

Ian T. Cole

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November 23, 2021

Mr. Steve Giudice, P.L.S; Principal Harry E. Cole & Sons 876 South Main Street Plantsville, CT 06479

<u>RE: Wetland Delineation, 570 Meriden – Waterbury Road (Rte. 322), Assessor's Parcel</u> <u>ID 024133, Southington, Connecticut.</u>

Dear Mr. Giudice:

At your request, I completed a wetland field survey of the above referenced 9.95-acre property at 570 Meriden Waterbury Road.

Wetland Delineation Methodology

A site-specific wetland survey was completed in accordance with the standards of the Natural Resources Conservation Services (NRCS) National Cooperative Soil Survey and the definitions of inland wetlands and watercourses as found in the Connecticut General Statutes, Chapter 440, Sections 22a-36 through 22a-45 as amended. Wetlands, as defined by the Statute are those soil types designated as poorly drained, very poorly drained, floodplain or alluvial in accordance with the NRCS National Cooperative Soil Survey. Such areas may also include disturbed areas that have been filled, graded, or excavated and which possess an aquic (saturated) soil moisture regime.

Watercourses means rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs, and all other bodies of water, natural or artificial, vernal, or intermittent, public, or private, which are contained within, flow through or border upon the Town of Southington or any portion thereof not regulated pursuant to sections 22a-28 through 22a-35, inclusive, of the Connecticut General Statutes. Intermittent watercourses are defined permanent channel and bank and the occurrence of two or more of the following characteristics: (a) evidence of scour or deposits of recent alluvium or detritus, (b) the presence of standing or flowing water for duration longer than a particular storm incident, and (c) the presence of hydrophytic vegetation.

Findings

The wetland survey was completed on November 10, 2021. The survey examined the upper 20" of the soil profile for the presence of hydric soil conditions and if present; to delineate any wetland and watercourse boundaries located on the property. The field survey was completed during blue sky conditions.

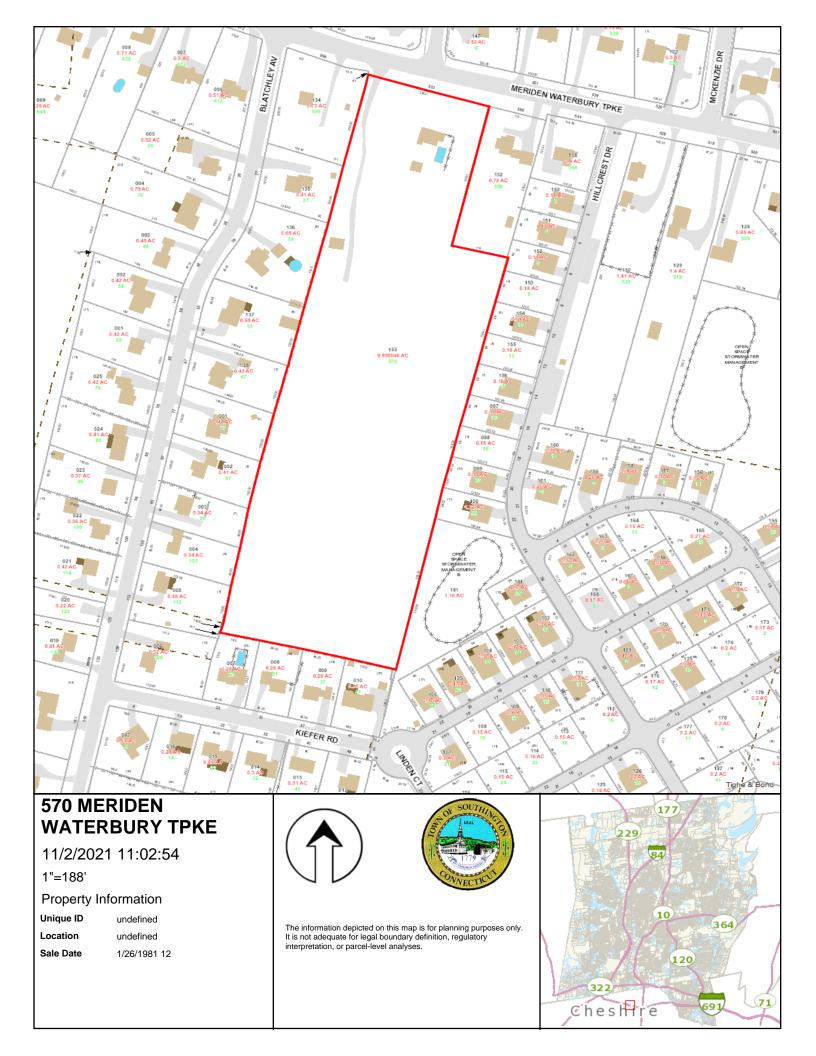
After examining the existing soil, hydrology, and vegetation it is my professional opinion that there are *no jurisdictional inland wetlands or watercourses* on the property.

