

## NATURAL RESOURCES REVIEW UPDATE

January 21, 2022

Mr. Ray Vergati  
Homeland Towers, LLC  
9 Harmony Street, 2nd Floor  
Danbury, CT 06810

**Re:** Revisions to Proposed Wireless Communications Facility  
Site Identifier: North Branford / CT021  
Site Address: 222 Clintonville Road, Northford, New Haven County, CT 06472  
EBI Project #: 6121001068

EBI Consulting (EBI) has prepared the following Natural Resources Review Update (NR Update) letter for the above-referenced proposed wireless communications facility. The potential impacts of this facility on natural resources was originally evaluated by EBI in a May 10, 2021 Natural Resources Review (NR Review). The purpose of this NR Update is to either evaluate revisions to the original design and/or location of this facility, or to obtain updated data used in the original assessment, which may no longer be valid or reliable. Specifically, EBI evaluated whether the original NR Review findings remain valid.

### Project Scope

The previous project design called for 110-foot monopole or monopine located at coordinates: N41.395917; W72.793194. The revised design calls for a 110-foot monopole or monopine located at coordinates N41.395811; W72.793078, which is an approximately 45-foot shift to the southeast. Please see the attached drawings for complete details.

The current proposed facility location consists of undeveloped wooded land.

### Protected Species

Based on the review completed as part of this NR Update, EBI makes no changes to the original finding that any resulting incidental take of the Northern long-eared bat (*Myotis septentrionalis*) as a result of this project is not prohibited by the final 4(d) rule. Additionally, EBI makes no changes to the original finding that the proposed facility 'may affect, not likely to adversely affect' the Indiana bat (*Myotis sodalis*) as long as all tree clearing occurs between October 1 and March 31. Please refer to the attached updated species data.

### Flood Zones

Based on the review completed as part of this NR Update, EBI makes no changes to the original finding that the proposed facility is not located within a 100-year flood zone.

### Wetlands

Based on the review completed as part of this NR Update, EBI makes no changes to the original finding that the proposed facility will not result in a significant change to surface features, specifically wetlands fill, as long as best management practices are implemented.

### Conclusion

Based on the review completed for this NR Update, EBI makes no changes to the findings of the original May 10, 2021 NR Review and recommends no further action.

Limitations

EBI is an independent contractor, not an employee of either the property owner or the project proponent, and its compensation was not based on the findings or recommendations made in this Review or on the closing of any business transaction.

