Wetland Survey The Jerome Drive & Rt. 6 Site

1 Jerome Drive Tax ID 24.13 – 4- 1 & 52

Cortlandt, NY

Approx. 0.6 Acre Study Area

Prepared for
Town of Cortlandt

June 15, 2023



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Introduction

A wetland investigation was conducted on property located at 1 Jerome Drive in the Town of Cortlandt, NY on June 15, 2023 by Paul J. Jaehnig, Certified Professional Geologist, Soil Scientist, and Wetland Scientist. The work consisted of the taking of soil borings to identify the presence of wetland or hydric soils and the delineation or marking of the wetland boundary. The work was conducted in accordance with the Town of Cortlandt Wetlands Law. The work was done at the request of the Town of Cortlandt.

Site Description

The site is situated on the east corner of intersection of Jerome Drive and Rt. 6., the site of a dental office. The site consists of: a building; adjacent parking lot for patients; some surrounding small lawn area with landscape plantings bordering the building and parking lot; woodlands border; and watercourse associated with a wetlands area (see enclosed *Wetlands and Soils Map* and photos 1-6 in Appendix I).

Slopes across the site vary from nearly level to very gently sloped. Most of the site is gently sloped land. The land slopes down to the northeast. Nearly level areas are on the southern portion of the site, as well as, the northeast end of the site. The remaining land is very gently sloped. Topography around much of the site has been modified by past manmade activity carried-out in developing the site.

A paved driveway comes in off of the northeast side of Jerome Drive and into the southeast corner of the site (see *photo 1* in Appendix). The driveway continues northeast along the southeast property line for approx. 80 ft. to the paved parking area (see *photo 2* in Appendix I). The parking area covers most of northern portion of the site. A second driveway comes off of Rt. 6 and into the southwest corner of the site. This second driveway turns northeast for approx. 40 ft. and connects with the paved parking area.

The building is located on the southwest-central portion of the site (see *photo 3* in Appendix I).

Lawn area is on the southern portion of the site, as well as, along the northwest and southeast borders of the site. Landscape trees and shrubs, including holly pine, andromeda, Japanese maple, locust, weeping willow and yew bush dot the lawn area around the building, and along some edges of the site.

Woodlands borders are on the northeast end of the site (see *photo 4* in Appendix I). Woodlands have a canopy of Norway maple, a few Northern catalpa, locust, red maple, and elm. The woodland understory is relatively open except for a few privet and winged euonymus shrubs. The groundcover is covered with English ivy in many places. Twig and leaf litter covers the woodland floor. There is some scattered man-made debris littering the woodlands.

There is a large partly buried rock situated on the northeast corner of the parking area (see *photo 5* in Appendix I).

Wetlands and Watercourse

The Wetland boundary and watercourses were delineated on the site with consecutively numbered flagging (WL-A-1, WL-A-2, WL-A-3, etc.) and plotted on the enclosed *Wetland and Soils Map*. Wetlands on the site consist of: a brook with associated wetlands located along the northeast property line.

Description

A brook, with a well-defined channel, flows northwest along the northeast property line (see *photo* 6 in Appendix I). The brook channel is approx. 10 to 15 ft. across and 2 to 3 ft. deep. The channel banks are steep. The gradient of the brook is nearly flat. Approx. 6 inches deep water flows on the channel at this time. The channel bed of the brook is lines with sandy and gravelly deposition and point bars. A few phragmites grow along some sides of the brook. Multiflora rose forms dense hedges along the top of bank of the brook. The brook flows out from a large swampland wetlands area containing Gregory Pond, located to the east and southeast of the site. The wetlands area covers many acres. The brook flows along the site property line to a box culvert located just north of the northernmost corner of the site. The brook flows through the culvert under Rt. 6 and away from the site. There does not appear to be any evidence of soils erosion or deposition from overtopping or flooding into the adjacent woodlands along this section of the brook.

Wetland / Watercourse Functions

The brook function as a conveyance system, bringing concentrated drainage from one wetland area to other wetlands and watercourse located at lower elevation positions within the watershed. This section of the watercourse provides some limited flood storage function when the watercourse flow surges during wetter periods of the year. The lack of large adjacent flood plain, however, limits the flood storage function along much of this section of the watercourse. The watercourse provides wildlife habitat for frogs, butterflies, and dragonflies, as well as, browsing area used by deer, raccoon, and coyote. Small birds utilize the dense shrub hedges along the brook for nesting and perching.