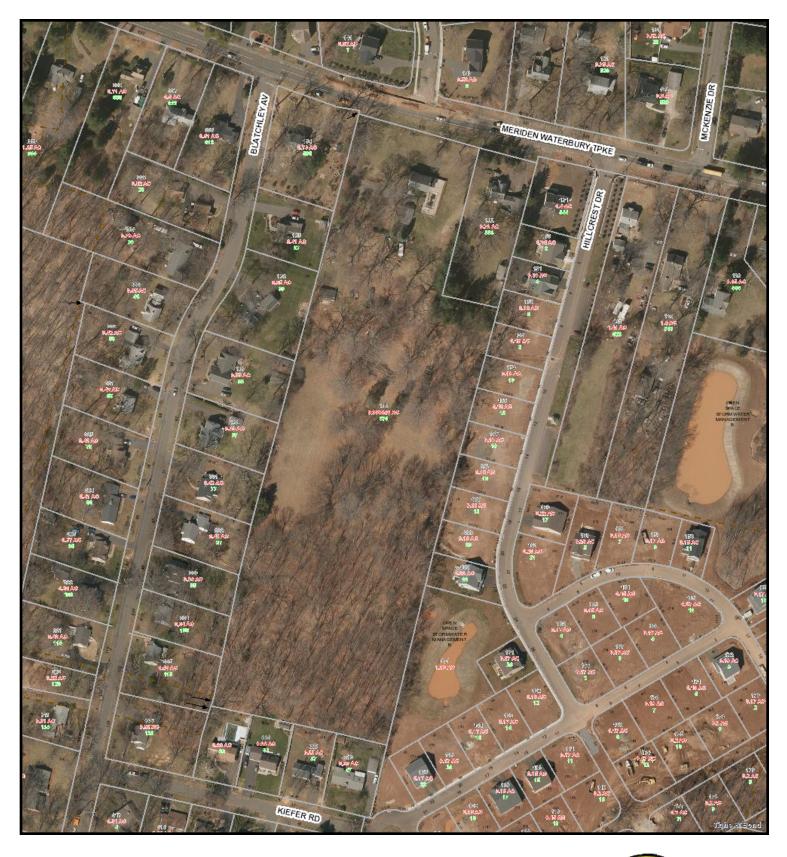
There is an existing house and associated appurtenances located in the northern portion of the property neighboring to the road frontage of Meriden -Waterbury Road. The remainder of the land use is classified as an undeveloped hardwood forest. The woodlands are vegetated with a variety of mature hardwood trees including oak, beech, ash, tulip, and maple species. The property has a "park like" setting as the subordinate shrub layer of the tree species above is sparce.

A notable channel subject to stormwater flowage bisects the southern extents of the property. Stormwater overflow from the Hillcrest subdivision stormwater detention basin cuts across the property (*from east to west*) draining to a collection point consisting of 2 - 15" culverts located in a rip-rap basin in the back yard of 113 Blatchley Ave. This channel is classified an erosional feature subject to storm flowage only and does not qualify as an intermittent watercourse.

At the time of my field visit on November 10, 2021, the channel was dry and there was little to no evidence of seasonal or persistent flow. The presence of a drainage channel is not a standalone qualifier to be automatically classified as a watercourse. To qualify drainage as a watercourse the feature needs to exhibit two of three defining parameters. Intermittent watercourses are defined as a permanent channel and bank and the occurrence of two or more of the following characteristics: (a) evidence of scour or deposits of recent alluvium or detritus, (b) the presence of standing or flowing water for duration longer than a particular storm incident, and (c) the presence of hydrophytic vegetation.

