



June 23, 2020

Mr. Jason Hime, PE  
Suffolk County Department of Health Services  
360 Yaphank Avenue, Suite 2C  
Yaphank, NY 11980

**Re: Dune Road Holding Corp. East Quogue, NY  
STP Siting Report Review of onsite STP  
SCDHS Ref #**

Dear Mr. Hime,

We are kindly requesting a siting review by the Suffolk County Health Department Services (SCHDS) for a proposed on-site Sewage Treatment Plant (STP) to serve a proposed retirement community. The proposed retirement community, being developed by Dune Road Holding Corp (DRH), is located on the North side of Dune road, approximately 800 feet west of Dolphin Lane, in East Quogue, Town of Southampton, Suffolk County, New York. The Suffolk County Tax Map Number for the lot is 900-385-1-37.3. The total area of the site is 9.4 acres and the gross land area is 3.436 acres.

Currently located at the site is a marina, restaurant, and kayak store. The site is in Suffolk County Groundwater Management Zone IV, which has an allowable sanitary flow of 600 gpd/acre. Based on the gross land area of 3.436 acres, the site has an allowable sanitary flow of 2,062 gpd (600 gpd/acre x 3.436 acres = 2,062 gpd).

The proposed retirement community will consist of 25 condominium units that vary between 1,250 and 2,500 sq. ft. in size. Based on the current SCDHS standards of 300 gpd/unit for units larger than 1,200 sq. ft., the condominiums will generate 7,500 gpd of sanitary flow. Therefore, to develop the site as proposed, a STP must be constructed. The new STP would be designed and constructed to meet SCDHS standards. It is intended to use the provisions for a modified sub-surface STP such that the reduced setbacks can be achieved.

Based upon Guidance Memo number 28 – STP Siting, PWGC evaluated the location of the STP with respect to public water supply wells of the Suffolk County Water Authority (SCWA), Hampton Bays Water District and surface water contributing areas. Based upon our preliminary evaluation, it appears that the proposed STP is located outside of the all public well field contributing areas. The proposed STP is within the contributing area to Shinnecock Bay. Since the proposed STP is not within any contributing area to a public water well field a nitrogen mass balance was performed, in accordance with Guidance Memo 28, as shown below:

**As of Right Development – Allowable Sanitary Flow**

Area = 3.436 acres

Flow = 2,062 gpd (2,062 gpd/1,000,000 = 0.002062 mgd)

Total Nitrogen Influent Concentration (TN) = 50 mg/L

Total Nitrogen Influent Quantity = 50mg/L \* 8.34 \*0.002865 mgd =**0.860 lbs/d**

### Proposed Development with STP

Flow = 25 unit \* 300 gpd/unit = 7,500 gpd = 7,500 gpd / 1,000,000 = 0.007500 mgd

Total Nitrogen Effluent Concentration = 7 mg/L

Total Nitrogen Effluent Quantity = 7 mg/L \* 8.34 \* 0.007500 mgd = **0.438 lbs/d**

Based upon the above calculations, the utilization of the proposed STP, with an effluent of 7 mg/L would result in a nitrogen loading that is approximately 0.42 lbs/d less than the as of right development. This difference equates to approximately 153.3 lbs/yr less nitrogen than if the property were developed as of right.

In addition, to the above analysis, PWGC prepared a 500 foot radius map to determine if private wells exist within 500 feet of the proposed development. A total of 11 properties were identified within the 500 foot radius of the subject property. PWGC contacted the SCWA and Hampton Bays Water District to determine whether any site in the 500 ft radius operates a private well. All 11 of the properties were determined to have access to public water. Of the 11 properties, two (2) were identified as not connected to the public water supply, see the below list of parcels:

- 1) 900-385-1-36.4
- 2) 900-385-1-37.1

The two (2) parcels not connected to the public water supply appear to be vacant properties. They do have access to public water if they are developed in the future.

PWGC also reviewed the available groundwater contour maps for Suffolk County. As it appears all of the parcels within 500 feet of the subject site are connected to public water or are undeveloped and the proposed nitrogen loading is less than an as of right development, the proposed STP will not adversely impact the public drinking water supply.

In addition, to the above information please find a copy of the engineering report for the proposed STP, which includes a site plan along with a copy of the soil boring plan and logs.

Please feel free to contact me if you have you have questions or comments.

Sincerely Yours,  
P.W. Grosser Consulting



Bryan Grogan, PE  
Vice President

# COUNTY OF SUFFOLK



EDWARD P. ROMAINE  
SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF HEALTH SERVICES

GREGSON H. PIGOTT, M.D., M.P.H.  
Commissioner

## Sewage Treatment Plant Preliminary Siting Evaluation Checklist

### To be completed by Applicant:

Project Name: Dockers

Tax Map Number(s): 900-385-1-37.3

Description/Coordinates of STP Outfall Location: 94 Dune Road, East Quogue, NY 11942

(Attach Site Plan if Available)

### Basic Site Info:

Anticipated STP Flow (GPD): 7,500 GPD

Estimated Depth to Groundwater (fbg): 6-8ft

New STP or Expansion? New STP

Estimated Groundwater Flow Direction:

Predominantly Northerly with regional influence

### To be completed by Office of Water Resources:

Possible Mounding Evaluation? Yes

#### Modeled Public Water Supply Capture Zone(s):

- 0-2 Years
- 2-5 Years
- 5-25 Years
- 25-50 Years
- 50+ Years

No Nearby Capture Zones

Name of Potentially Impacted Wellfield(s):  
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#### Modeled Surface Water Capture Zone(s):

- 0-2 Years
- 2-5 Years
- 5-25 Years
- 25-50 Years
- 50+ Years

No Nearby Capture Zones

Name of Potentially Impacted Surface Water(s):  
Shinnecock Bay West SW

#### Additional information/Recommendations:

- Evaluate the Shinnecock Bay for potential impacts.
- Nitrogen discharge goal to be significantly lower than 10 mg/L and provide nitrogen mass loading calculations to show significant reduction
- Provide advance treatment process that consistently reduces the total nitrogen concentration to maximum practical extent

SCDHS OWR Reviewer(s): Christinna Hak

Date Completed: January 23, 2024

Noted Conditions: The preliminary evaluation does not subrogate the need for a formal STP siting review. The above preliminary siting evaluation information must not be considered as final and is provided solely as preliminary guidance. Additional information and considerations may impact the final siting report prepared by the SCDHS.