Sincerely,

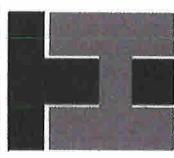


Mr. Jason Stayer  
Senior Biologist

Ms. Elaine Langer  
Biologist  
Direct# (347) 415-5453

Attachments: Updated Supporting Documentation

## **UPDATED SUPPORTING DOCUMENTATION**



HOMELAND TOWERS, LLC

# WIRELESS TELECOMMUNICATIONS FACILITY

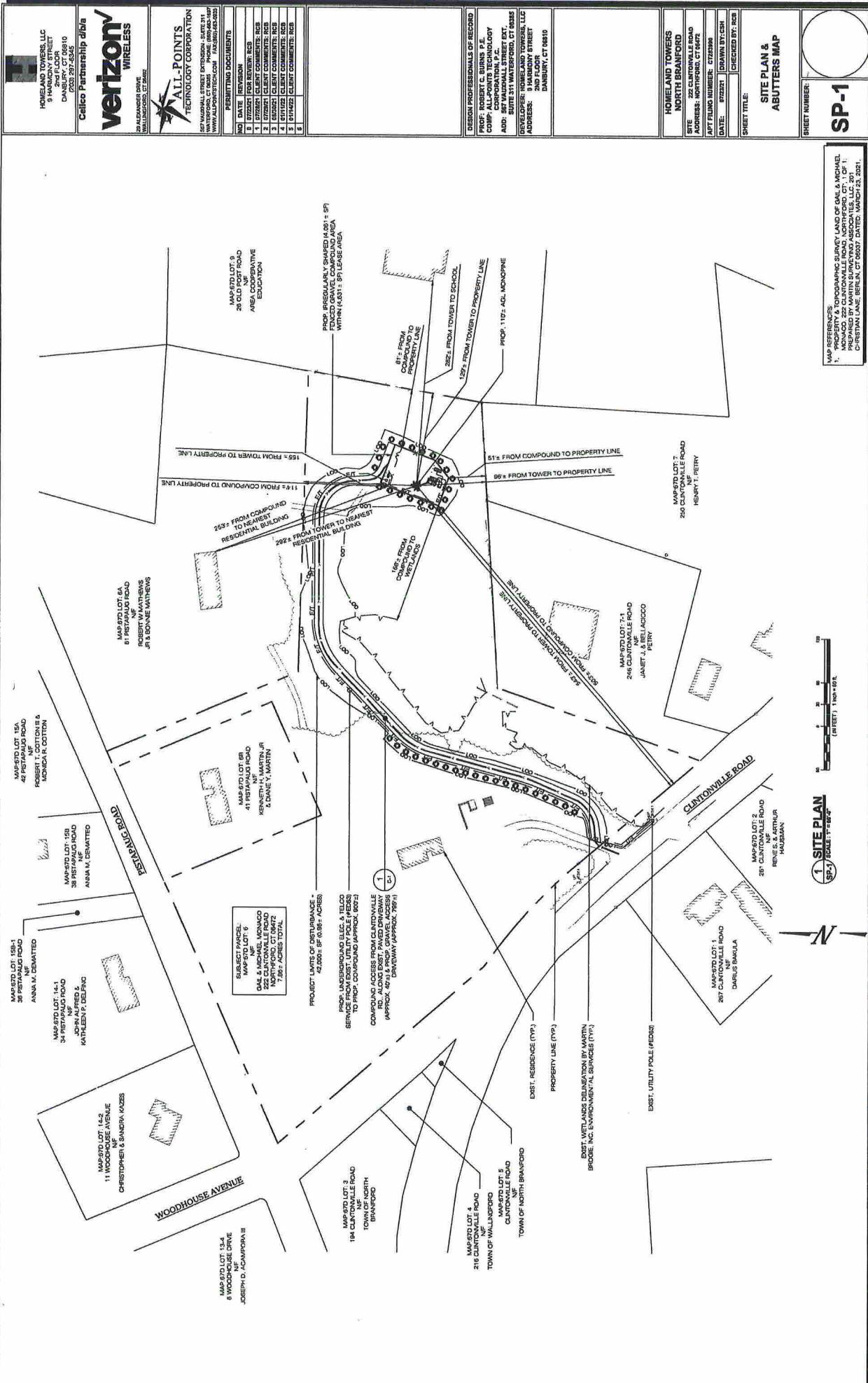
## NORTH BRANFORD

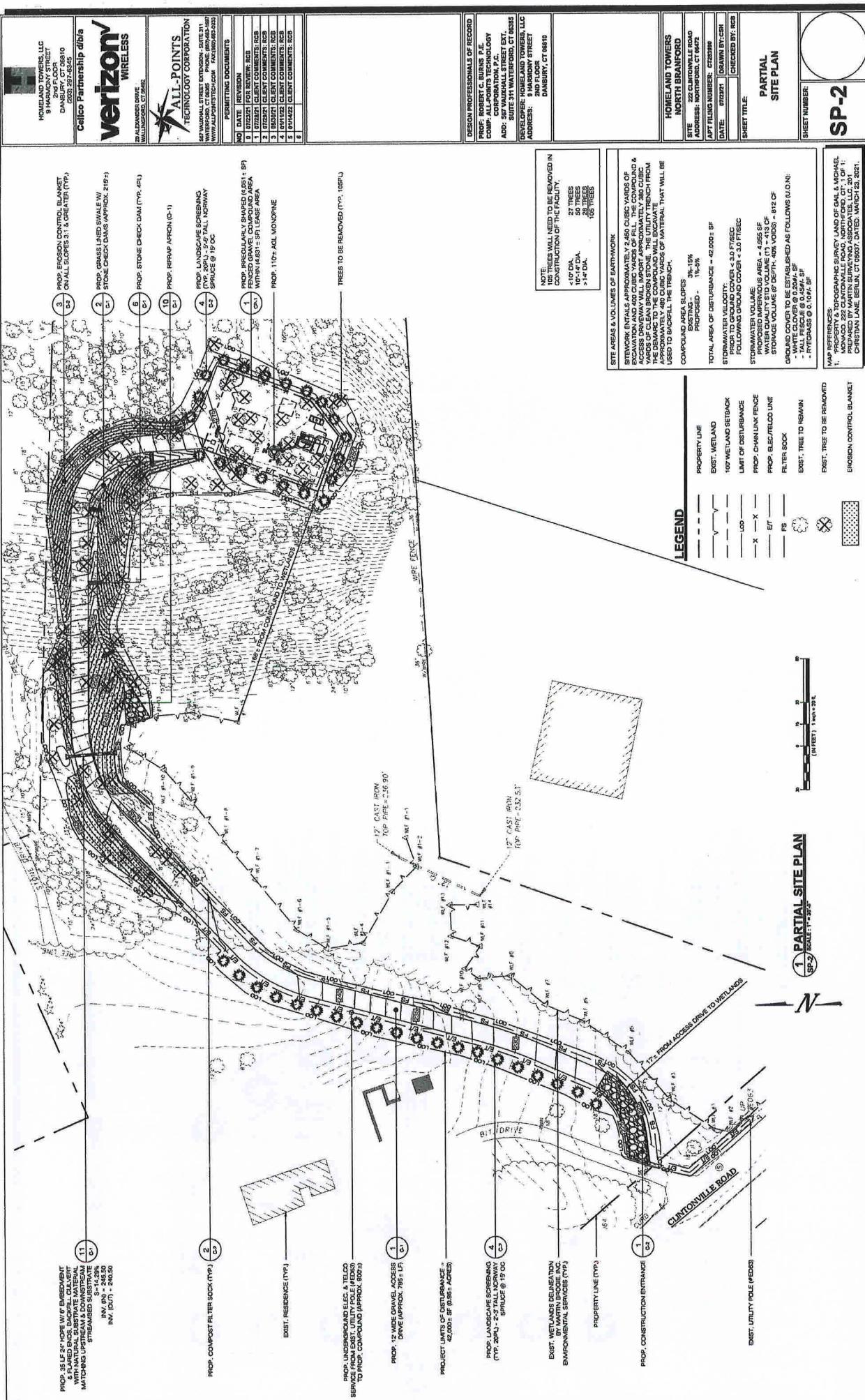
### 222 CLINTONVILLE ROAD

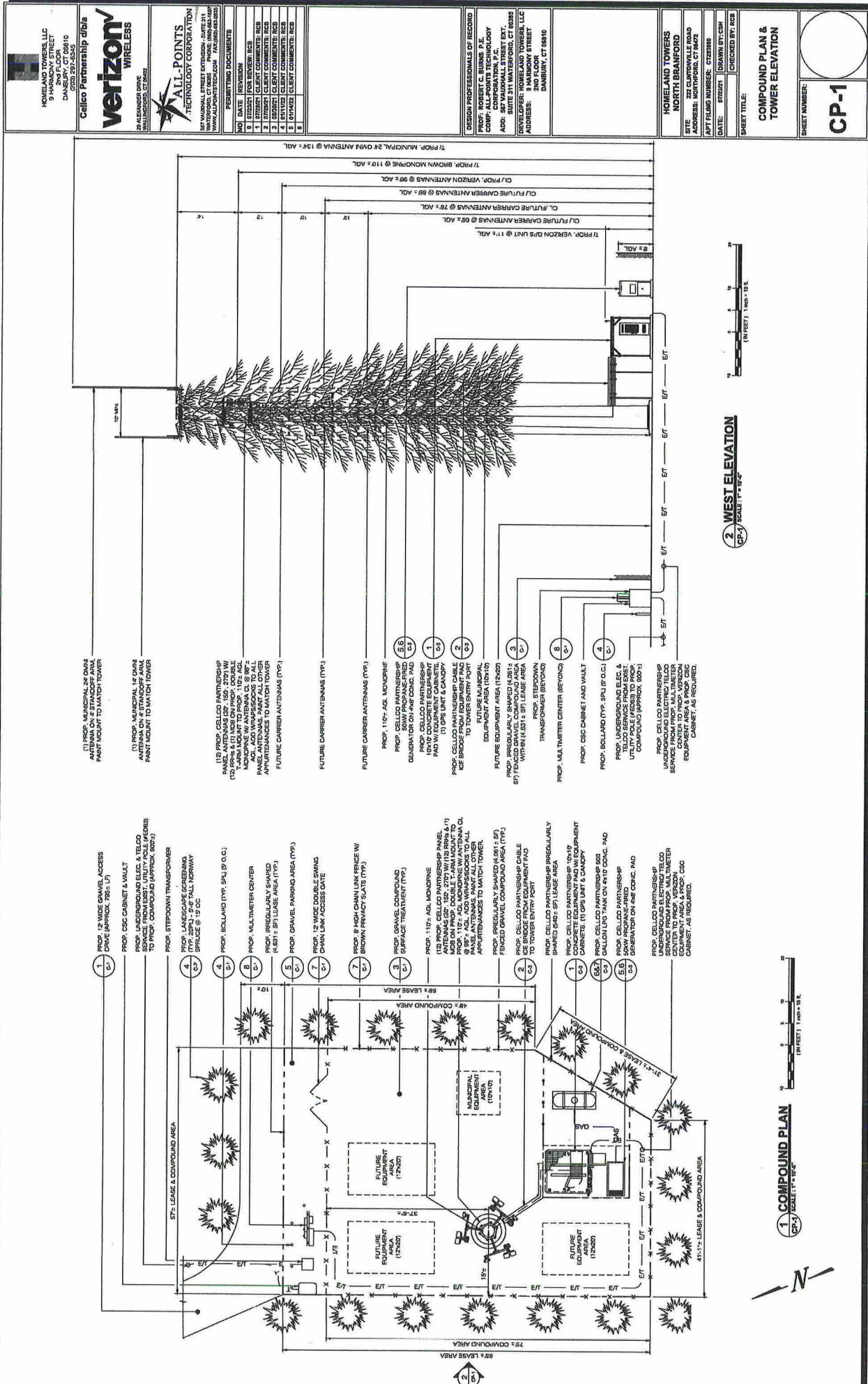
### NORTHFORD, CT 06472

<p><b>HOMELAND TOWERS, LLC</b> 9 HARMONY STREET 205 FT. COOR DANBURY, CT 06810 (203) 257-5345</p> <p><b>Cellco Partnership dba</b> <b>verizon</b> WIRELESS</p>	
<p><b>ALL-POINTS</b> TECHNOLOGY CORPORATION</p> <p>222 CLINTONVILLE ROAD, CT 06472 WATERFORD, CT 06380 PHONE: 860-454-0007 WWW.ALLOINT.COM</p> <p><b>PERMITTING DOCUMENTS</b></p>	
NO.	DATE
1	REVISION
2	07/01/2019
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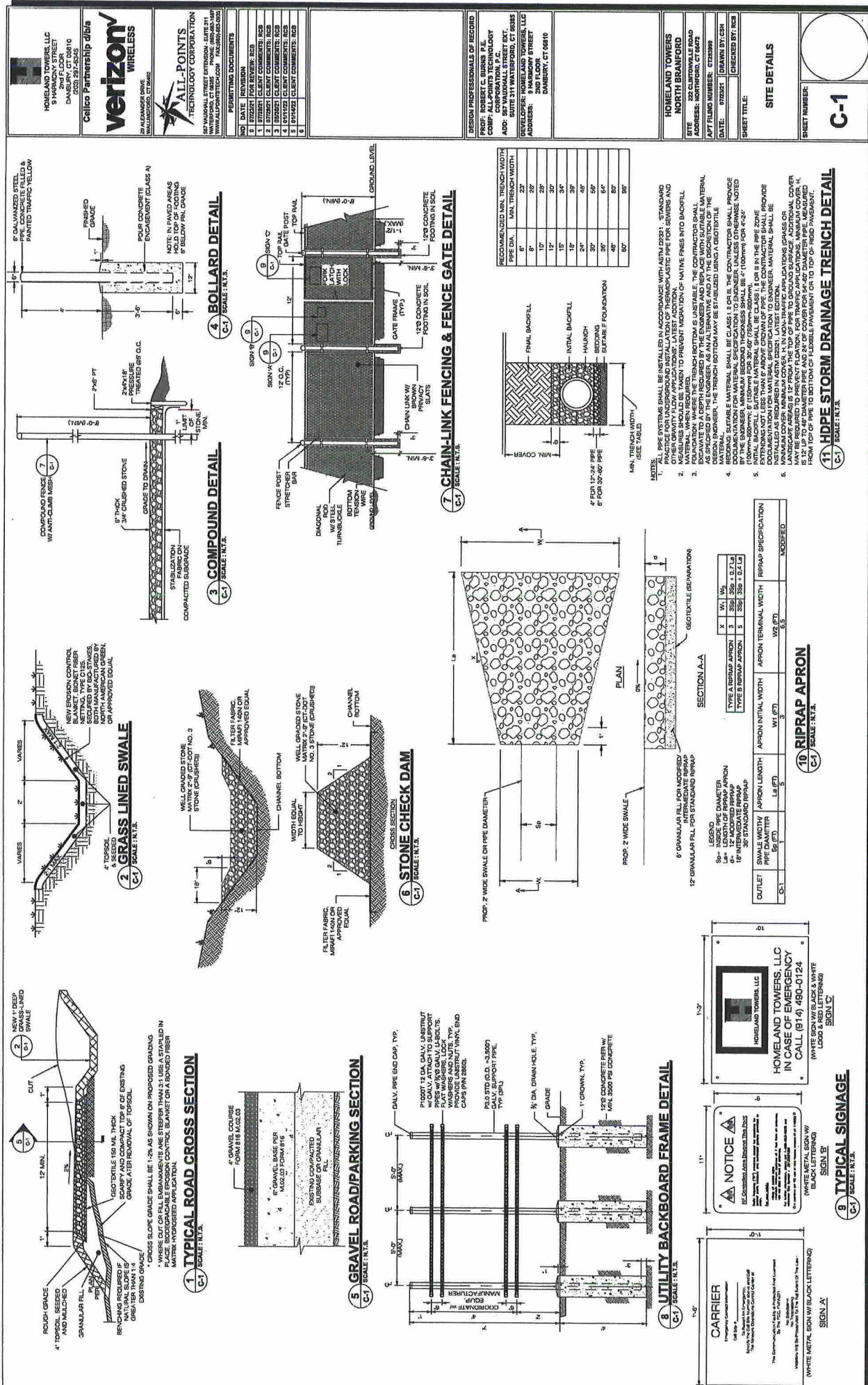