While the subject erosional feature does have a narrow, shallow channel with evidence of scour, it lacks a predominance of hydrophytic vegetation, is absent of hydric soil development and has demonstrated that base flow does not persist longer than a particular storm event. A second field visit was completed on November 14^{th} , following an intense >1" storm event that occurred overnight Saturday 11/13/2021. The purpose of the field inspection was to witness hydrology conditions within the stream channel following the >1" storm event. On Sunday the day following the storm the channel had showed evidence of flow in the leaf litter, however by morning the entire channel again dry, demonstrating that the sole source of this flashy hydrology is the Hillcrest detention system overflow.

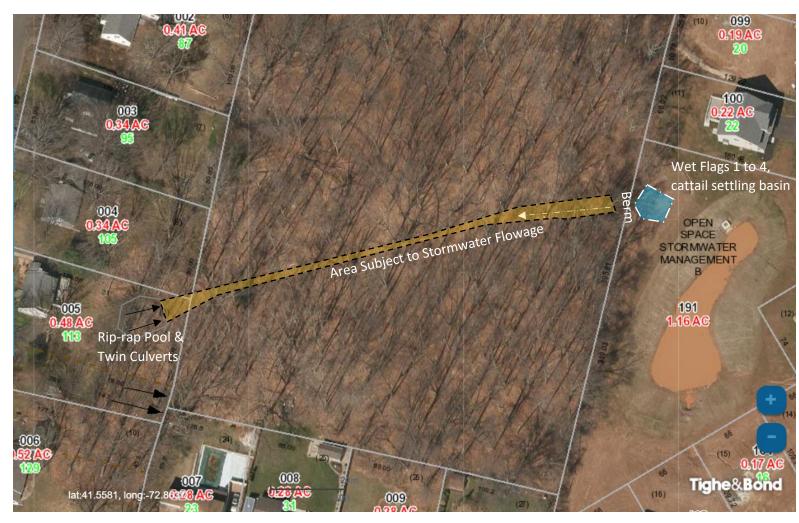




11/2/2021 8:49:46 PM

Scale: 1"=188' Scale is approximate

The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analyses.



Wetland / Natural Resource Survey Sketch November 10, 2021

Drainageway – non-jurisdictional



Photo 1: Hillcrest Drive Detention Basin



Photo 2: Hillcrest Drive Detention Outlet Settling Basin (offsite)– Flagged as wetland- vegetated by cattail. This man-made feature is segregated from the subject property by an earthen berm.



Photo 3: Draw in landscape that is subject to stormwater flowage preceding intense rain events, as seen in the photo there is little evidence of flow path although a cryptic channel does exist if you brush off the forest floor leaf litter, however, the channel lacks persistent flow, has no evidence of wetland soil, and does not have wetland vegetation, therefore the feature does not qualify as a regulated intermittent watercourse.



Photo 4: "flow" path heading towards receiving twin culverts behind 113 Blatchley Ave



