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MAY 22 2024
Planning & Development
Town of Waterford, CT

# TOWN OF WATERFORD
## Application for Inland Wetland / Watercourse Permit

**Type of Application:**
Permitted Use, Section 4.1 _____
Unregulated Activities, Section 4.2 _____
Regulated Activities, Section 6 ✓ Fee: 160.00

**Agency Use:**
Date Received: 5/23/2024
Received By: _____
Application Number: C-24-05

| | | | |
|---|---|---|---|
| **1. Applicant:** 1721, LLC | | **Phone:** 203-348-8378 | |
| **Address:** 205 Willowbrook Avenue Stamford | | **State:** CT | **Zip:** 06385 |
| **Fax:** | **E-Mail:** august.lenhart@gmail.com | | |
| **2. Owner:** <same as applicant> | | **Phone:** | |
| **Address:** | | **State:** | **Zip:** |
| **Fax:** | **E-Mail:** | | |
| **3. Agent:** Indigo Land Design, LLC (Joe Wren, PE) | | **Phone:** 860-388-9343 | |
| **Address:** 40 Elm St., 2nd Fl. Old Saybrook | | **State:** CT | **Zip:** 06475 |
| **Fax:** | **E-Mail:** jwren@indigo-land.com | | |
| **4. Property Address:** 430 Mohegan Avenue Parkway & 23B Old Norwich Road Tax Map 76 Lots 10164 & 5600 | | | |
| **5. Abutting Property Owners – Complete Attached Form** <see attached> | | | |
| **6. Activity to be Reviewed and / or Licensed (attach sheet if necessary):** <see attached> | | | |
| **7. Description of Proposed Activity (attach sheet if necessary):** <see attached> | | | |
| **8. Purpose of Activity (attach sheet if necessary):** <see attached> | | | |
| **9a. Acreage of Property:** 5.716 ac | | **9b. Acreage of Wetlands:** 0.042 ac. (on-site) | |
| **10. Acreage of Wetlands Altered:** 0.0 - None | | | |
| **11. Wetland Mitigation Proposed:** 0.0 - None | | | |
| **12. Section 7 and sections 8.1 & 8.2 of the Town of Waterford "Inland Wetlands and Watercourse Regulations" have been complied with: (Review attached check list)** | | **Yes:** ✓ | **No:** |

**The applicant / owner hereby gives the Commission, its agent and consultants the right of free access to any part of the property under consideration. The undersigned warrants the truth of all statements contained herein and in all supporting documents according to the best of his / her knowledge, information and belief.**

| | | |
|---|---|---|
| **Applicant:** | | **Date:** 5-21-24 |
| **Owner:** <same as applicant> | | **Date:** 5-21-24 |
| **Agent:** Joseph Wren | | **Date:** 5-21-24 |

**TOWN OF WATERFORD**

**Application for Inland Wetland / Watercourse Permit**

***1721, LLC***
***430 Mohegan Avenue Parkway & 23B Old Norwich Road***

## 6. Activity to be Reviewed and / or Licensed (attach sheet if necessary):

The activity to be reviewed includes some clearing and grading in the 100' upland review area for the construction of two stormwater management basins. A portion of the 100' URA on site will be retained, the majority of the URA width on site is proposed to be 75 feet, and a small portion in the northeast corner will be 50 feet but, in no case, is the URA width proposed to be less than 50 feet.

## 7. Description of Proposed Activity (attach sheet if necessary):

The applicant is proposing a 24-unit (16 single-family homes and 4 duplex-style homes) 8-30g affordable housing development on the subject property. All proposed buildings, roadways, utilities, stormwater basins are proposed beyond the 100' URA. Some clearing and grading is necessary within the outer fringes of the URA for the construction of the stormwater management basins. The proposed activity within 100 feet from the wetlands for this project is limited to clearing and grading and will be revegetated ~ this area of disturbance is approximately 0.15 acres. There is no proposed work within any wetland area or within 50 feet of any wetland area.

## 8. Purpose of Activity (attach sheet if necessary):

As mentioned above, the purpose of the activity is for clearing and grading in the URA for the construction of the two proposed stormwater management basins. The entire disturbed area within the URA will be revegetated and no other improvements are proposed within the URA.

