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## ***Ian Cole, LLC***

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March 25, 2024

Attorney Mark J. Cook, Esq.  
Tobin, Carberry, O'Malley, Riley & Selinger, P.C.  
PO Box 58  
43 Broad Street  
New London, CT 06320

**RE: *Wetland Delineation Report: QCELLS Battery Energy Storage System Facility Site, 40 Norwich Road (State Highway Rte.32), HQCA Energy Solutions, LLC, Waterford, Connecticut.***

Dear Mr. Cook,

At your Firm's request and on behalf of your client, HQCA Energy Solutions, LLC, I completed a field survey of the above referenced .98-acre Project Site located at 40 Norwich Road in Waterford, Connecticut in search of jurisdictional freshwater inland wetlands and watercourses.

### **WETLAND DELINEATION METHODOLOGY**

A 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 Waterford 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.

## **RESULTS**

The on-site wetland survey was completed on March 11, 2024, to examine the upper 20" of the soil profile for the presence of hydric soil conditions and if present to delineate any wetland and/or watercourse boundaries located within the survey area. 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 subject parcel. The parcel is developed with the bulk of the eastern half of the property covered by impervious surface by either asphalt parking, other impervious surface and/or buildings with a strip of lawn along the road frontage.

It should be noted that a stormwater swale parallels the south property line (Photo 4). The swale periodically receives stormwater runoff from Norwich Road, but the swale does not qualify as a regulated wetland or watercourse feature because 1. The stormwater drainage feature lacks stream bed and bank channel development, 2; does not host a predominance of hydrophytic vegetation, lacks evidence of detritus, erosion, or signs of alluvial deposition, 3; does not contain hydric soils 4; does not show evidence of persistent flow for longer than a particular storm event, and 5; the watershed and source of hydrology is generated solely from roadside runoff discharging from Norwich Road and is not from a naturally contributing source of hydrology.

The subject drainage ditch directs untreated stormwater into a topographically isolated scrub-shrub / forested wetland depression situated on the adjacent northwest corner of 30 Norwich Road (Photo 5). The neighboring wetland pocket is proximal to the southwestern corner of 40 Norwich Road, but the wetland feature does not encroach over the property line (see Photo 3 for reference). As illustrated on the Wetland Delineation Map, the off-site wet basin is solely on the adjacent 30 Norwich Road land which seasonally floods, collecting stormwater runoff and attenuating it as it slowly infiltrates back into the surrounding sandy soils.

## **SOIL SURVEY**

The soils identified on-site are a refinement of those mapped by the Natural Resources Conservation Service (NRCS) Websoil Soil Survey. The parcel has long been disturbed throughout. The soils are classified as belonging to the Urban Land which contains miscellaneous soil types that are present on the landscape in a complex pattern that is not practical or necessary to separate. These soils are used to denote moderately well to well drained earthen material which has been so disturbed by cutting, filling, or grading, that the original soil profile can no longer be discerned and are co-associated with buildings, roads, parking lots and landscaping of developed areas. Minor inclusions of Agawam loamy sands and Narragansett silt loams may be found in undisturbed pockets at the

western limits of the property. A copy of the NRCS Soil Survey is attached for your reference.

