

Wetland and Watercourse Delineation Report

For KCE CT 11 Battery Energy Storage System Project
Granby, Connecticut



Prepared for:
Key Capture Energy
25 Monroe Street
Albany, New York 12210



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1.0 Project Setting

The proposed KCE CT 11 Battery Energy Storage System (BESS) Project (Project) is located in the town of Granby, Hartford County, Connecticut. The Project is located within the watershed of the Farmington River.

To support avoidance and minimization of impacts to protected natural resources, Flycatcher LLC (Flycatcher) completed agency consultation, desktop review, and on-site surveys to investigate for the presence of natural resources to inform the Project design and development. This includes a wetland and watercourse delineation and vernal pool survey. Field surveys were completed on April 10, 2024, and on May 29, 2024. Though the Project does not intersect with any mapped polygons by the Connecticut Department of Energy and Environmental Protection's (DEEP) Natural Diversity Data Base (NDDb) program, outreach was initiated to NDDb to determine if there are any known locations of listed species within or adjacent to the Project site.

The Project's Survey Area is approximately 5 acres and covers one parcel located east of Salmon Brook Street (Route 202) and south of Mill Pond Road (Figure 1, Attachment 1). The Survey Area is undeveloped and is covered by second growth, mixed wood forest. There are commercial buildings along Mill Pond Road on the parcel to the north, and undeveloped land to the south. An intermittent stream and associated wetland extend across the western portion of the Survey Area, beginning at a culvert in the northwestern portion of the Survey Area and continues beyond the Survey Area to the south.

Topography on-site is highest on the western boundary and in the center of the Survey Area, with slopes extending down to wetland areas on the western portion of the site and apparent wetlands outside the Survey Area to the south and east. The central portion of the Survey Area, where development is proposed, has nearly level topography. The National Wetlands Inventory shows no wetlands or watercourses within the Survey Area, although a portion of a perennial stream is mapped in the northwestern corner of the Survey Area on the National Hydrography Database.

2.0 Soils

The Natural Resources Conservation Service (NRCS) medium intensity soil survey for Hartford County shows the following map units depicted within the Survey Area:

- Merrimac fine sandy loam, 0 to 3 percent slopes
- Hinckley loamy sand, 15 to 45 percent slopes

The NRCS mapped soils are not classified as hydric. On-site investigations confirmed the soils within upland areas are sandy loam to loamy sand and do not meet the definition of State wetlands. Additionally, hydric soils (histosol) were observed in the mapped wetland area as described in the following section.

3.0 Water Resources

3.1 Wetlands

Wetland delineations were conducted in accordance with the US Army Corps of Engineers (USACE) Wetland Delineation Manual¹ and the Northcentral and Northeast Regional Supplement.² Additionally, wetland and watercourses surveys were completed in accordance with the Connecticut Department of Energy and Environmental Protection's (DEEP) Inland Wetland and Watercourses Act³ and with the Town of Granby⁴ Inland Wetlands and Watercourses Regulations.

The Survey Area was investigated by a wetland scientist via a meander survey. When a location appeared to have hydrophytic vegetation, indicators of hydrology, or the presence of hydric soils an investigation was undertaken. The scientist analyzed site-specific data to determine if the area met the state and federal criteria to be considered a wetland. When wetlands were identified, the boundaries of the wetlands were marked with pink survey flagging with the word "Wetland Delineation" and numbered in sequential order.

Flycatcher mapped one (1) palustrine forested (PFO) wetland within the Survey Area. Soils are characterized as sandy loam and fine sandy loam with a thick organic horizon, thereby being classified as hydric soil indicator *Histosol (A1)*. A summary description of the wetland is provided in Table 1, below. The location of the wetland mapped within the Survey Area is depicted on Figure 2, in Attachment 1. Representative photographs are provided in Attachment 2.

3.2 Watercourses

Watercourse identification followed the DEEP's Inland Wetland and Watercourses Act definition of "Watercourses" (Chapter 440: Section 22a-38).³ If a watercourse meeting the above definition was observed, blue survey flagging was hung along the centerline (for streams less than six feet in width) or along the top of the bank (for streams six feet or wider).