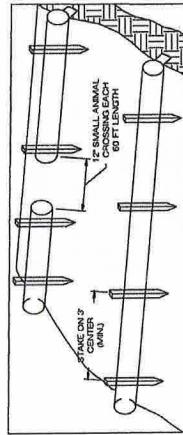
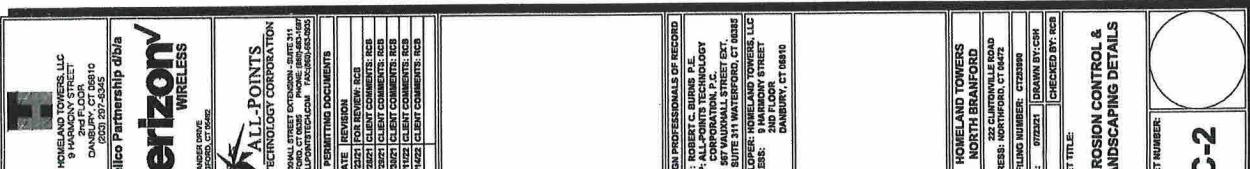






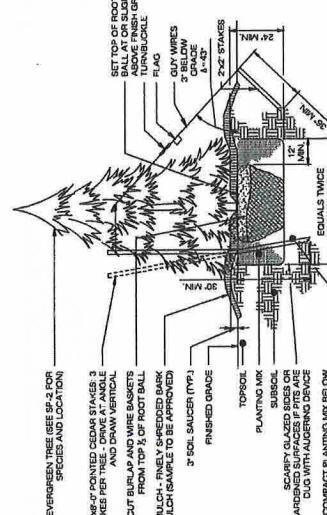
<p><b>verizon</b> WIRELESS</p> <p>20 ALEXANDER DRIVE, WATERTOWN, CT 06795 PHONE: 860-227-5245</p> <p>Calico Partnership dba</p> <p><b>ALL-POINTS</b> TECHNOLOGY CORPORATION</p> <p>20 ALEXANDER DRIVE, WATERTOWN, CT 06795 PHONE: 860-227-5245 FAX: 860-227-5245 WWW.ALLPOINTSTECH.COM</p> <p>PENMITTING DOCUMENTS</p> <table border="1"> <tr><td>NO.</td><td>DATE</td><td>REVISION</td></tr> <tr><td>1</td><td>07/24/01</td><td>FOR REVIEW: RGB</td></tr> <tr><td>2</td><td>08/01/01</td><td>1.0</td></tr> <tr><td>3</td><td>08/01/01</td><td>2.0</td></tr> <tr><td>4</td><td>08/01/01</td><td>3.0</td></tr> <tr><td>5</td><td>08/01/01</td><td>4.0</td></tr> <tr><td>6</td><td>08/01/01</td><td>5.0</td></tr> </table>	NO.	DATE	REVISION	1	07/24/01	FOR REVIEW: RGB	2	08/01/01	1.0	3	08/01/01	2.0	4	08/01/01	3.0	5	08/01/01	4.0	6	08/01/01	5.0	<p>HOMELAND TOWERS, LLC 19 HARMONY STREET 20 ALEXANDER DRIVE WATERTOWN, CT 06795 PHONE: 860-227-5245</p> <p>DESIGN PROFESSIONALS OF RECORD</p> <p>PROF. ROBERT C. BURNS P.E. CONF. ALL-POINTS TECHNOLOGY CONTRACTOR: ALL-POINTS TECHNOLOGY ADD: 550 HARBORVIEW STREET, SUITE 211 SUITE 211, WATERTOWN, CT 06795 DEVELOPER: HOMELAND TOWER, LLC ADDRESS: 9 HARMONY STREET, 2ND FLOOR DANBURY, CT 06810</p> <p>HOMELAND TOWERS NORTH BRANFORD STATE: CT 222 CLAYDONVILLE ROAD ADDRESS: NORTHBRAND, CT 06472 APT/BLDG NUMBER: C700B DATE: 07/24/01 DRAWN BY: C700B CHECKED BY: 860-227-5245 SHEET TITLE: ALTERNATE MONOPOLE ELEVATION SHEET NUMBER: A-1</p>
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<p><b>2 WEST ELEVATION</b> A-1 SCALE: 1:100</p>																						





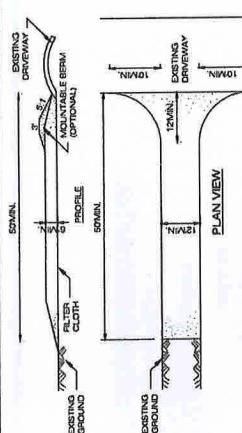
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## EVERGREEN TREE PLAN

C-2 SCALE

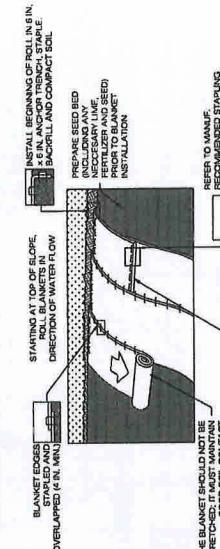


CONSTRUCTION SPECIFICATIONS



**CONSTRUCTION ENTRANCE DETAIL**

5-2 SCALE: M.F.S.