| Conservation Commission Permit Application Attachment | | | Properties Adjacent to: | |
|---|---|---|---|---|
| | | | | |
| **Owner** | **Parcel ID#** | | **Property Address** | **Mailing Address** |
| | | | | |
| 1721 LLC | 523010 | | 430 MOHEGAN AVE PKWY | 49 TWIN LAKES DR WATERFORD, CT 06385 |
| | | | | |
| 1721 LLC | 00000023B | | 23B OLD NORWICH ROAD | 49 TWIN LAKES DR WATERFORD, CT 06385 |
| | | | | |
| 1721 LLC | 00000023A | | 23A OLD NORWICH ROAD | 49 TWIN LAKES DR WATERFORD, CT 06385 |
| | | | | |
| 1721 LLC | 523011 | | ROBERTS COURT | 49 TWIN LAKES DR WATERFORD, CT 06385 |
| | | | | |
| ARNOLD WAYNE P & AMY L | 523000 | | 23 OLD NORWICH ROAD | 23 OLD NORWICH ROAD QUAKER HILL, CT 06375 |
| | | | | |
| CONNECTICUT COLLEGE | 522800 | | 13 OLD NORWICH ROAD | 270 MOHEGAN AVE NEW LONDON, CT 06320 |
| | | | | |
| MAGEE GREGORIO C | 616200 | | 8 ROBERTS COURT | 8 ROBERTS CT QUAKER HILL, CT 06375 |
| | | | | |
| MILLER JENNIFER L | 616100 | | 7 ROBERTS COURT | 7 ROBERTS COURT QUAKER HILL, CT 06375 |
| | | | | |
| SABILIA CORINNE | 436600 | | 432 MOHEGAN AVE PKWY | 432 MOHEGAN AVENUE PARKWAY QUAKER HILL, CT 06375 |
| | | | | |
| TAYLOR STEPHEN P & MARTIN RICHARD V | 523400 | | 27 OLD NORWICH ROAD | 27 OLD NORWICH RD QUAKER HILL, CT 06375 |
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**CLAEngineers, Inc.**
Civil • Structural • Survey

317 MAIN STREET • NORWICH, CT 06360 • (860) 886-1966 • (860) 886-9165 FAX

April 23, 2024

Joe Wren, PE
Principal
Indigo Land Design, LLC
40 Elm Street, 2nd Floor

Re: 430 Mohegan Avenue Parkway
23B Old Norwich Rd
Waterford CT
CLA –7572

Dear Mr. Wren:

At your request, CLA Engineers delineated inland wetlands on the referenced parcel according to the State of Connecticut statutory definition as described in C.G.S. Section 22a. CLA conducted fieldwork in February, March and April of 2024 and delineated the inland wetland boundary with sequentially numbered pink flagging tape. This letter documents the wetland delineation and the soils encountered on the site.

**Site Setting**

The site is currently undeveloped except for a sanitary sewer that runs along the northerly side from Roberts Court to Mohegan Avenue Parkway. The vegetation is in an early stage of old field succession and dominant vegetation includes multiflora rose (*Rosa multiflora*) barberry (*Berberis thumbergii*) reaspberry (*Rubus spp.*) Where trees occur, they include red maple (*Acer rubrum*) tree of heaven (*Ailanthus altissma*) hickories (*Carya spp.*) and black walnut (*Juglans nigra*).

The current land use surrounding the site is predominantly residential to the west, north and east. Connecticut College is located to the south.

The topography of the site features moderate to gentle hillslopes with high elevations of approximately 168' NAVD on the southwestern side of the site down to elevation approximately118' in a bowl like depression on the eastern edge of the site. Surface water flows offsite to east under Mohegan Avenue Parkway via a culvert. The water eventually flows into Mamacoke Cove. Fill, in the form of boulders, was historically placed along upland edge of wetland and subsurface flow emanates from boulder fill area.

**Soils**

Southern New England was overlain by glacial ice as recently as 12,000-15,000 years ago during the Wisconsin glaciation. The materials that the glaciers deposited over top the local bedrock determine the surficial geology of the region and of the site. These glacial deposits are generally divided into three categories: glacial till (un-stratified sand, silt and rock), glaciofluvial (water sorted, stratified sand and gravel), and glaciolacustrine (stratified sand, silt and clay that settled out in lakebeds). The original type of glacial deposit present on the site is glacial till. This finding is based on on-site–observations and the NRCS mapping (attached) that shows the soil series mapped as (51) Sutton, (61) Canton and Charlton and (84) Paxton and Montauk.

The soils on the site have been re-graded for the existing site development within the sewer easement. The slopes down to the wetlands reflect past grading and filling.

Table 1 is a sumary table of the soils found on the site. Appendix A provides additional soil data

**Table 1 - Soil Types and Properties at the 430 Mohegan Avenue Parkway Site**

| Soil Series | Parent Material | Drainage Class | Texture/Characteristics |
|---|---|---|---|
| 3 Ridgebury, Leicester, Whitman* | Glacial till with dense layer | Somewhat Poorly to very poorly drained | Sandy loam |
| 51 Sutton | Glacial till | Moderately well drained | Sandy loam |
| 61 Canton and Charlton | Glacial till | Well Drained | Sandy loam |
| 84 Paxton and Montauk | Glacial till | Well Drained | Sandy Loam |

* Wetland soil types on site, not mapped by NRCS

The Ridgebury, Leicester and Whitman series consists of very deep, somewhat poorly to poorly drained soils formed in lodgment till derived mainly from granite, gneiss and/or

schist. They are commonly shallow to a densic contact. They are nearly level to gently sloping soils in depressions in uplands.