Flycatcher mapped one intermittent watercourse within the Survey Area. The watercourse flows southwest across the Survey Area from the northwestern within the PFO floodplain wetland. The bank-full width is approximately 4-feet, bank height is approximately 0.5-inches, and substrate primarily consists of muck and sand. The location of the watercourse is depicted on Figure 2, in Attachment 1.

¹ USACE. (1987). *Corps of Engineers wetlands delineation manual*. Environmental Laboratory. Environmental Laboratory U.S. Army Corps of Engineers, Waterways Experiment Station, Wetlands Research Program

Technical Report Y-87-1. Vicksburg, MS. <https://usace.contentdm.oclc.org/digital/collection/p266001coll1/id/4532/>

² USACE (2012). *Regional supplement to the Corps of Engineers wetland delineation manual: Northcentral and Northeast region: Version 2.0*. Ed. J.S. Wakely, R.W. Lichvar and C.V. Noble. ERDC/EL TR-08-27. Vicksburg, MS:

U.S. Army. <https://usace.contentdm.oclc.org/utis/getfile/collection/p266001coll1/id/7640>

³ CTDEEP. (1972). *Inland wetlands and watercourses act: regulations of Connecticut State agencies: Chapter 440: Wetlands and watercourses*. https://www.cga.ct.gov/current/pub/chap_440.htm

⁴ Town of Granby Inland Wetlands and Watercourses Commission. (2018). *Town of Granby Inland Wetlands and Watercourses Regulations*. <https://www.granby-ct.gov/DocumentCenter/View/387/Wetlands-Regulations-PDF>

Table 1. Summary Descriptions of Wetlands Delineated Within the Survey Area

Resource ID	Cowardin Classification ¹	Hydrology Indicators	Dominant Vegetation	Hydric Soil Indicators	Description & Notes
W-JLH-1	PFO	Surface Water (A1), High Water Table (A2), Saturation (A3), Geomorphic Position (D2), Microtopographic Relief (D4)	Eastern hemlock (<i>Tsuga canadensis</i>), Green ash (<i>Fraxinus pennsylvanica</i>), Yellow birch (<i>Betula alleghaniensis</i>) Red maple (<i>Acer rubrum</i>), Common winterberry (<i>Ilex verticillata</i>), Skunk cabbage (<i>Symplocarpus foetidus</i>), spotted touch-me-not (<i>Impatiens capensis</i>)	Histosol (A1)	Toe of slope floodplain forested wetland; Extends outside the Survey Area to the south. Contains watercourse S-EEG-1.
1. Wetland classifications per USFWS' Cowardin et al. (1979) https://www.fws.gov/wetlands/Documents/Classification-of-Wetlands-and-Deepwater-Habitats-of-the-United-States.pdf					

4.0 Vernal Pool Survey

Vernal pools are temporarily/seasonally flooded wetlands that provide the primary breeding habitat for vernal pool indicator species, and a host of secondary faunal species.⁵ Wood frogs (*Lithobates sylvaticus*) spotted salamanders (*Ambystoma maculatum*), blue spotted salamanders (*Ambystoma laterale*), marbled salamander (*Ambystoma opacum*), Jefferson's salamander (*Ambystoma jeffersonianum*), and fairy shrimp (*Eubrachipus spp.*) are vernal pool indicator species that depend on vernal pools to complete their life cycle.⁶ Productivity of breeding vernal pool species is the primary metric used to assess vernal pool quality; thus, vernal pools must be assessed during the breeding season (generally March to late April).

Vernal pool surveys were conducted on April 10, 2024. Definitions from Calhoun et al. (2005) and the USACE Connecticut General Permit (2021) as well as the presence of indicator species were used to make vernal pool determinations.^{5,6} Flycatcher did not observe vernal pools or amphibian breeding habitat during the survey.

In addition to the vernal pool survey, an NDDDB preliminary determination request was submitted on July 23, 2024. A response has not been received from the program; however, a copy of the request is provided as Attachment 3.