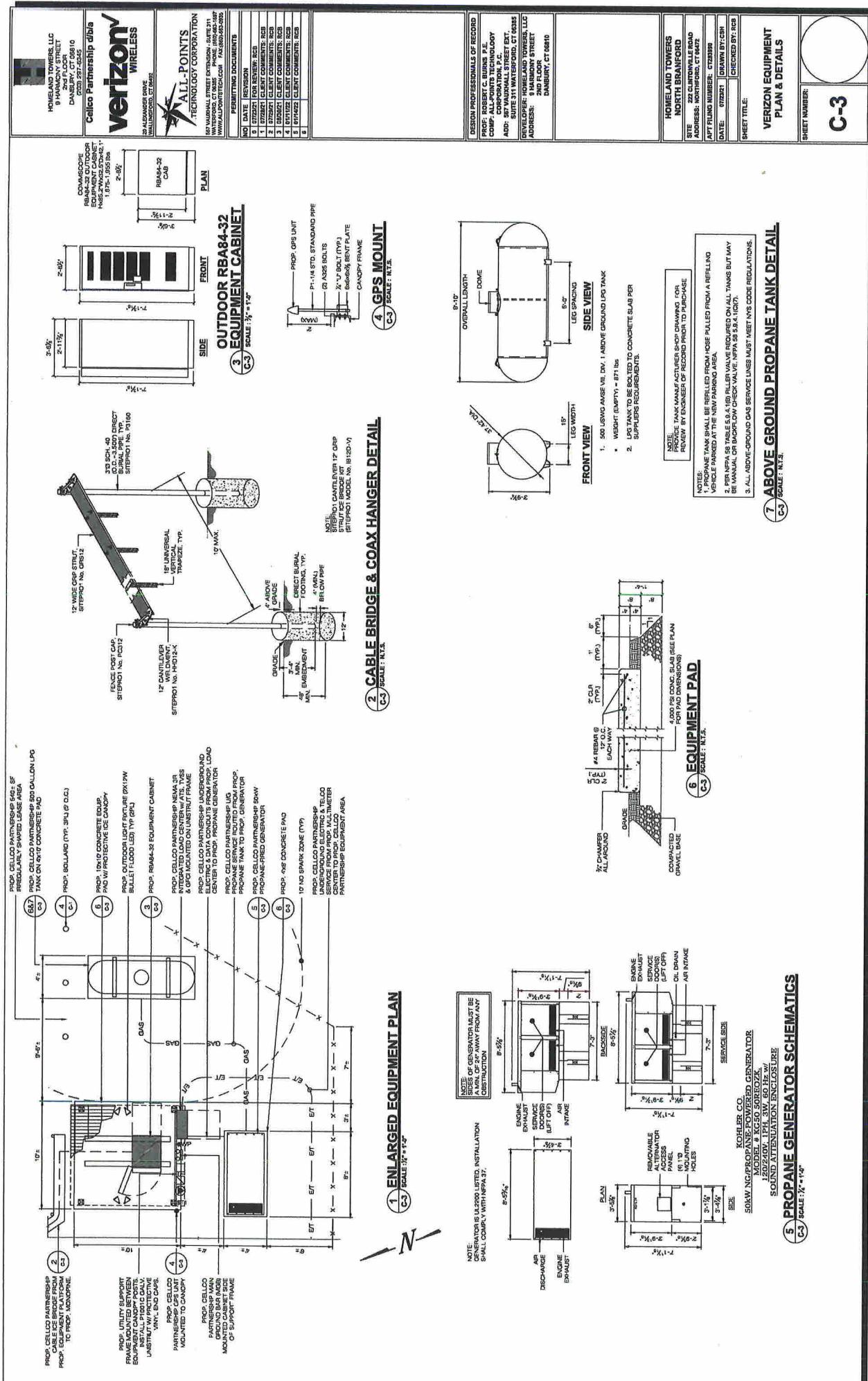


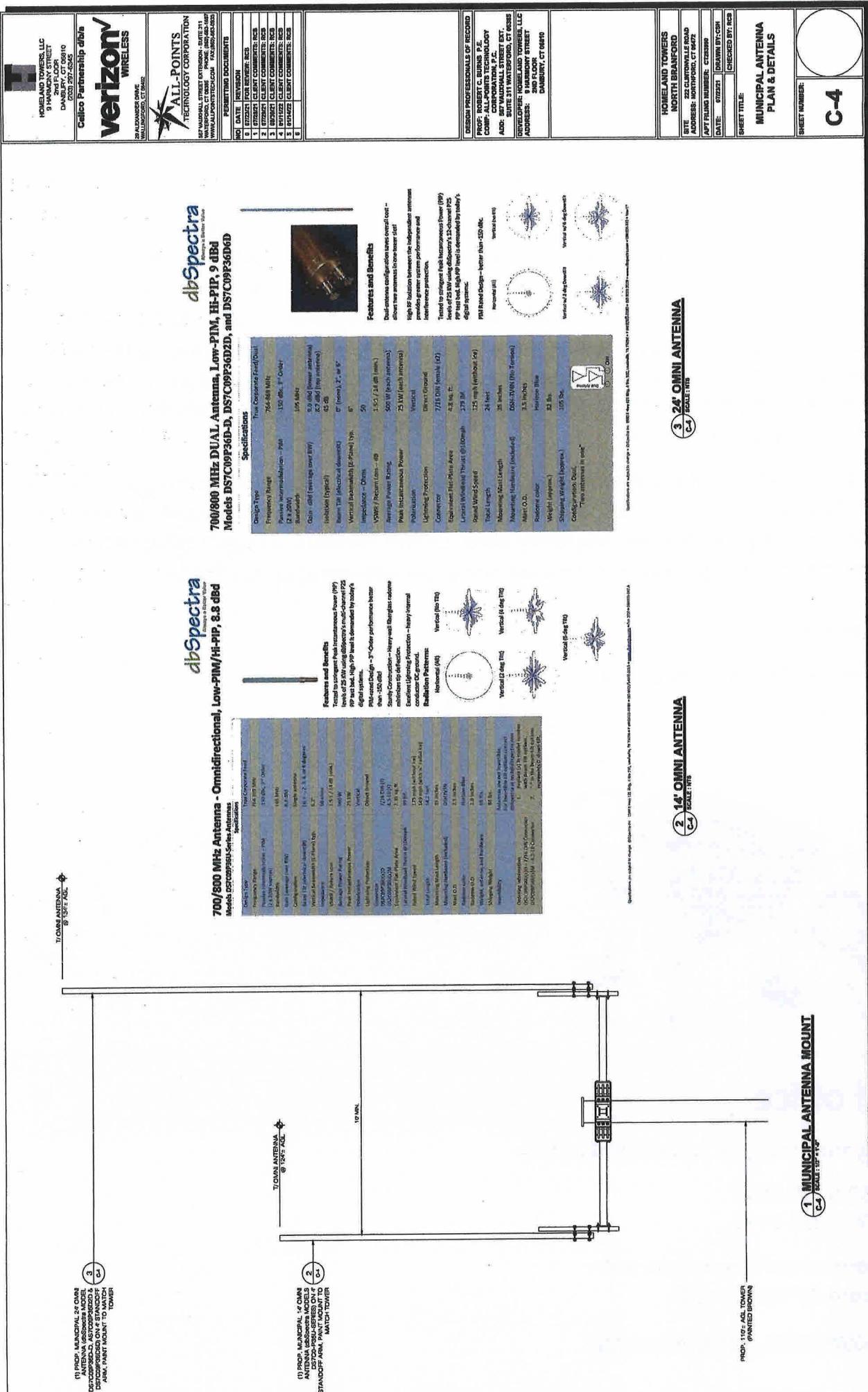
The diagram illustrates a steep hillside with a vertical slope. A thick, light-colored horizontal line, representing a 'BLANKET', is applied across the slope. Above the slope, a small tree is labeled 'TREES'. Below the slope, a small tree is labeled 'SOIL CLOTHING'. A dashed line labeled 'SOIL LOSS' indicates runoff. A legend box contains the text 'PATTERN FOR STEEPNESS AND LENGTH OF SLOPE BEING BANKEDED'.

C-2 SCALE : N.T.S.



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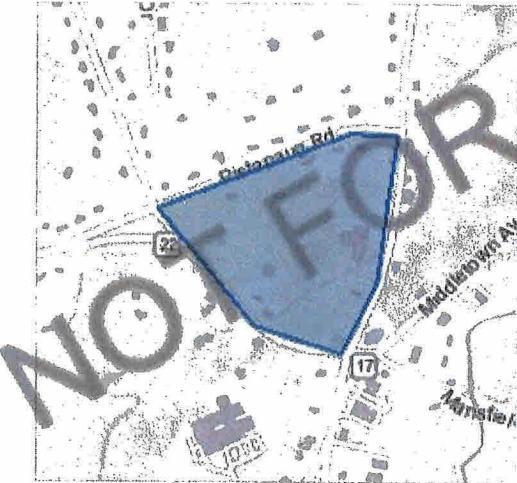
# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

New Haven County, Connecticut



## Local office

New England Ecological Services Field Office

📞 (603) 223-2541

📠 (603) 223-0104

70 Commercial Street, Suite 300  
Concord, NH 03301-5094

<http://www.fws.gov/newengland>

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act requires Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are not shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status](#) page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Mammals

NAME	STATUS
Indiana Bat Myotis sodalis Wherever found There is final critical habitat for this species. The location of the critical habitat is not available. <a href="https://ecos.fws.gov/ecp/species/5949">https://ecos.fws.gov/ecp/species/5949</a>	Endangered
Northern Long-eared Bat Myotis septentrionalis Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

## Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>

- Measures for avoiding and minimizing impacts to birds  
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds  
<http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A  
BREEDING SEASON IS INDICATED  
FOR A BIRD ON YOUR LIST, THE  
BIRD MAY BREED IN YOUR  
PROJECT AREA SOMETIME WITHIN  
THE TIMEFRAME SPECIFIED,  
WHICH IS A VERY LIBERAL  
ESTIMATE OF THE DATES INSIDE  
WHICH THE BIRD BREEDS  
ACROSS ITS ENTIRE RANGE.  
"BREEDS ELSEWHERE" INDICATES  
THAT THE BIRD DOES NOT LIKELY  
BREED IN YOUR PROJECT AREA.)

#### Bald Eagle *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Oct 15 to Aug 31

#### Black-billed Cuckoo *Coccyzus erythrophthalmus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9399>

Breeds May 15 to Oct 10

**Blue-winged Warbler** *Vermivora pinus*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds May 1 to Jun 30

**Canada Warbler** *Cardellina canadensis*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 20 to Aug 10

**Cerulean Warbler** *Dendroica cerulea*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/2974>

Breeds Apr 29 to Jul 20

**Long-eared Owl** *asio otus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3631>

Breeds Mar 1 to Jul 15

**Prairie Warbler** *Dendroica discolor*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 1 to Jul 31

**Rusty Blackbird** *Euphagus carolinus*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds elsewhere

**Wood Thrush** *Hylocichla mustelina*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 10 to Aug 31

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

#### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

#### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

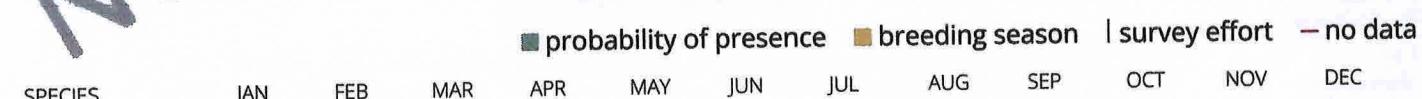
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

#### No Data (—)

A week is marked as having no data if there were no survey events for that week.

#### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Bald Eagle

Non-BCC

Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Black-billed

Cuckoo

BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Blue-winged

Warbler

BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Canada Warbler

BCC Rangewide

(CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



NOT FOR CONSULTATION

Cerulean Warbler  
BCC Rangewide  
(CON) (This is a  
Bird of  
Conservation  
Concern (BCC)  
throughout its  
range in the  
continental USA  
and Alaska.)



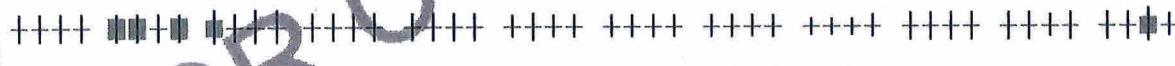
Long-eared Owl  
BCC Rangewide  
(CON) (This is a  
Bird of  
Conservation  
Concern (BCC)  
throughout its  
range in the  
continental USA  
and Alaska.)



Prairie Warbler  
BCC Rangewide  
(CON) (This is a  
Bird of  
Conservation  
Concern (BCC)  
throughout its  
range in the  
continental USA  
and Alaska.)



Rusty Blackbird  
BCC - BCR (This is a  
Bird of  
Conservation  
Concern (BCC) only  
in particular Bird  
Conservation  
Regions (BCRs) in  
the continental  
USA)



Wood Thrush  
BCC Rangewide  
(CON) (This is a  
Bird of  
Conservation  
Concern (BCC)  
throughout its  
range in the  
continental USA  
and Alaska.)



**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to

occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

### What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

### What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage](#).

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Facilities

## National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

## Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

## Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters.

Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

#### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

**From:** [vonOettingen, Susi](#)  
**To:** [Kimberly Narel](#)  
**Subject:** Fw: [EXTERNAL] RE: Indiana bats in CT  
**Date:** Monday, September 27, 2021 11:47:10 AM

---

Hi,

I am very sorry, I must not have closed the loop on this. Consultation is complete for the NLEB with the verification letter. The Indiana bat is not considered to be present in Connecticut in the summer and the project is not located near a hibernaculum. Therefore, it is a "no effect" for the Indiana bat and no concurrence required. The CT DEEP has confirmed that (I suggest you go through the DEEP in the future for bat-related questions).

My apologies.

Susi

\*\*\*\*\*

Susi von Oettingen  
**New Telephone Number: 603-748-8357 (mobile)**  
Endangered Species Biologist  
New England Field Office  
70 Commercial Street, Suite 300  
Concord, NH 03301

### **Teleworking indefinitely**

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**From:** Hess, Brian <[Brian.Hess@ct.gov](mailto:Brian.Hess@ct.gov)>  
**Sent:** Thursday, May 27, 2021 8:33 AM  
**To:** vonOettingen, Susi <[susi\\_vonoettingen@fws.gov](mailto:susi_vonoettingen@fws.gov)>  
**Cc:** Fraser, Devaughn <[Devaughn.Fraser@ct.gov](mailto:Devaughn.Fraser@ct.gov)>  
**Subject:** [EXTERNAL] RE: Indiana bats in CT

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hi Susi,

Your understanding is correct. We have one record for a solitary MYSO from 1997. That was a hibernaculum survey in North Branford in February.

Thanks,

Brian

**From:** vonOettingen, Susi <susi\_vonoettingen@fws.gov>  
**Sent:** Thursday, May 27, 2021 07:57  
**To:** Hess, Brian <Brian.Hess@ct.gov>  
**Subject:** Indiana bats in CT

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

Good morning,

I received a letter for a communications facility in Northford, CT. The consulting company biologist is requesting concurrence for a "not likely to adversely affect" Indiana bat because tree clearing will occur in the winter.

My understanding is that Indiana bats have never been documented occurring in Connecticut in the summer, only small numbers were documented hibernating. I believe this is a no effect because Indiana bats are not present. Would you agree? Or does DEEP consider Connecticut to be within the summer range of Indiana bat?

Just checking to make sure.

Thanks.

Susi

\*\*\*\*\*

Susi von Oettingen  
**New Telephone Number: 603-748-8357 (mobile)**  
Endangered Species Biologist  
New England Field Office  
70 Commercial Street, Suite 300  
Concord, NH 03301

**Teleworking indefinitely**

# Natural Resources Review

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**CT021 / North Branford**

**222 Clintonville Road  
Northford, Connecticut**

**EBI Project No. 6121001068**

**January 21, 2022**

**Prepared for:**

**Homeland Towers, LLC  
9 Harmony Street, 2nd Floor  
Danbury, CT 06810**

**Prepared by:**



January 21, 2022

**Subject: Natural Resources Review for a Proposed Wireless Communications Facility**  
**CT-021 / North Branford**  
**222 Clintonville Road, Northford, New Haven County, CT 06472**  
**41° 23' 45.2834" / 72° 47' 35.41"**  
**6121001068**

## OVERVIEW

EBI Consulting (EBI) has prepared this Natural Resource Review (NR Review) for the above-referenced proposed wireless communications facility (herein, the Facility). This NR Review supports a National Environmental Policy Act (NEPA) review of the proposed Facility, completed in accordance with Federal Communications Commission (FCC) NEPA implementing procedures set forth in 47 CFR 1.1301-1.1320.

The purpose of this NR Review is to determine whether further environmental review may be required in accordance with 47 CFR 1.1307(a)(1), (2), (3), (6), and (7) of FCC NEPA Rules. Specifically, this NR Review focuses on evaluating whether the proposed Facility will result in potential significant impacts to federally-protected lands, species, flood zones, or other significant changes to surface features.

EBI prepared this NR Review using readily-available online resources. This NR Review is designed to provide a baseline evaluation of the potential for the proposed Facility to significantly affect the above-referenced natural resources (including protected species) and to determine if additional review, specialized on-site surveys, or consultation is required.

## PROJECT SUMMARY

As of the date of this Review, Homeland Towers, LLC proposes to construct a new communications facility on the Subject Property. The proposed facility will include a 100-foot (approximately 104-foot with appurtenance) monopole tower and associated support equipment located within a 4,061 square-foot fenced compound on a 4,361 square-foot lease area. Access will be gained via an existing paved driveway emanating northwest from Clintonville Road for approximately 105 feet, and then constructing a 12-foot wide gravel drive for approximately 680 feet to the proposed compound. Utilities will follow the access route to an existing point-of-connection. Please see the attached drawings for complete details.

## PROPERTY AND VICINITY DESCRIPTION

The Subject Property is an irregular-shaped parcel consisting of a single-family residence, landscaping, paved access road, and undeveloped wooded land totaling approximately 7.86-acres.

The area of the proposed facility (herein the Project Site) currently consists of undeveloped wooded land. Property use in the vicinity of the Subject Property primarily consists of single-family residences, rural commercially-developed properties, and undeveloped wooded land.

## FEDERAL LANDS REVIEW

EBI reviewed available online mapping resources to determine if the proposed Facility location is inside the boundaries of, or within one-mile of certain classifications of federal land. Applicable data is depicted on EBI's 'Land Resources Map' (see attached). The following table summarizes EBI's review.

FEDERALLY-PROTECTED LAND Jurisdictional Agency / Resource	Within Boundary	Within 1-mile	Not Within 1-mile
<b>Wilderness Area [47 CFR §1.1307(a)(1)]</b> National Wilderness Preservation System (NWPS) National Park Service (NPS); U.S. Forest Service (USFS); U.S. Fish and Wildlife Service (USFWS); Bureau of Land Management (BLM) <a href="http://www.wilderness.net/index.cfm?fuse=NWPS">http://www.wilderness.net/index.cfm?fuse=NWPS</a>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Wildlife Preserve [47 CFR §1.1307(a)(2)]</b> National Wildlife Refuge System (NWRS) NPS; USFS; USFWS; BLM <a href="http://www.fws.gov/refuges">http://www.fws.gov/refuges</a>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Wild &amp; Scenic Rivers</b> NPS; USFS; USFWS; BLM <a href="http://www.rivers.gov">http://www.rivers.gov</a>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>National Scenic Trails</b> NPS and Managing Systems and Trails Organization (MSTO) <a href="https://www.nps.gov/subjects/nationaltrailssystem/national-scenic-trails.htm">https://www.nps.gov/subjects/nationaltrailssystem/national-scenic-trails.htm</a>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Based on a review of the above-referenced resources, the proposed facility is not located within the boundaries of, or within one-mile of any of the above-referenced federal lands.