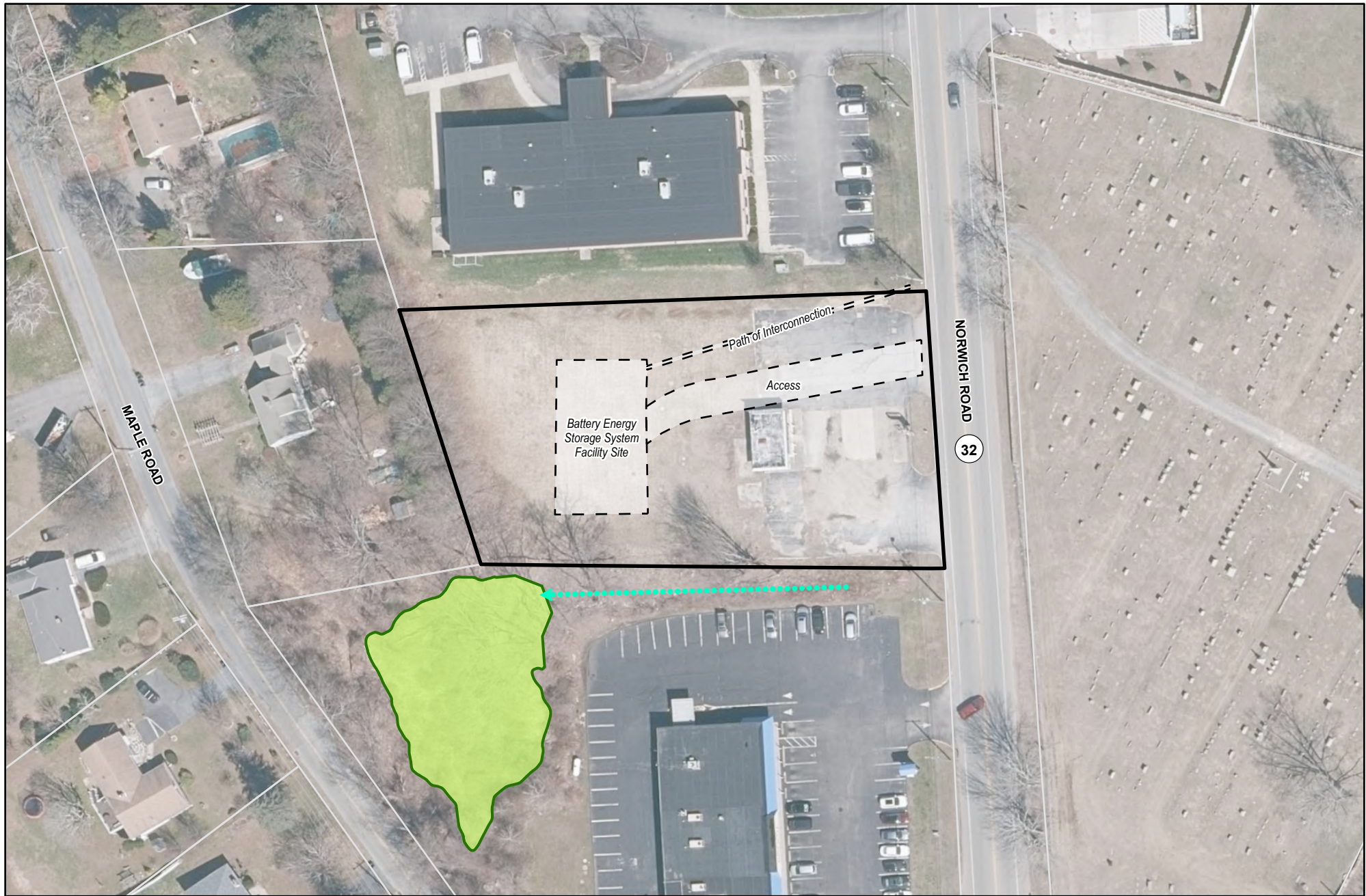
If you have any questions or comments, please do not hesitate to contact me at [itcole@gmail.com](mailto:itcole@gmail.com) or (860) 514-5642.

Sincerely,



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

ATTACHMENTS  
WETLAND DELINEATION MAP  
NRCS SOIL SURVEY  
SITE PHOTOS



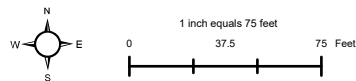
- Legend**
- Subject Property
  - Parcel Boundary
  - Proposed Battery Energy Storage System Facility Site Area
  - Drainage Ditch

- Delineated Wetland Boundary
- Delineated Wetland Area

### **Wetland Delineation Map**

QCELLS  
 40 NORWICH RD  
 WATERFORD (QUAKER HILL) CT 06375

Map Notes/Disclaimer:  
 Map Date: March, 2024  
 Base Map: CTECO 2019 Aerial Imagery  
 This map was created using GIS level data, and is NOT a survey. This map should be used for graphical and informational purposes only. This map has not been prepared for, or suitable for, legal, engineering, or surveying purposes. The data is presented "as-is" without any claims or warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented.



**Ian T. Cole**  
 Delineations without Delay



Soil Map—State of Connecticut, Eastern Part  
(40 Norwich Rd - Waterford)



Map Scale: 1:524 if printed on A landscape (11" x 8.5") sheet.

0 5 10 20 30 Meters


0 25 50 100 150 Feet

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
29B	Agawam fine sandy loam, 3 to 8 percent slopes	0.4	36.0%
66B	Narragansett silt loam, 2 to 8 percent slopes	0.1	11.2%
307	Urban land	0.6	52.7%
<b>Totals for Area of Interest</b>		<b>1.1</b>	<b>100.0%</b>

**WETLAND DELINEATION**

**SURVEY PHOTOS**

**MARCH 11, 2024**

**40 NORWICH ROAD**

**WATERFORD**

**CONNECTICUT**





Photo 1: View of Parcel from Norwich Road at Northeast Corner Looking Southwest



Photo 2: View of Parcel from Northwest Corner Looking East Across the Property.

*Wetland Delineations*

*Wetland Evaluations*

*Soil Evaluations*





Photo 3: View of Parcel from Southwest Corner Standing on Wetland Boundary Looking Towards the Proposed Battery Storage Area, Note Remnants of Silt Fence from Previous Site Work.



Photo 4: Existing Conditions of the Drainage Ditch Between 40 Norwich Road and 30 Norwich Road.





Photo 5: Example of the General Scrub-Shrub Conditions of the Adjacent Wetland on 30 Norwich Road.