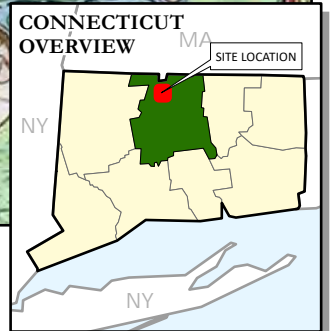
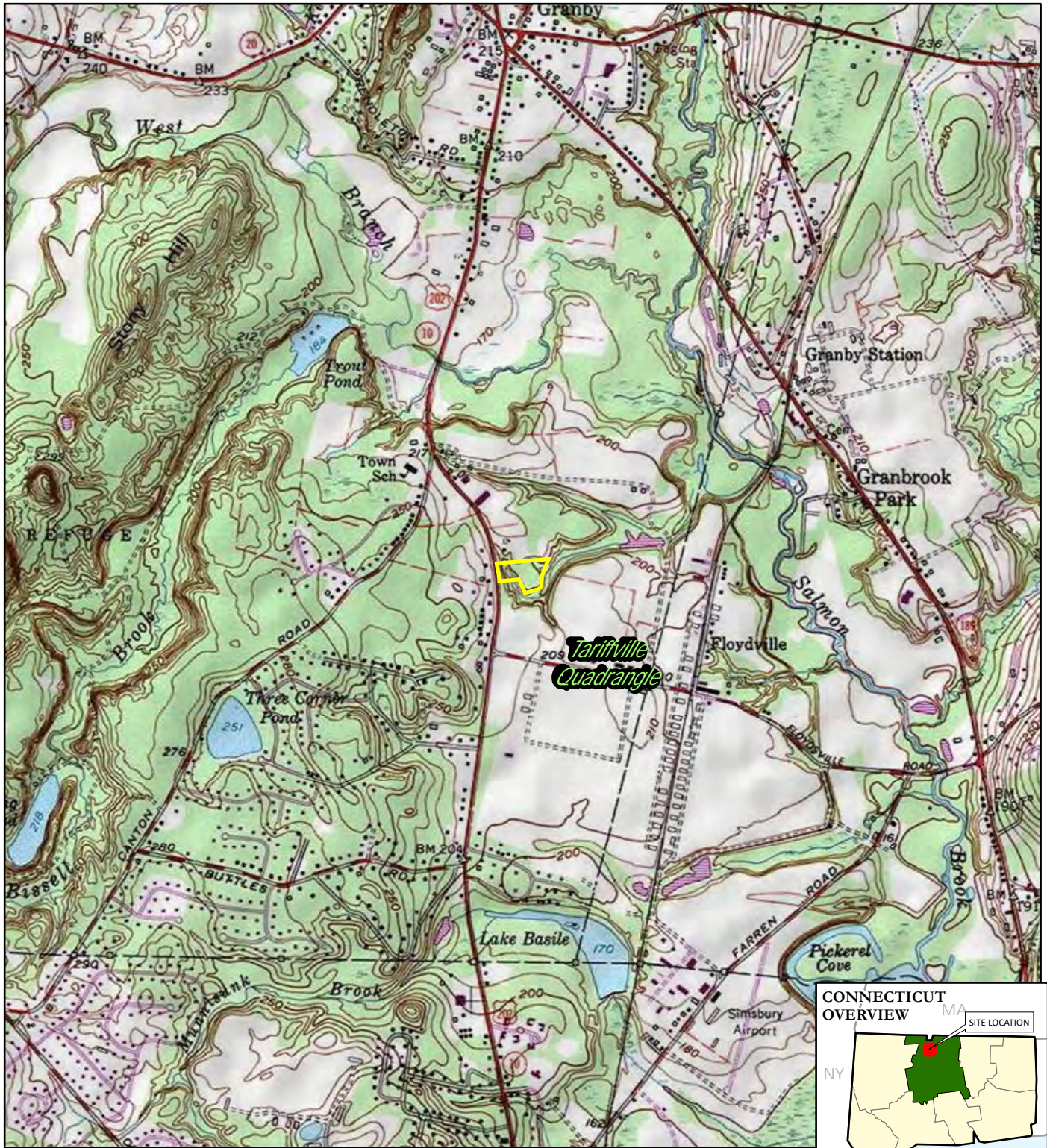
⁵ Calhoun, A. J., Miller, N. A., & Klemens, M. W. (2005). *Conserving pool-breeding amphibians in human-dominated landscapes through local implementation of Best Development Practices*. Wetlands Ecology and Management, 13, 291-304.