## PROTECTED SPECIES REVIEW

### Federally Listed Species and Critical Habitats

EBI reviewed online resources maintained by the USFWS (<http://ecos.fws.gov/ipac>) to identify any species that are federally-listed under the Endangered Species Act (ESA) as either endangered or threatened, and that are known to occur within the project vicinity. Based on EBI's research of online files maintained by the USFWS, two such federally-listed (i.e. endangered or threatened) species is known to occur within the project vicinity.

Additionally, EBI utilized the USFWS online Critical Habitat Portal<sup>1</sup> online mapping tool, and determined that the proposed Facility location is not within a designated critical habitat.

### State Protected Species

In addition, EBI also reviewed online resources including a map of Natural Diversity Database (NDDB) data displaying potential sensitive habitats and/or species, maintained by the Connecticut Department of Energy and Environmental Protection (DEEP, <https://portal.ct.gov/DEEP/Endangered-Species/Endangered-Species-Listings/Endangered-Threatened-and-Special-Concern-Species-listed-by-County>), within New Haven County, CT. Based on EBI's review of these online resources, there are 284 state-protected (threatened, endangered, species of concern) species within New Haven County, CT. Further the Project Site is not located within 1/2-mile of potential sensitive habitats and/or species.

A review of the identified species and their associated habitats with respect to the proposed location of the Site is provided in the following table.

<sup>1</sup> USFWS Critical Habitat Portal URL: <http://criticalhabitat.fws.gov>

SPECIES LISTING Common Name (Scientific Name)	FEDERAL / STATE STATUS	HABITAT DESCRIPTION	DETERMINATION OF EFFECT
Indiana bat <i>Myotis sodalis</i>	FE / SE	Hibernates in caves; maternity sites generally are behind loose bark of dead or dying trees or in tree cavities. Foraging habitats include riparian areas, upland forests, ponds, and fields. Forested landscapes supporting suitable habitat (trees > 3-inches dbh) are the most important habitat.	May affect, not likely to adversely affect – suitable summer habitat (i.e. trees with dbh > 3-inches) would be removed from the proposed lease area. Clearing trees between October 1 and March 31, during hibernation, would eliminate the possibility of taking individual bats.
Northern long-eared bat <i>Myotis septentrionalis</i>	FT / SE	Winter habitat includes large caves or mines; Summer habitat includes roost under or in cavities of both live and dead trees. Foraging habitats include riparian areas, upland forests, ponds, and fields. Forested landscapes supporting suitable habitat (trees > 3-inches dbh) are the most important habitat.	May Affect (4D Rule) - Potentially suitable habitat exists at the proposed Site. However, information obtained from the USFWS did not identify any known hibernaculum within 0.25 miles of the proposed Site or maternity roosting trees within 150 feet of the proposed Site. Therefore, any resulting incidental take of the Northern long-eared bat ( <i>Myotis septentrionalis</i> ) is not prohibited by the final 4(d) rule.

= Federal Endangered; FT = Federal Threatened; PT = Federal Proposed Threatened

= State Endangered; State Threatened

Please note that identified protected species which require strictly aquatic habitats (e.g. clams) were not included in the table above as no such habitat is present at the proposed Project Site.

As noted in the table above, potentially suitable habitats (undeveloped wooded land with trees > 3-inches dbh) capable of supporting the Northern long-eared bat (*Myotis septentrionalis*) were noted within the vicinity and at the proposed Site. However, information obtained from the USFWS did not identify any known hibernaculum within 0.25 miles of the proposed Site or known maternity roosting trees within 150 feet of the proposed Site and as such, EBI is unaware of known hibernaculum within 0.25 miles or known maternity roosting trees within 150 feet of the proposed Site. As such, EBI submitted these findings to the USFWS with the online 4D Rule Key determination, and in a response dated April 01, 2021, the USFWS determined that any resulting incidental take of the Northern long-eared bat (*Myotis septentrionalis*) as a result of this project is not prohibited by the final 4(d) rule. Further, unless the USFWS determines within 30 days of April 01, 2021 that the IPaC determination was incorrect, this response satisfies and concludes EBI's responsibilities for the proposed facility construction with respect to the Northern long-eared bat.

However; note that potentially suitable habitat (trees with dbh > 3-inches) capable of supporting the Indiana bat (*Myotis sodalis*) is also noted within the vicinity and at the proposed Site. Therefore, due to tree clearing occurring between October 1 and March 31, it is anticipated that the proposed installation 'may affect, but is unlikely to adversely affect' the Indiana bat. The proposed installation is anticipated to have 'no effect' on the remaining identified listed species.

#### Migratory Bird Treaty Act

Consideration should also be given to the potential impacts of the construction and ongoing operation of the proposed Facility on species protected under the Migratory Bird Treaty Act (MBTA; 16 U.S.C. 703-712). The USFWS issued "Recommended Best Practices for Communications Tower Design, Siting, Construction, Operation, Maintenance and Decommissioning"<sup>2</sup> to provide avoidance and minimization measures to reduce the risk of avian mortality as a result of communications towers.

<sup>2</sup> <https://www.fws.gov/migratorybirds/pdf/management/usfwscommtowerguidance.pdf>

The proposed tower will be a 104-foot monopole tower with no FAA required lighting. As such, it meets most of the USFWS's tower siting and design recommendations and is therefore not anticipated to adversely affect migratory birds.

#### **Bald & Golden Eagle Protection Act**

The Bald and Golden Eagle Protection Act (BGEPA; 16 U.S.C. 668-668d) prohibits the "taking" of bald and golden eagles in the absence of a permit issued by the Secretary of the Interior. Based on EBI's on-site observations, assessment of habitat, and review of publicly-available occurrence data, the proposed installation is not anticipated to result in the "take" of any Bald or Golden Eagles. No further review is required.

#### **FEMA FLOOD ZONE**

Based on EBI's review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map ([www.fema.gov](http://www.fema.gov); Map #09009C0318) the proposed facility lease area is located within an area identified as Zone X, and therefore is not located within a 100-year floodplain. As such, in accordance with §1.1307(a)(6) of FCC NEPA Rules, an Environmental Assessment is not required.

#### **SIGNIFICANT CHANGES TO SURFACE FEATURES**

##### **Wetlands**

EBI did not observe any readily-identifiable wetlands or wetland characteristics (e.g. standing water, hydrophytic vegetation, soil saturation and inundation, drainage patterns and sediment deposition, watermarks and drift lines on trees and vegetation, or water stained leaves) at the Project Site. However, a review of the NWI Wetlands did identify a mapped wetland within the immediate proximity of the proposed access/utility easement. Specifically, the NWI Wetlands Map identifies a freshwater pond approximately 50 feet east/northeast of the access/utility easement. Although this mapped wetland will not be directly impacted by the proposed project, EBI recommends that best management practices (i.e. silt fencing, wattles, erosion controls etc.) are utilized during all construction related activities to minimize secondary or indirect impacts.

EBI also reviewed the United States Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS) Web Soil Survey (WSS) for the Site and immediate vicinity. According to EBI's review, soils at the Project Site consist of Cheshire fine sandy loams 3 to 8 and 8 to 15 percent slopes; and Cheshire fine sandy loams with 3 to 8 percent slopes and very stony. All three soil types are well drained and support depths to water table and restrictive layer at more than 80 inches. These soil types are not listed as hydric by the NRCS (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/>).

Based on EBI's review as summarized above, the proposed communications facility installation is not anticipated to impact identified wetlands.

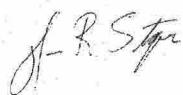
#### **FINDINGS AND CONCLUSIONS**

Based on the results of EBI's review as summarized herein, the proposed communications facility is:

- Anticipated to have 'no effect' on designated critical habitats; any incidental take of the Northern long-eared bat is not prohibited by the 4(d) rule; is anticipated to 'may affect, not likely to adversely affect' the Indiana bat, given tree clearing occurs between October 1 and March 31;
- Not within the boundaries of, or within one mile of federally-protected land (i.e. wildlife preserves, wilderness areas, etc.);
- Not within the boundaries of a FEMA-designated 100-year flood zone; and
- Not anticipated to result in a significant change to surface features, as long as best management practices are implemented.

EBI is an independent contractor, not an employee of either the property owner or the project proponent, and its compensation was not based on the findings or recommendations made in this Review or on the closing of any business transaction.