The Sutton series consists of very deep, moderately well drained loamy soils formed in melt-out till. They are nearly level to strongly sloping soils on hills, low ridges, and ground moraines, typically on footslopes, lower backslopes and in slight depressions.

The Canton and Charlton series consists of very deep, well drained soils formed in a loamy mantle underlain by sandy till. They are on nearly level to very steep moraines, hills, and ridges.

The Paxton and Montauk series consists of well drained loamy soils formed in lodgment till. The soils are very deep to bedrock and moderately deep to a densic contact. They are nearly level to steep soils on hills, drumlins, till plains, and ground moraines. (Source: NRCS https://soilseries.sc.egov.usda.gov)

**Wetland Description**

This site has one wooded wetland system that system that continues to the east. Citation: (https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/.)

**I. Classification code: PFO1E**

System **Palustrine (P)** : The Palustrine System includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 ppt. It also includes wetlands lacking such vegetation, but with all of the following four characteristics: (1) area less than 8 ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5 m (8.2 ft) at low water; and (4) salinity due to ocean-derived salts less than 0.5 ppt.
Class **Forested (FO)** : Characterized by woody vegetation that is 6 m tall or taller.
Subclass **Broad-Leaved Deciduous (1)** : Woody angiosperms (trees or shrubs) with relatively wide, flat leaves that are shed during the cold or dry season; e.g., black ash (Fraxinus nigra).
Water Regime **Seasonally Flooded/Saturated (E)** : Surface water is present for extended periods (generally for more than a month) during the growing season, but is absent by the end of the season in most years. When surface water is absent, the substrate typically remains saturated at or near the surface.

The on-site wetland has predominantly of red maple trees in the canopy. The understory is a dense tangle of multiflora rose and Japanese barberry. Also present were jewelweed (*Impatiens capensis)* and skunk cabbage *(Symplocarpus foetidus).*

**Vernal Pool Investigation**

CLA conducted on-site investigations of the wetland on March 15, 2024 and April 8 2024. These dates coincided with site visits to other, known vernal pools in coastal southeastern Connecticut, which had wood frog and spotted salamander egg masses present. No wood frog or spotted salamander egg masses were found at the site, nor was there any other evidence of reproduction of vernal pool species. The maximum depth of water present in the wetland was six inches. Given this hydrology, it is not surprising that the wetland does not support vernal pool species.

**Potential for Wetland Impacts**

CLA understands that the proposed development, as designed by Indigo land Design LLC, has the following characteristics:

- A 75-foot vegetated buffer will be maintained around the inland wetland.
- The stormwater treatment system is designed to meet the CTDEEP 2004 Manual as revised to 2024.
- The Erosion and Sedimentation controls have been designed to be consistent with the CTDEEP 2002 Manual as revised to 2024.

Given that lack of direct wetland impacts and the three factors mentioned above, CLA believes that the project can be constructed without adverse impacts to inland wetlands.

Please contact me if you have any questions.

Sincerely,

Robert C Russo

Robert C. Russo CSS

# Appendix A
# Soils Data

Soil Map—State of Connecticut, Eastern Part
(Roberts Ct)

Map Scale: 1:2,270 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 30 60 120 180

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

## MAP LEGEND

**Area of Interest (AOI)**

- Area of Interest (AOI)

**Soils**

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

**Special Point Features**

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

**Water Features**

- Streams and Canals

**Transportation**

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

**Background**

- Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut, Eastern Part
Survey Area Data: Version 1, Sep 15, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 14, 2022—Oct 6, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| 51B | Sutton fine sandy loam, 0 to 8 percent slopes, very stony | 4.1 | 21.6% |
| 60B | Canton and Charlton fine sandy loams, 3 to 8 percent slopes | 0.8 | 4.1% |
| 60D | Canton and Charlton soils, 15 to 25 percent slopes | 1.1 | 5.6% |
| 61B | Canton and Charlton fine sandy loams, 0 to 8 percent slopes, very stony | 5.4 | 28.0% |
| 61C | Canton and Charlton fine sandy loams, 8 to 15 percent slopes, very stony | 3.9 | 20.2% |
| 73E | Charlton-Chatfield complex, 15 to 45 percent slopes, very rocky | 1.1 | 5.6% |
| 84C | Paxton and Montauk fine sandy loams, 8 to 15 percent slopes | 2.9 | 15.0% |
| **Totals for Area of Interest** | | **19.2** | **100.0%** |