⁶ USACE (2021). *Department of the Army Regional General Permits for the State of Connecticut*.

<https://www.nae.usace.army.mil/Portals/74/docs/regulatory/StateGeneralPermits/CT/Connecticut-General-Permit-2021.pdf>

ATTACHMENT 1

Figures



BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES.



1" = 2,000'
1:24,000

0 2,000 4,000
FEET



PROJECT:

**KEY CAPTURE ENERGY
GRANBY CT11 BATTERY STORAGE PROJECT
GRANBY, HARTFORD COUNTY, CONNECTICUT**

LEGEND:



SURVEY AREA

USGS 7.5-MINUTE QUADRANGLE BOUNDARY

DRAWN BY:	D. KENWORTHY
CHECKED BY:	K. NICKERSON
MONTH:	JUNE
YEAR:	2024
PROJ. NO.:	22F-008
CLIENT:	KCE

FIGURE 1



LEGEND

- HOST PARCEL
- CULVERT
- UPLAND DRAINAGE
- DELINEATED INTERMITTENT STREAM
- DELINEATED WETLAND BOUNDARY
- DELINEATED WETLAND

NOTES:

- BASEMAP IMAGERY FROM ESRI/NAIP "WORLD IMAGERY" SERVICE LAYER.
- HOST PARCEL BOUNDARY BASED ON ALTA/NSPS LAND TITLE SURVEY PROVIDED BY BARTON AND LOGUIDICE.

PROJECT:

KEY CAPTURE ENERGY
CT 11 BATTERY STORAGE PROJECT
GRANBY, HARTFORD COUNTY, CT

TITLE:

WETLAND DELINEATION RESULTS

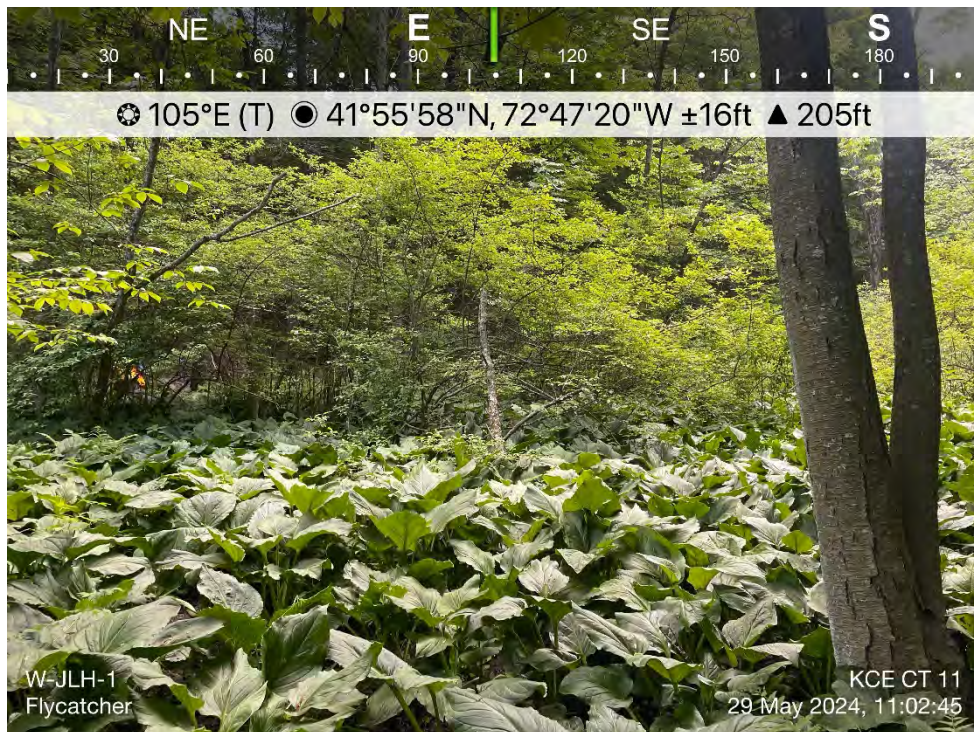
DRAWN BY:	D. KENWORTHY	PROJ NO.:	22-F008
CHECKED BY:	K. NICKERSON	FIGURE 2	
MONTH:	JULY		
YEAR:	2024		