Sincerely,



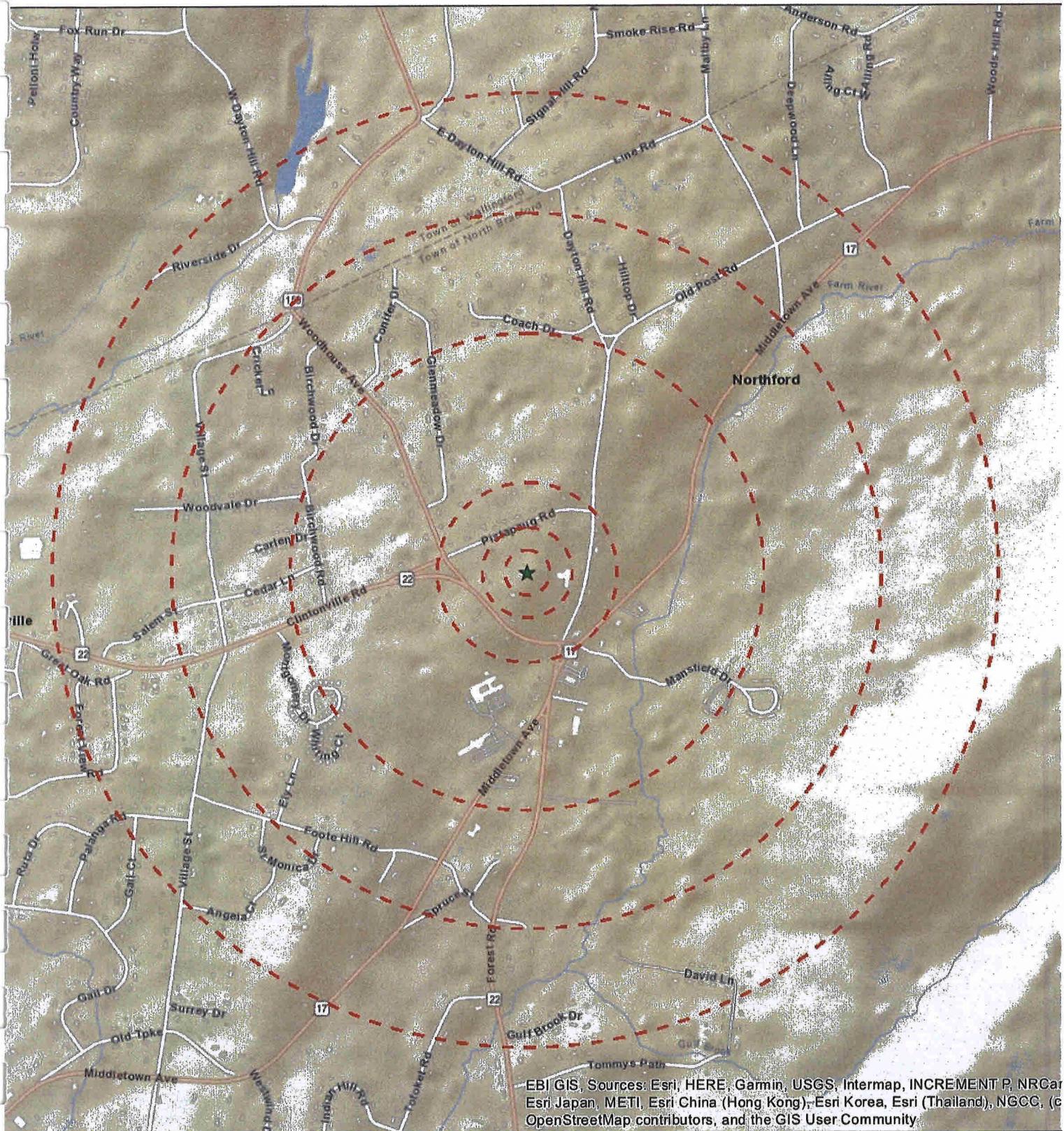
Mr. Jason Stayer  
Senior Biologist



Ms. Kim Narel  
Biologist I  
(949) 290-0535

Attachments: **Figures & Drawings**  
**Photographs**  
**Species Review Documentation**  
**Supporting Documentation**  
**Qualifications**

## **FIGURES & DRAWINGS**



### Legend

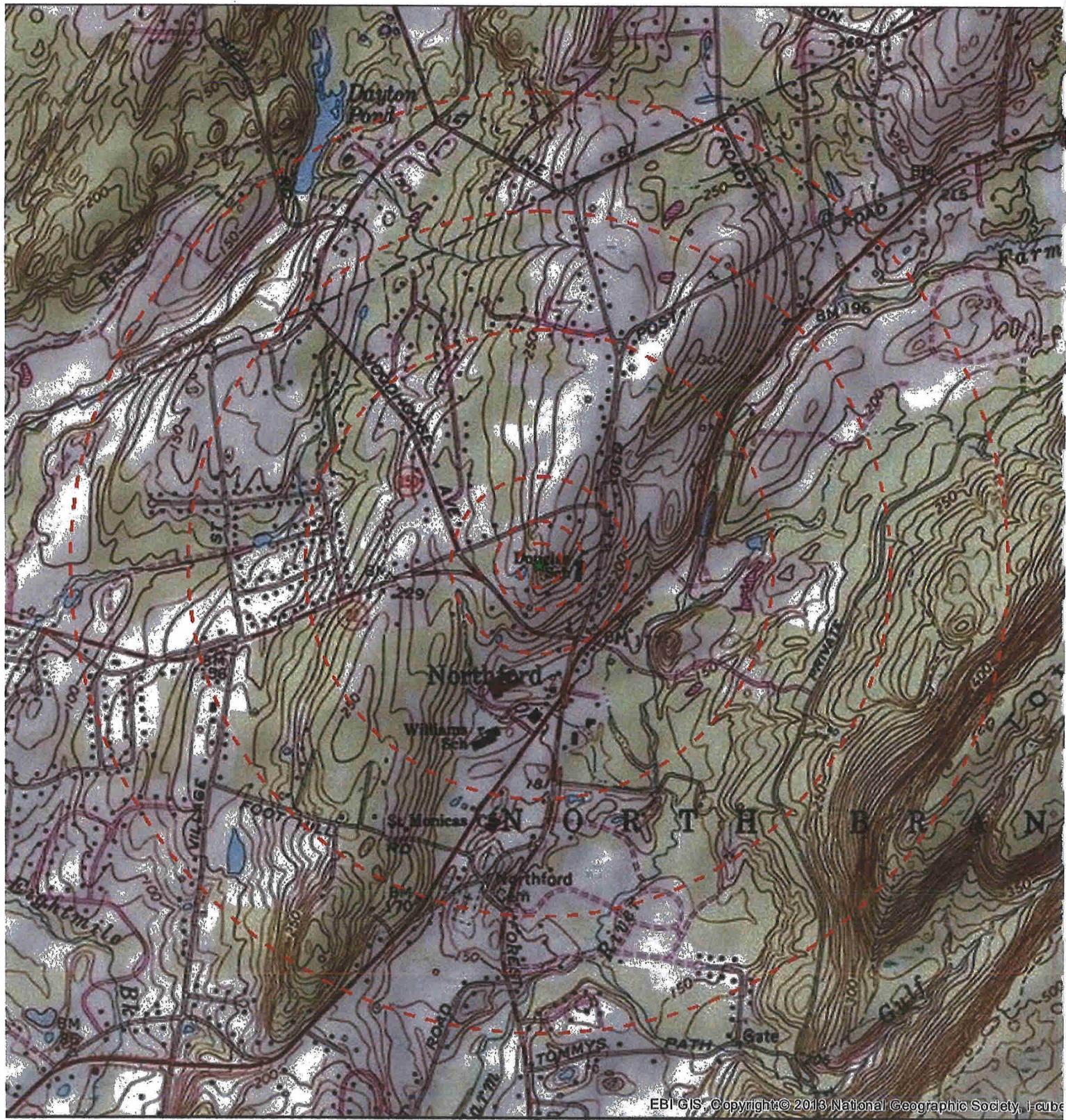
- ★ Project Site
- Site Radius at 250', 500', 1000', 1/2, 3/4 & 1 mile

Date: 3/17/2

### Figure 1: Site Location Map

021 NORTH BRANFORD  
CLINTONVILLE ROAD  
NORTHBRADFORD, CONNECTICUT 06472





## Legend

## ★ Project Site

### Site Radius at 250', 500', 1000', $\frac{1}{2}$ , $\frac{3}{4}$ & 1 mile

Date: 3/17/20

3S 24K Quad: Wallingford, CT 1985

Figure 2 - Topographic Map

**T021 NORTH BRANFORD  
22 CLINTONVILLE ROAD  
ORTHFORD, CONNECTICUT 06472**



## FAA 1-A SURVEY CERTIFICATION

Applicant: Homeland Towers  
9 Harmony Street, 2<sup>nd</sup> Floor  
Danbury, CT 06810

Verizon Site Ref: CT021

Site Address: 222 Clintonville Road  
Northford, CT 06472

Horizontal Datum: NAD 83

Vertical Datum: NAVD 1988 (AMSL)

Structure Type: Proposed Monopine

Latitude: (NAD 83) 41°23'45.2834" N (41.3959121° N)

Longitude: (NAD 83) 72°47'35.4194" W (72.7931721° W)

Proposed Ground Elevation: 272.3'± (in feet) AMSL Elevation

Top of Proposed Monopine: 100'± AGL / 372.3'± AMSL Elevation (in feet)

### Certification:

I certify that the latitude of 41°23'45.2834" N (41.3959121° N) and the longitude of 72°47'35.4194" W (72.7931721° W) are accurate to within 20 feet horizontally, and that the following elevations are accurate to within 3 feet vertically. The proposed ground height is 272.3' AMSL and the top of the proposed monopine is 100' AGL / 372.3' AMSL. The horizontal datum (coordinates) are in the terms of the North American Datum of 1983 (NAD 83) and are expressed in degrees, minutes, and seconds to the nearest ten thousandth of a second and decimal degrees.

