



JOSEPH R. THEROUX

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FORESTRY SERVICES ~ WETLAND IMPACT ASSESSMENTS
WETLAND DELINEATIONS AND PERMITTING ~ E&S/SITE MONITORING
WETLAND FUNCTION/VALUE ASSESSMENTS

5/24/2021

TOWN OF BROOKLYN
INLAND WETLANDS AND WATERCOURSES COMMISSION
69 SOUTH MAIN ST.
BROOKLYN, CT. 06234

RE: WETLAND DELINEATION, 181 PARADISE DR. BROOKLYN, CT.

DEAR COMMISSIONERS:

AT THE REQUEST OF MR. O'CONNOR, I HAVE DELINEATED THE INLAND WETLANDS AND WATERCOURSE ON THE SUBJECT PROPERTY.

THESE WETLANDS AND WATERCOURSE HAVE BEEN DELINEATED IN ACCORDANCE WITH THE STANDARDS OF THE NATIONAL COOPERATIVE SOIL SURVEY AND THE DEFINITIONS OF WETLANDS AND WATERCOURSES AS FOUND IN THE CONNECTICUT STATUTES, CHAPTER 440, SECTIONS 22A-38.

FLUORESCENT PINK FLAGS WITH A CORRESPONDING LOCATION NUMBER DELINEATE THE BOUNDARIES OF THESE INLAND WETLANDS/WATERCOURSE AND THE ADJACENT UPLAND SOILS.

WETLAND FLAGS WF- 1 THROUGH WF-16 DELINEATE THE HIGH WATER MARK AND/OR THE ADJACENT WETLAND SOILS ALONG THE SHORE OF TATNIC POND.

IN SOME AREAS THE DELINEATION LINE WAS THE HIGH WATER MARK WHERE IT MEETS THE UPLAND SOILS. IN OTHER AREAS, WETLAND SOILS WERE FOUND ADJACENT TO THE SHORELINE.

ALONG SOME OF THE EASTERN PORTIONS OF THE SHORELINE, ESPECIALLY IN FRONT OF THE EXISTING RESIDENCE, HISTORIC FILL MATERIALS, (SAND, SILT, GRAVEL), WERE FOUND ON TOP OF THE ORIGINAL WETLAND SOILS.

THESE WETLAND SOILS ARE CHARACTERIZED BY THICK ORGANIC "A" HORIZONS, SHALLOW REDOXIMORPHIC FEATURES AND LOW CHROMA COLORS WITHIN 20 INCHES OF THE SOIL SURFACE.

UPLAND REVIEW AREA/WETLANDS ACTIVITIES:

THE MAJORITY OF THE ACTIVITY WITHIN THE UPLAND REVIEW AREAS INCLUDED THE CUTTING AND PROCESSING OF TREES AND BRUSH IN THE WESTERN PORTION OF THE PROPERTY, REMOVAL OF SIGNIFICANT QUANTITIES OF SCRAP AND GARBAGE, (NUMEROUS DUMPSTERS), THE BURNING OF BRUSH, RAKING, GRADING AND LEVELING AND THE ADDITION OF FILL MATERIALS SUCH AS CRUSHED STONE.

THE ACTIVITIES I OBSERVED WITHIN THE DELINEATED WETLAND SOILS ADJACENT TO THE POND WERE SOME LIMITED CUTTING OF SHRUB, SAPLING AND HERBACEOUS VEGETATION, RAKING AND GRADING ALONG THE SHORELINE, AND THE DEPOSITION OF CRUSHED STONE ALONG THE DELINEATION LINE IN FRONT OF THE RESIDENCE.

WETLAND IMPACTS:

THE REMOVAL OF HERBACEOUS AND SHRUB VEGETATION DIRECTLY ADJACENT TO THE SHORELINE IN THE WESTERN PORTION OF THE PARCEL HAS IMPACTED THE HABITAT IN THE RIPARIAN ZONE. PRIOR TO THIS, THE HABITAT AND COVER FOR WILDLIFE WAS SUBSTANTIALLY BETTER DUE TO THE DENSE VEGETATION. CURRENTLY THERE IS SIGNIFICANTLY LESS COVER.

THE GROUND DISTURBANCE ASSOCIATED WITH THE VEGETATION CUTTING, RAKING, GRADING AND LEVELING WAS MINIMAL AND DID NOT INTRODUCE ANY SIGNIFICANT AMOUNTS OF SEDIMENT INTO THE POND. THIS IS DUE TO THE MINIMAL LEVELS OF DISTURBANCE AND LEVEL TOPOGRAPHY ADJACENT TO THE POND.

THE MAJORITY OF THE FILLING THAT OCCURRED WITHIN THE DELINEATION LINE WAS HISTORIC IN NATURE, AS EVIDENCED BY THE DENSE COMPOSITION OF THE FILL/SOILS, AND WELL-ESTABLISHED ROOT SYSTEMS FROM HERBACEOUS AND SHRUB VEGETATION. ONLY MINIMAL AMOUNTS OF FILL WERE RECENTLY PLACED.

ALTHOUGH THE REMOVAL OF THE UNDERSTORY VEGETATION ADJACENT TO THE SHORELINE HAS CHANGED THE SHORELINE HABITAT, IN MY OPINION, THESE ACTIVITIES HAVE NOT CAUSED AN ADVERSE IMPACT TO THE POND OR WETLAND FUNCTIONS/VALUES. CURRENTLY, THE HERBACEOUS VEGETATION IS RE-SPROUTING, (FERNS, SKUNK CABBAGE, ETC.)

RECOMMENDATIONS:

I WOULD RECOMMEND THE FOLLOWING:

- 1.) INSTALL SILT FENCING OR STAKED HAYBALES ALONG THE SHORELINE TO PREVENT ANY POTENTIAL SEDIMENTS FROM ENTERING THE POND UNTIL THE AREA IS STABILIZED AFTER ANY FURTHER PERMITTED GRADING ACTIVITIES.
- 2.) IMMEDIATELY SEED AND MULCH ANY AREAS THAT ARE DESIRED AS LAWN AREAS.

- 3.) ALONG THE EDGE OF THE LAKE NOT BEING CONSIDERED AS LAWN OR OPEN AREAS, SEED WITH NEW ENGLAND WETMIX SEED MIX TO RE- ESTABLISH HERBACEOUS WETLAND VEGETATION.
- 4.) IN AREAS WHERE SHRUB SPECIES ARE NEEDED, PLANT A MIX OF SWEET PEPPERBUSH, SPICEBUSH, WINTERBERRY OR SIMILAR WETLAND SHRUB SPECIES.

TAKING INTO CONSIDERATION THE CONDITION OF THE PROPERTY AND THE WETLANDS/SHORELINE PRIOR TO THE REMOVAL OF ALL OF THE SCRAP AND GARBAGE, AND THE FACT THAT THE WETLANDS HAVE BEEN HISTORICALLY FILLED, I THINK THAT THE MAJORITY OF THESE ACTIVITIES ALTHOUGH UNPERMITTED, HAVE IMPROVED THE OVERALL ENVIRONMENTAL QUALITY OF THE AREA.

IN CONCLUSION, IF YOU HAVE ANY QUESTIONS CONCERNING THE DELINEATION OR THIS REPORT, PLEASE FEEL FREE TO CONTACT ME.

THANK YOU,

Joseph R. Theroux

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