FILE NO.: KCE_GranbyCT11_Petition_Fig5_Delin_11x17L.mxd

ATTACHMENT 2
Site Photographs



Wetland W-JLH-1



Wetland W-JLH-1



Wetland W-JLH-1



Watercourse S-EEG-1



Watercourse S-EEG-1



Watercourse S-EEG-1



Representative upland photo



Representative upland photo

Attachment 3
NDDB Preliminary Determination Request



Connecticut
**Department of Energy &
Environmental Protection**
WILDLIFE DIVISION

CPPU USE ONLY

App #: _____

Doc #: _____

Check #: No fee required

Program: Natural Diversity Database
Endangered Species

Hardcopy _____ Electronic _____

Request for Natural Diversity Data Base (NDDDB) State Listed Species Review

This form was auto-populated with information provided through the DEEP ezFile portal NDDDB review application.
There are no fees associated with NDDDB Reviews.

Part I: Preliminary Screening & Request Type

Before submitting this request, you must review the most current Natural Diversity Data Base "State and Federal Listed Species and Significant Natural Communities Maps" found on the [DEEP website](#). These maps are updated twice a year, usually in June and December.

This form is being submitted for a:

☒ New NDDDB request

☐ Renewal of a NDDDB Request **without**
modifications and within **two years** of issued
NDDDB determination (no attachments
required)

[CPPU Use Only - NDDDB-Listed Species Determination #
1736]

☐ New **Safe Harbor Determination**; must be associated with
an application for a GP for the Discharge of Stormwater
and Dewatering Wastewaters from Construction Activities
(Attachment D of this form is required)

☐ Renewal/Extension of an existing Safe Harbor
Determination

☐ With modifications

☐ Without modifications (no attachments required)

[CPPU Use Only - NDDDB-Safe Harbor Determination # 1736]

Enter NDDDB Determination Number for Renewal:

Enter Safe Harbor Determination Number for
Renewal/Extension:

1. Does your project utilize federal funds or require a federal permit? ☐ Yes ☒ No

If yes, your project may be subject to Federal rules regarding the Northern long-eared bats or other federally listed species. Information on the Northern long-eared bat and the 4-D rule may be found at:

<http://www.fws.gov/midwest/endangered/mammals/nleeb/>

Information on other federally listed species and Section 7 consultations may be found at:

<https://www.fws.gov/newengland/EndangeredSpec-Consultation.htm>

2. Does your project utilize state funding, involve state agency actions, or relate to a CEPA request?

☒ Yes ☐ No

3. Does your project require state permits, licenses, registrations or authorizations? ☒ Yes ☐ No

If yes, list permit type(s): Stormwater Discharge – Construction

If an active enforcement action exists regarding this project, enter number:

If known, enter DEEP analysts reviewing this project:

II: Requester Information

If the requester is a corporation, limited liability company, limited partnership, limited liability partnership, or a statutory trust, it must be registered with the Secretary of the State. If applicable, the name shall be stated **exactly as it is registered with the Secretary of the State. Please note, for those entities registered with the Secretary of the State, the registered name will be the name used by DEEP. This information can be accessed at the Secretary of the State's Business Records Search. (<https://service.ct.gov/business/s/onlinebusinesssearch>)*

If the requester is an individual, provide the legal name (include suffix) in the following format: First Name; Middle Initial; Last Name; Suffix (Jr, Sr., II, III, etc.).

If there are any changes or corrections to your company/facility or individual mailing or billing address or contact information, please complete and submit the [Request to Change company/Individual Information](#) to the address indicated on the form.

