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## Drainage Statement for Milani Park, Highland Beach, Florida

## Introduction

The proposed improvements will be constructed on approximately 5.519 acres of land in the Town of Highland Beach. The site is comprised of two parcels, 2.712 acres west of SR A1A and 2.807 acres east of SR A1A. The site is located approximately 0.25 miles north of the intersection of Spanish River Boulevard and SR A1A in Section 9, Township 47 South, and Range 43 East in Palm Beach County, Florida.

## **East Parcel**

For the park, the east parcel improvements will consist of the construction of a lifeguard/restroom building, new dune crossover and lifeguard station. There will be no parking improvements constructed or provided on the east parcel. The existing structures on the northern portion of the east parcel will remain in place and will not be utilized as part of the park amenities or infrastructure.

Per our pre-application meeting with the Florida Department of Environmental Protection (FDEP), since there will be no impervious parking improvements on the east parcel, water quality requirements will be waived for the east parcel. Therefore there will be no stormwater improvements constructed on the east parcel and no discharge from the east parcel. All runoff will be retained onsite and percolated by the existing vegetated areas. This will limit the impacts made to the east parcel.

## **West Parcel**

For the park, the west parcel improvements will consist of the construction of a new 100 space parking lot, paved walkways, guardhouse, lighting, and landscaping. Stormwater runoff will be collected within three detention areas within and along the perimeter of the parking lot to meet the water quality requirements of the FDEP. The detention areas will be interconnected and will percolate naturally. A portion of the treated stormwater will be discharged into the onsite wetland via a bleeder from the northern detention area. This is a typical approach that is used and permitted for wetlands. The wetland will continue to function in a natural state as it currently functions today.

Should an outfall be secured for the property, it will be constructed at the northwestern corner of the site with discharge from the wetland to the canals west of the site. Use of an outfall will provide an additional means of draining the onsite detention areas by discharging an allowable amount of water per the guidelines of the FDEP. It would also provide an emergency overflow for the stormwater system. Should the outfall not be secured, the system will operate via natural percolation and discharge into the onsite wetland. During extreme storm events, the parking area may have standing water and will be closed.

Based on our review of permits issued by the South Florida Water Management District within the Town of Highland Beach, the water table at the site is approximately 2.00 feet NGVD. The proposed detention areas will be constructed with a bottom elevation of 3.00 feet NGVD and top elevations of 4.00 feet NGVD for the one foot deep areas and a top elevation of 5.00 feet NGVD for the two foot deep detention areas. High points within the parking area will be set at approximately elevation 5.50 feet NGVD. Per our pre-application meeting with the FDEP, the detention areas must provide detention to meet the water quality requirements of one inch over the west parcel or 0.23 acre-feet of detention. Since a portion of the treated water will be drained into the onsite wetland, an additional 150% of water quality detention must be provided in the detention areas – for a total of 0.34 acre-feet of detention. Based on the site plan provided, the three detention areas will provide water quality detention in excess of the 0.34 acre-feet required.

Preliminary review of the site indicates that the project will be able to comply with all permitting requirements. During the permitting process, construction plans and drainage calculations for the proposed improvements will be submitted to the appropriate governmental agencies.

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