NY State Dept. of Environmental Conservation (NYSDEC) Wetland Jurisdiction

The wetlands area adjacent to the site is identified as New York State Department of Environmental Conservation (NYSDEC) jurisdictional wetlands "A-9", according to a review of the agency's published maps (see NYSDEC Wetland Map in Appendix II). The brook is a Class C watercourse according to the agency's published maps.

Regional Drainage

Drainage from the site is directed northeast toward the brook located along the northeast edge of the site. The brook flows northwesterly for approx. 1.5 miles to the Peekskill Hollow Brook (see *Regional Drainage Map* in Appendix III).

Soils

Shallow soil borings were taken using a spade and Dutch auger at selected locations throughout the site in order to identify wetland soils. Soil boring locations (SS-1, SS-2, etc.) were plotted approx. on the enclosed *Wetland and Soils Map*. Soil borings were logged noting soil profile color, texture, redoximorphic (wetland soil) indicators, and water table. Detailed descriptions of soil borings are provided in Appendix IV.

Soils encountered on the site include: non-wetland, well drained Udorthents (Ud), slopes varied, to describe areas of soil cut, fill, and grading done around the building, lawn area, woodlands, and around the driveway and parking lot as part of the original development of the site; wetland, very poorly drained Fluvaquents (Ff), slopes 0 to 3 %, to describe young wetland soil profiles formed along the active watercourse channel. The distribution of these soil-types is depicted on the enclosed *Wetlands and Soils Map*.

Appendix I

Selected Site Photos



Photo 1 Looking northeast along paved driveway entrance into the site.



Photo 2 Looking south across paved parking area. Note building in center of photo.

June 2023- 1 Jerome Drive, Cortlandt, NY



Photo 3 Looking north from Jerome Drive and toward building.



Photo 4 Looking southeast across woodlands on the northern end of the site. Note scattered man-made debris on woodland floor.

June 2023- 1 Jerome Drive; Cortlandt, NY



Photo 5 Looking close-up at partly buried rock at northeast corner of parking lot.

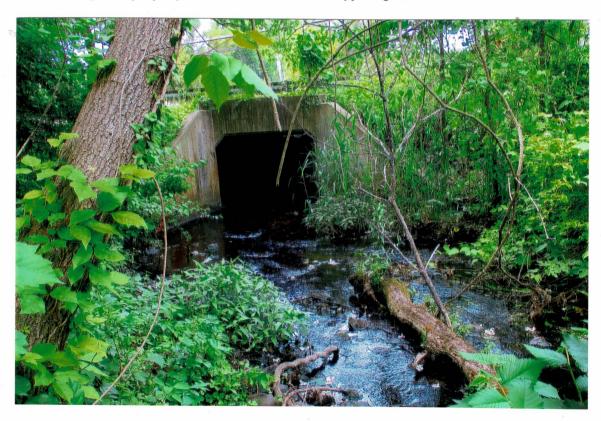
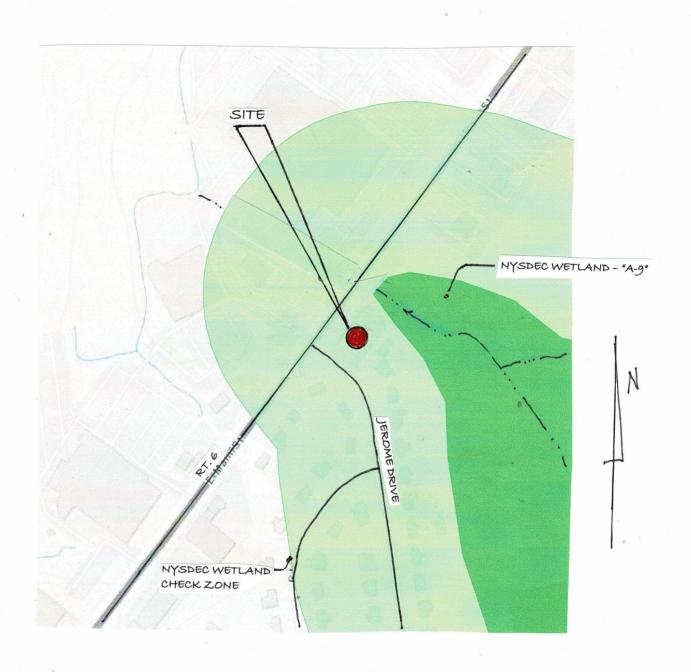


Photo 6 Looking northwest and downstream along brook flowing into culvert under Rt. 6.