1. Requester*

Company Name: FLYCATCHER LLC

Contact Name: KATELIN NICKERSON

Address: 106 Lafayette St

City/Town: Yarmouth

State: ME

Zip Code: 04096

Business Phone: 2072336175 Ext:

**E-mail: KATELIN@FLYCATCHERLLC.COM

****By providing this email address you are agreeing to receive official correspondence from the department, at this electronic address, concerning this request. Please remember to check your security settings to be sure you can receive emails from "ct.gov" addresses. Also, please notify the department if your e-mail address changes**

a) Requester can best be described as:

☐ Individual ☐ Federal Agency ☐ State agency

☐ Municipality ☐ Tribal ☒ *business entity (* if a business entity complete i through iii):

i) Check type ☐ corporation

☐ limited liability company

☐ limited partnership

☐ limited liability partnership

☐ statutory trust

☐ Other:

ii) Provide Secretary of the State Business ID #: This information can be accessed at the Secretary of the State's Business Records Search (<https://service.ct.gov/business/s/onlinebusinesssearch>)

iii) ☒ Check here if your business is **NOT** registered with the Secretary of the State's office.

b) Acting as (Affiliation), pick one:

☐ Property owner

☐ Consultant

☐ Engineer

☐ Facility owner

☒ Applicant

☐ Biologist

☐ Pesticide Applicator

☐ Other representative:

Part III: Site Information

This request can only be completed for one site. A separate request must be filed for each additional site.

SITE NAME AND LOCATION

Project Name (for use in correspondence): CT 11 Granby

If your Project site has a street address, please enter below:

Street Address:

Town(s):

If your Project has no street address, please enter a description of the site location:

Location Description: South of Mill Pond Drive and east of Route 202 in Granby.

Town(s): Granby

Size in acres, or site dimensions: 6.33

Describe existing land conditions:

Currently the site is forested and undeveloped and is located behind an existing commercial development in Granby.

Part IV: Project Information

1. **Project Type:**

Choose Project Category: Construction, Development

Choose Project Type: Energy and Utility Production Facilities and Distribution Infrastructure

Choose Project Subtype: New facility construction

2. Brief Project Description: Undeveloped, forested area south of a shopping center.

3. Provide a schedule for all phases of the project including the year, the month that the proposed activity will be initiated and the duration of the activity.

Late 2025 or 2026

4. Is the subject activity limited to the maintenance, repair, or improvement of an existing structure within the existing footprint? ☐ Yes ☒ No If yes, add explanation in No. 4 below.

5. Give a detailed description of the activity which is the subject of this request and describe the methods and equipment that will be used. Include a description of steps that will be taken to minimize impacts to any known listed species.

The proposed project will require tree clearing and development within a forested upland area. Following tree clearing the Project will construct an access road and equipment pad. The equipment pad will house a Battery Energy Storage System and associated equipment. The BESS will be connected to the local electrical distribution network via overhead generator tie in line.

Development of the gentie will require clearing within a freshwater wetland. Clearing within the wetland will take place on the northern end of the site as to cross the wetland at the narrowest point. No grubbing or excavation is proposed within the wetland resource.

The project will be subject to stormwater permitting with DEEP and will adhere to Best Management Practices for protecting adjacent resources during construction and operations of the project.

6. If this is a renewal or extension of an existing Safe Harbor request *with* modifications, explain what about the project has changed.

Part VI: Supporting Documents

Check each attachment submitted as verification that *all* applicable attachments have been supplied with this request form. Label each attachment as indicated in this part (e.g., Attachment A, etc.) and be sure to include the requester's name, site name and the date. **Please note that Attachments A and B are required for all new requests. Attachment C is required for requests associated with: new state or federal permit applications, modifications of existing permits, permit enforcement actions, site management/planning that requires details species recommendations, and state funded projects, state agency activities, and CEPA requests.** Renewals/Extensions with no modifications do not need to submit any attachments. Attachments C and D are supplied at the end of this form.