Photo 5: Receiving Culverts behind 113 Blatchley Ave

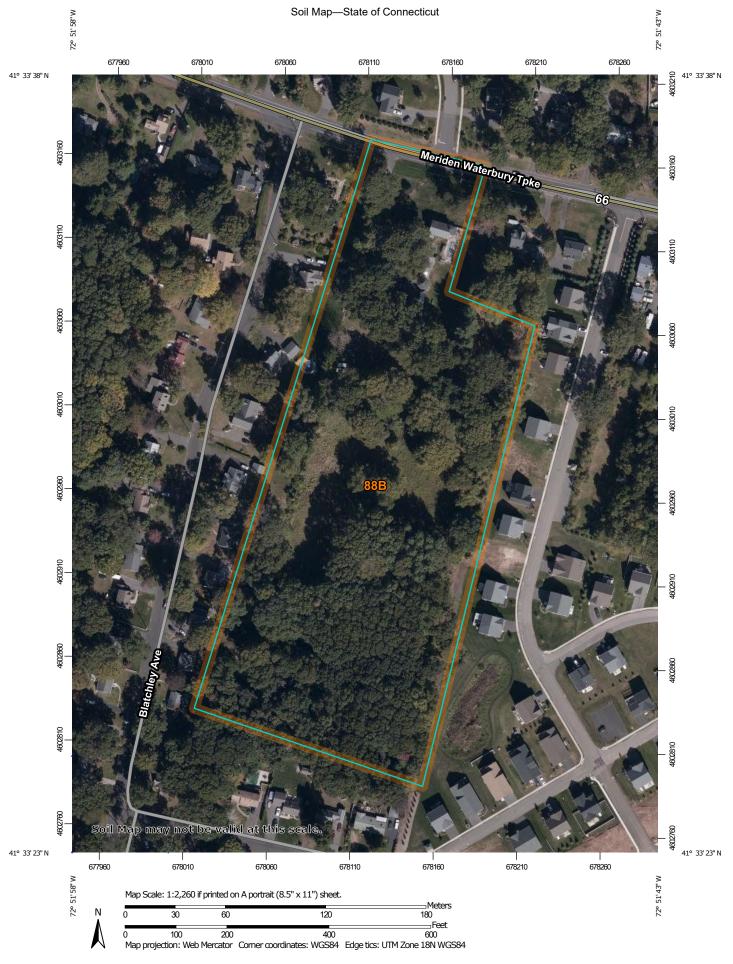


Photo 6: Channel conditions on morning of November 14th, 2021, preceding intense >1" rain event the night before. Note lack of standing or flowing water, evidence of the flashy nature of the hydrology which is tied to the overflow discharge from the Hillcrest subdivision stormwater management system.

Soil Survey

The soils identified on-site are a refinement of the Natural Resources Conservation Service (NRCS) Websoil Soil Survey.

The soils mapped and classified on the property belong to the Wethersfield soil series. These well drained upland soils formed from coarse-loamy melt-out till. Generally, Wethersfield soils have about 2 feet of fine sandy loam subsoil over gravely sandy loam parent material. The soils on the property are generally level with slopes ranging from 3-8%.



Web Soil Survey National Cooperative Soil Survey

MAP LEGEND		MAP INFORMATION	
Area of Interest (AOI)	😂 Spoil Area	The soil surveys that comprise your AOI were mapped at	
Area of Interest (AOI)	A Stony Spot	1:12,000.	
Soils	Very Stony Spot	Warning: Soil Map may not be valid at this scale.	
Soil Map Unit Polygons	wet Spot	Enlargement of maps beyond the scale of mapping can cause	
Soil Map Unit Lines	∆ Other	misunderstanding of the detail of mapping and accuracy of s line placement. The maps do not show the small areas of	
Soil Map Unit Points	Special Line Features	contrasting soils that could have been shown at a more detailed	
Special Point Features		scale.	
Image: Blowout Image: Borrow Pit	Streams and Canals	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)	
💥 Clay Spot	Transportation +++ Rails		
Closed Depression	Interstate Highways		
Gravel Pit	JS Routes	Maps from the Web Soil Survey are based on the Web Mercato projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the	
Gravelly Spot	殸 Major Roads		
🔇 Landfill	Local Roads	Albers equal-area conic projection, should be used if more	
🙏 🛛 Lava Flow	Background	accurate calculations of distance or area are required.	
Arsh or swamp	Aerial Photography	This product is generated from the USDA-NRCS certified data a of the version date(s) listed below.	
Mine or Quarry		Soil Survey Area: State of Connecticut	
9		Survey Area Data: Version 21, Sep 7, 2021	
 Perennial Water Rock Outcrop 		Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.	
Saline Spot		Date(s) aerial images were photographed: Aug 30, 2019—Oc	
Sandy Spot		15, 2019	
Severely Eroded Spot		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.	
Sinkhole			
Slide or Slip			
Sodic Spot			



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
88B	Wethersfield loam, 3 to 8 percent slopes, very stony	10.9	100.0%
Totals for Area of Interest		10.9	100.0%



Please do not hesitate to contact me at <u>itcole@gmail.com</u>; (860) 514-5642 if you have any questions or need any additional information.

Sincerely,

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Ian T. Cole Professional Registered Soil Scientist Professional Wetland Scientist #2006