June 2023- 1 Jerome Drive, Cortlandt, NY

Appendix II

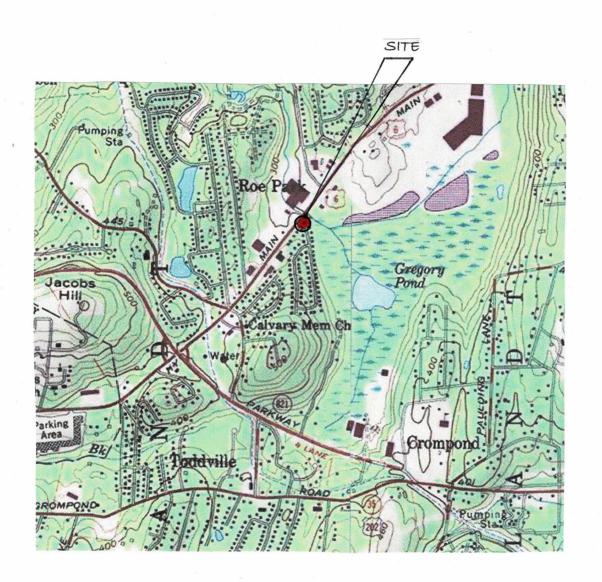
NYSDEC Wetlands Map



NYSDEC WETLAND MAP N.T.S.

Appendix III

Regional Drainage Map



REGIONAL DRAINAGE MAP N.T.S.

Appendix IV

Soil Boring Logs

KEY TO BORING LOGS

SS-1 SOIL BORING

0-4" DEPTH IN INCHES FROM

THE GROUND SURFACE

COLOR MUNSELL COLOR NOTATION

VERY DARK GRAY HUE VALUE/ CHROMA

10YR 3 / 1

<u>SS-1</u>

SITE: LEVEL WOODLANDS; TREE CANOPY OF NORTHERN CATALPA, NORWAY MAPLE; UNDERSTORY OF PRIVET AND WINGED EUONYMUS SHRUBS; GROUNDCOVER OF ENGLISH IVY; TWIG AND LEAF LITTER COVERS WOODLAND FLOOR.

- 0-6" VERY DARK GRAY BROWN 10YR 3/2 LOAM.
- 6-28" MIXED LIGHT OLIVE BROWN 2.5Y 5/4 SANDY LOAM.

WATER TABLE NOT ENCOUNTERED.

<u>SS-2</u>

SITE: WOODLANDS WITH LEVEL AND LOCALLY UNDULATING GROUND; TREE CANOPY OF LOCUST AND RED MAPLE; OPEN UNDERSTORY; BRUSH PILE; TWIG AND LEAF LITTER COVERS WOODLAND FLOOR.

- 0-4" VERY DARK GRAY BROWN 10YR 3/2 LOAM.
- 4-9" BROWN 10YR 4/3 LOAM.
- 9-28" MIXED LIGHT OLIVE BROWN 2.5Y 5/4 SANDY LOAM WITH 5 % GRAVEL.

WATER TABLE NOT ENCOUNTERED.

KEY TO MAP

SOIL BORING LOCATION 1-55

WL-A-2 WL-A-1

FLAGGED WETLAND BOUNDARY

TOPOGRAPHIC CONTOUR IN FEET - 330

SOILS INFORMATION

NON-WETLAND SOILS

udorthents, cut, fill, g graded soils well drained, slopes varied 2

WETLAND SOILS

Fluvaquents soils

1

very poorly drained, slopes 0 to 3 %

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SOILS BOUNDARY

Wetlands & Soils Map The Jerome Drive Site 1 Jerome Drive & Rt 6

cortlandt, NY

TAX 10 24.13 - 4 - 1 552

Approx. 0.6 Acre Total Study Area

The Town of Contlandt Prepared for

June 15, 2023

Paul J. Jaehnig-Wetlands and Soils Consulting P.O. Box 1071 Ridgefield, CT 06877 Prepared By

3. VEGETATIVE COVERS PLOTTED ONTO MAP DURING THIS INVESTIGATION.

PROPERTY LINE, BUILDING, DRIVEWAYS, PARKING LOT, WALKS, DRAINAGE, AND

TOPOGRAPHY DEVELOPED FROM WESTCHESTER COUNTY DEPT. OF PLANNING

PUBLISHED GIS MAPPING.

WETLAND LAW. THE WETLAND BOUNDARY, AS DEPICTED ON THIS MAP, IS NOT

SURVEY-LOCATED.

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AND WETLAND SCIENTIST IN ACCODANCE WITH TOWN OF CORTLANDT

1. WETLAND INVESTIGATION COMPLETED JUNE 15, 2023 BY PAUL JAEHNIG-

MAP NOTES

CERTIFIED PROFESSIONAL GEOLOGIST, SOIL SCIENTIST,

Scale: 1 inch = 40 ft.