

DRAINAGE STATEMENT

Proposed Lifestyle Center
 Country Club of Florida, Village of Golf, FL
 July 9, 2018

Introduction

The subject project area is part of a previously developed country club facility including golf course, clubhouse, recreational sports courts, practice facilities and other amenities for use by the members of the club. The Applicant is proposing a new lifestyle center, pool & deck and vehicular drop-off south of the Village of Golf Town Hall across Country Road in a cleared grass area adjacent to an existing croquet court and lake.

Existing Site Drainage Conditions

The overall 278+/- acre country club was permitted on July 9, 1996 under South Florida Water Management District (SFWMD) Environmental Resource Permit No. 50-03681-P. The site was constructed prior to surface water regulations however this ERP allowed for the construction of a reclaimed water system to support irrigation of the property. This property was re-permitted on June 26, 2007 under SFWMD ERP 50-07247-P to increase the existing lake acreage from 10.0 acres to 14.8 acres on the existing golf course. During this rehabilitation of the golf course, the site work improved the design storm peak stages per the following graphic taken from the previous permit which elevations reference the National Geodetic Vertical Datum of 1929 (NGVD):

SUMMARY

STORM EVENT	AS BUILT STAGE		EXISTING (BEFORE WORK) STAGES	
5 YEAR - 1 DAY	12.87'		13.36'	
25 YEAR - 3 DAY	15.72'	98.5 CFS	15.89'	109.5 CFS
100 YEAR - 3 DAY	17.15'		17.26'	

The 14.78+/- acres of on-site lakes collect stormwater before ultimately discharging to the Lake Worth Drainage District (LWDD) L-27 Canal via three (3) existing outfall structures as follows:

- 1 - 24" CMP, L = 200', INVERT EL = 10.0'
- 1 - 24" CMP, L = 90', INVERT EL = 11.5'
- 1 - 4.5' WIDE WEIR, CREST EL = 12.0'

The project area itself appears to generally sheet flow from existing elevation highs ranging from 18.0 to 19.1 NGVD down to the existing Lake 13 (0.26 acres) which has a surface water level of approximately 10.9 based on surveyed information.

Proposed Site Drainage Conditions

The proposed site plan will increase impervious area by approximately 0.38 acres which will consist of new lifestyle center building, pool & deck and associated drop-off area. A series of interconnected swales, yard drains and/or inlet drainage structures will be constructed to capture stormwater runoff surrounding the new lifestyle center and area drainage from the building/pool which will be piped underground to Lake 13 adjacent to the project area. Lake 13 along with the other on-site lakes will retain the runoff to satisfy Village of Golf Comprehensive Plan drainage sub-element, SFWMD and LWDD criteria. As the project represents approximately 0.14% of the entire drainage basin area, the minor increases in runoff are negligible and have been off-set by the ERP 50-07247-P lake expansions that occurred in 2007.

The minimum finished floor elevation is established by the most restrictive of the following:

- Peak stage of 100-year / 3-day rainfall event (17.15' NGVD)
- 100-year Flood Elevation per FEMA FIRM 12099C0788F dated 10/5/2017, Zone X (no base flood elevation)

Therefore, new buildings on-site shall be set at or above elevation 17.15' NGVD or dry flood proofing provided up to that elevation if the lowest habitable floor is below 17.15' NGVD.

Conclusion

Stormwater runoff will be managed within the project area with a series of interconnected swales, yard drains, storm piping and/or drainage inlet structures with routing to the adjacent Lake 13 of the overall country club stormwater system. Proposed site grading will be modified to route displaced area for the proposed development to this stormwater infrastructure. The project impacts are negligible (0.14%) relative to the overall system and have been preemptively off-set by the lake expansions that occurred in 2007. The overall discharge structures and stormwater facilities are not proposed to be modified at this time.



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