ISLA CARROLL DEVELOPMENT VILLAGE OF WELLINGTON, PALM BEACH COUNTY, FLORIDA

#### PROJECT DESCRIPTION

The site is +/-79-acres and located at the northwest corner of 120<sup>th</sup> Avenue and 35<sup>th</sup> Street, in the Village of Wellington, Palm Beach County, Florida. The proposed development consists of roughly 40 single family lots and amenities including a pool, restaurant, pickleball courts, walking trails, equestrian trails, paddocks, stables, riding rink, fitness area, clubhouse, parking areas and the associated utility and stormwater infrastructure.

### PERMITTING REQUIREMENTS AND BACKGROUND

The site is situated within the South Florida Water Management District's (SFWMD) C-51 Drainage Basin (Subbasin 14) and within Basin B of the ACME improvement district. As part of the Basin C-51, the site will have to provide compensating storage below the C-51 (Subbasin 14) base flood elevation of 15.50 NAVD. A portion of the site is also within the FEMA Flood Zone AE, which has a base flood elevation of 15.00 NAVD. The analysis will provide exporter vs importer calculations to ensure that the post-development conditions provide the necessary amount of storage to accommodate the increased runoff volume. The existing site currently discharges to the ACME C-7 canal located along the east side of 120<sup>th</sup> Ave S, which is owned and maintained by ACME Improvement District. A new permit from the Village of Wellington and a modification to the existing SFWMD environmental resource permit (50-00548-S-24) will be required.

## PROPOSED STORMWATER MANAGEMENT SYSTEM

The proposed drainage improvements consist of interconnected catch basins and pipes that collect and convey runoff to the proposed lakes for treatment and attenuation prior to offsite discharge. The site is required to provide 150% of water quality treatment for the greater of 1" over the entire site area or 2.5" over the percentage of impervious area. Water quality treatment will be achieved through a combination of exfiltration trench and storage within the proposed dry and wet detention areas. A drainage analysis will be provided to demonstrate that the site can accommodate runoff and critical storm elevations will not increase in the post-development condition. The site will be graded to meet the grading assumptions and required minimum building finished floor elevations and set forth by the SFWMD master permit and the Villages stormwater criteria specified in ordinance 2010-14. As the Isla Carroll project is located within Basin B of ACME improvement district, the site grading must meet the following required elevations; 14.50 NAVD for minimum road elevation, 15.50 NAVD for minimum finished floor elevations must be within 14.00 NAVD and 17.50 NAVD.

## LEGAL POSITIVE OUTFALL

Once treated, the discharge will be routed be via a control structure with piped connection to the existing ACME Improvement District canal located east of 120<sup>th</sup> Avenue S.

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