



ENVIRONMENTAL  
TECHNOLOGY  
INC.

Environmental Consultants



March 18, 2021

SENT VIA EMAIL: sns rugs@hotmail.com

Mr. Saiyd Nagim  
270-274 Irvington, LLC  
285 Old Short Hills Rd  
Short Hills, NJ 07078

Re: Wetlands/Transition Area Investigation  
270 Irvington Avenue  
Tax Map Block 2102, Lot 14-20  
Village of South Orange, Essex County, N.J.

Dear Mr. Nagim:

Per your request, Environmental Technology Inc. has visited the above referenced property and conducted a wetlands investigation to determine the presence or absence of freshwater wetlands or their associated transition areas. This review was pursuant to the Freshwater Wetlands Protection Act Rules (N.J.A.C 7:7A).

Our methodology and findings are as follows:

#### STUDY METHODOLOGY

The investigation of the site was performed by the staff of Environmental Technology on February 26, 2021.

In accordance with the New Jersey Freshwater Wetlands Protection Act, and outlined by the New Jersey Department of Environmental Protection (NJDEP), the extent of the wetlands were determined by implementing the methodology that is currently accepted by the United States Environmental Protection Agency (USEPA), namely Federal Manual for Identifying and Delineating Jurisdictional Wetlands dated January 10, 1989 and supplements. This methodology states that for an area to be considered wetland all three of the following parameters must be present:

1. Hydric Soils
2. A Predominance of Hydrophytic Vegetation
3. Hydrology

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The determination of hydric soils in the field is made by the use of a manually operated

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soil sampler. Then a determination of hydric soils is made by using Munsell Soil Color Charts. Transects are made from the wetlands to the uplands to determine the point at which soils no longer were determined to be hydric. Hydric soils are those soils that have a chroma of less than or equal to 1 (when no mottling is present) or a matrix chroma of less than or equal to 2 when mottling is present.

When soils classified as a sand soil are encountered Munsell Soil Color Charts are not used exclusively. In these instances, hydric determinations are also made by the presence of one or more of the following conditions: high organic matter content in the surface horizon, the streaking of subsurface horizons by organic matter, or the presence of organic pans.

In situations in which soils exhibit significant coloration due to the nature of the parent material (e.g. red shales) the soils often do not exhibit the characteristic chromas associated with hydric soils. In the above situations the Munsell Soil Color Charts cannot always be used to evaluate the hydric nature of the soil. In these cases, their hydric nature according to the Soil Conservation Service (SCS), and the other criteria carry more weight.

Vegetation is classified according to the Eastern Mountains and Piedmont 2014 Regional Wetland Plant List prepared by the USACOE. The classifications, according to this list are as follows:

Obligate (OBL) Always found in wetlands under natural (not planted) conditions (frequency greater than 99%), but may persist in nonwetlands if planted there by man or in wetlands that have been drained, filled, or otherwise transformed into nonwetlands.

Facultative Wetland (FACW) Usually found in wetlands (67%-99% frequency), but occasionally found in nonwetlands.

Facultative (FAC) Sometimes found in wetlands (34%-66% frequency), but also occurs in nonwetlands.

Facultative Upland (FACU) Seldom found in wetlands (1%-33% frequency) and usually occurs in nonwetlands.

Nonwetland (UPL) Occurs in wetlands in another region, but not found (<1% frequency) in wetlands in the region specified. If a species does not occur in wetlands in any region, it is not on the list.

According to the Federal Manual for Identifying and Delineating Jurisdictional Wetlands dated January 10, 1989, an area has hydrophytic vegetation, when under normal circumstances more than 50 percent of the composition of the dominant species from all strata are obligate wetland (OBL), facultative wetland (FACW), and/or facultative (FAC) species. However, when a plant community has less than or equal to 50 percent of the dominant species from all strata represented by OBL, FACW, and/or FAC species, and hydric soils and wetland hydrology are present, the area also has hydrophytic vegetation. (NOTE: These areas are considered problem



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area wetlands.)

In the non-growing season hydrophytic vegetation is assumed to be present, since during this time of the year many herbaceous species are either unidentifiable or non-existent.

Hydrology is determined by the evidence of water, either visible or indicators that water was present. This is noted by visible factors such as drift lines, high water marks on trees, sediment deposits including encrusted detritus, displacement of leaf litter as the result of water flowage, and drainage patterns. During the growing season, saturated soil samples and/or the water table is noted as evidence of hydrology when they are encountered within 12 inches of the soil surface.

Seasonal high water table information is used, when available, from the Soil Conservation Service. Recent rainfall and/or other precipitation are also considered when evaluating hydrology.

In situations where the native conditions have been altered such as; cleared lands (e.g. agricultural lands), areas where the original soil has been altered (such as formerly plowed or filled lands), certain criteria are given more weight than others due to the lack of reliability of the affected parameter as an indicator.

## FINDINGS

The investigation found the site to consist of a combination of residential structures and paved areas in the northeastern section, with a combination of maintained lawn and upland trees in the remaining sections. The topography was relatively flat.

No freshwater wetlands or freshwater wetlands transition areas were identified on or within 150 feet of the site. This is the maximum required transition area distance from freshwater wetlands.

Soil samples confirmed the presence of non-hydric soils within and around the study area. The samples revealed non-hydric soils with representative Munsell soil color readings of 10YR 4/3 from 0 to 8 inches and 7.5YR 5/4 from 8 to 18 inches.

The common vegetation observed on the site included White Ash (*Fraxinus americana*, FACU), Honey Locust (*Gleditsia triacanthos*, FAC), Silver Maple (*Acer saccharinum*, FACW), Red Oak (*Quercus rubra*, FACU) and White Oak (*Quercus alba*, FACU) along with the lawn areas and some landscaping adjacent to some of the dwellings.

Although not regulatory, it should be noted that the NJDEP GeoWeb mapping does not identify any wetlands on or adjacent to the site.

Based on the methodology currently accepted by the NJDEP pursuant to N.J.A.C. 7:7A, there are no areas within the proposed area of disturbance for the project which are classified as

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freshwater wetlands or transition areas. Therefore, no NJDEP wetlands approval is required for the proposed project.

The information provided is based on the most current information available and our best professional judgment. This letter does not consider pending or future legislation or regulations that may change the opinions provided.

Please do not hesitate to contact our office if you should have any questions regarding our findings.

Very truly,

ENVIRONMENTAL TECHNOLOGY INC.



David C. Krueger, President  
Professional Wetland Scientist 000662  
Certified Wetland Delineator WDCP94MD03101146B

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