<input checked="" type="checkbox"/> Attachment A:	Project Detail Map: an 8 1/2" X 11" print/copy of the relevant portion of a USGS Topographic Quadrangle Map clearly indicating the exact location of the site.
<input checked="" type="checkbox"/> Attachment B:	GIS file (for uploaded GIS polygons): fine scaled map showing site boundary and area of work details on aerial imagery with relevant landmarks labeled. (Site and work boundaries in GIS [ESRI ArcView shapefile, in NAD83, State Plane, feet] format can be substituted for detailed maps, see instruction document)
<input checked="" type="checkbox"/> Attachment C:	Supplemental Information (attached, DEEP-APP-007C): Site plans, photographs and biological reports
<input type="checkbox"/> Attachment D:	Safe Harbor Report Requirements (attached, DEEP-APP-007D)

Part VII: Requester Certification

The requester *and* the individual(s) responsible for actually preparing the request must sign this part. A request will be considered incomplete unless all required signatures are provided.

<p>"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief."</p>	
<p>Nickerson Katelin</p>	<p>7/23/2024</p>
<p>Signature of Preparer (a typed name will substitute for a handwritten signature)</p>	<p>Date</p>
<p>Nickerson Katelin</p>	
<p>Name of Preparer (print or type)</p>	<p>Title (if applicable)</p>
<p>Signature of Preparer (if different than above)</p>	<p>Date</p>
<p>Name of Preparer (print or type)</p>	<p>Title (if applicable)</p>

Note: Please submit the completed Request Form and all Supporting Documents to:

CENTRAL PERMIT PROCESSING UNIT
DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

Or email request to: deep.nddbrequest@ct.gov

Attachment C: Supplemental Information and Attachments

1. Existing & Proposed Conditions

If available provide site plans, drawings or imagery showing existing conditions and proposed changes. If not available, describe all natural and man-made features including wetlands, watercourses with direction of flow, fish and wildlife habitat, floodplains and any existing structures potentially affected by the subject activity. Such features should be depicted and labeled on the site plan.

☐ **Annotated Site Plan(s) attached**

2. **Photographs** depicting site conditions can be helpful to reviewers. Provide and label photographs, if available.

☐ **Site Photographs (optional) attached**

3. Biological Surveys

Has a biologist visited the site and conducted a biological survey to determine the presence of any endangered, threatened or special concern species ☐ Yes ☐ No

If yes, submit any reports of biological surveys, documentation of the biologist's qualifications, and any NDDB survey forms. Reports should include biologist(s) name, habitat and/or species targeted by survey, plant and animal species observed, dates when surveys were conducted.

☐ **Reports of biological surveys attached**

☐ **Documentation of biologist's qualifications attached**

☐ **[NDDB Survey forms](#) for any listed species observations attached**

Attachment D: Safe Harbor Report Requirements

Submit a report, as Attachment D, that synthesizes and analyzes the information listed below. Those providing synthesis and analysis need appropriate qualifications and experience. A request for a safe harbor determination shall include:

1. **Habitat Description and Map(s), including GIS mapping overlays, of a scale appropriate for the site, identifying:**

- wetlands, including wetland cover types;
- plant community types;

- topography;
 - soils;
 - bedrock geology;
 - floodplains, if any;
 - land use history; and
 - water quality classifications/criteria.
2. **Photographs** - The report should include photographs of the site taken from the ground and also all reasonably available aerial or satellite photographs and an analysis of such photographs.
 3. **Inspection** - A visual inspection(s) of the site should be conducted, preferably when the ground is visible, and described in the report. This inspection can be helpful in confirming or further evaluating the items noted above.
 4. **Biological Surveys** - The report should include all biological surveys of the site where construction activity will take place that are reasonably available to a registrant. A registrant shall notify the Department's Wildlife Division of biological studies of the site where construction activity will take place that a registrant is aware of but are not reasonably available to the registrant.
 5. **Based on items #1 through 4 above, the report shall include a Natural Resources Inventory of the site of the construction activity.** This inventory should also include a review of reasonably available scientific literature and any recommendations for minimizing adverse impacts from the proposed construction activity on listed species or their associated habitat.
 6. **In addition, to the extent the following is available at the time a safe harbor determination is requested, a request for a safe harbor determination shall include and assess:**
 - Information on Site Disturbance Estimates/Site Alteration information
 - Vehicular Use
 - Construction Activity Phasing Schedules, if any; and
 - Alteration of Drainage Patterns