The vertical datum (heights) are in terms of the North American Vertical Datum of 1988 and are determined to the nearest tenth of a foot.

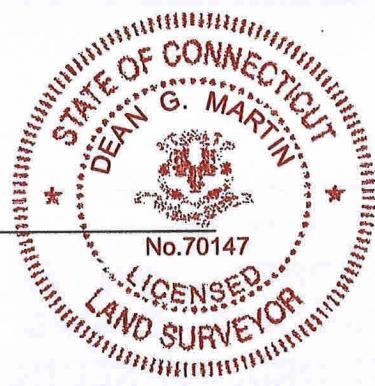
Company:

Martin Surveying Associates, LLC.

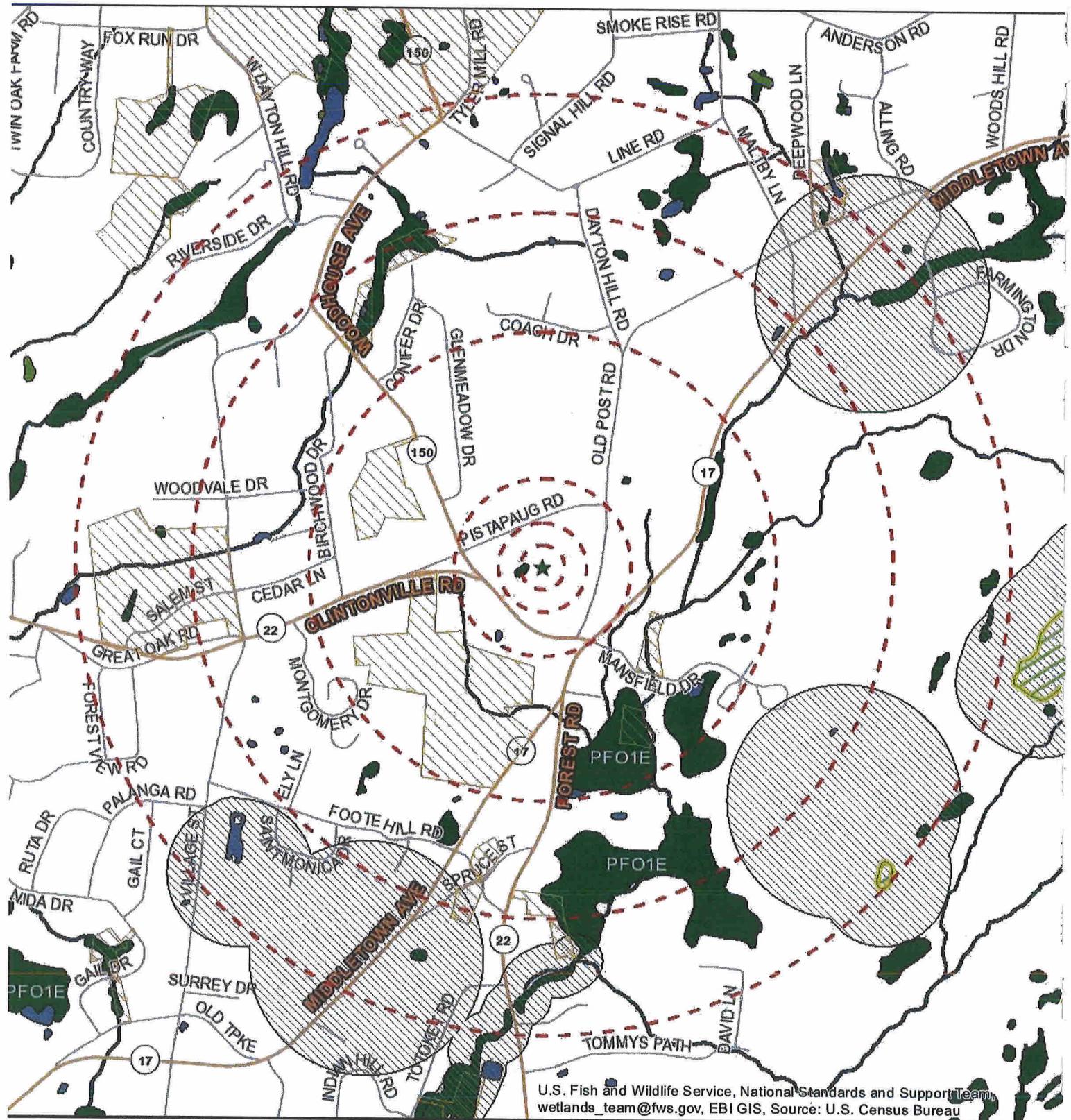
Surveyor

Signature/Seal:

  
Dean Martin, PLS CT #70147



March 25, 2021



### Legend

★ Project Site

--- Site Radius at 250', 500', 1000', 1/2, 3/4 & 1 mile

\* See associated map leg.  
for additional source inform.

Date: 4/1/2

and Resources Map

**T021 NORTH BRANFORD  
22 CLINTONVILLE ROAD  
NORTHFORD, CONNECTICUT 06472**

N: 6121001068

# and Resources Legend

## Scenic Parkways, Rivers & Trails

- National Scenic Parkway
- National Park Service Trail / Appalachian Trail
- AZ - BLM Historic Trail
- CT - DEP Trail
- MT - Lewis & Clark Trail
- NY - Trails**

- NY - Scenic Landmark Area
- NY - Statewide Area of Scenic Significance
- National Wild, Scenic River
- CA, MT, PA - Wild or Scenic River

Sources: National Park Service [http://www.nps.gov/gis/data\\_info/](http://www.nps.gov/gis/data_info/) ; Bureau of land management <http://www.blm.gov/wo/st/en.html> ; CT DEP [http://www.ct.gov/deep/cwp/view.asp?a=2698&q=323342&deepNav\\_GID=1707%20](http://www.ct.gov/deep/cwp/view.asp?a=2698&q=323342&deepNav_GID=1707%20) ; NY GIS Clearinghouse <http://gis.ny.gov/> ; National W & S Rivers <http://www.rivers.gov/rivers/mapping-gis.php> ; Montana GIS <http://nris.mt.gov/gis> ; California Atlas <http://atlas.ca.gov/>

## State Conservation, Lands & Wildlife Areas

- CT - DEP Property**
- CO - Public Access Wildlife Area
- FL - Wildlife Management Area
- MT - National Wildlife Refuge
- NH - WMNF Management Area
- ME - Conservation Land
- TN - Wildlife Resource Land
- TX - State Park or Wildlife Mgt Area
- TX - Audubon Sanctuary**
- CT - DEP Municipal and Open Space**
- NH - Conservation Land
- NY - DEC State Lands
- NY - Agricultural District**

Sources: CT DEP [http://www.ct.gov/deep/cwp/view.asp?a=2698&q=323342&deepNav\\_GID=1707%20](http://www.ct.gov/deep/cwp/view.asp?a=2698&q=323342&deepNav_GID=1707%20) ; CO Wildlife Space [http://ndis.nrel.colostate.edu/ftp/ftp\\_response.asp](http://ndis.nrel.colostate.edu/ftp/ftp_response.asp) ; Florida Fish and Wildlife [www.MyFWC.com](http://www.MyFWC.com) ; Montana GIS <http://nris.mt.gov/gis> ; NH GRANIT <http://www.granit.unh.edu/date/downloadfreedata> ; ME GIS <http://megis.maine.gov/catalog> ; TN GIS <http://www.state.tn.us/environment/parks/gis/data/> ; TX GIS <http://www.glo.state.tx.us/nri/data/index.html> ; NY GIS Clearinghouse <http://gis.ny.gov/>

- | <b>US FWS NWI</b>   |                                   |
|---------------------|-----------------------------------|
|                     | Estuarine and Marine Deepwater    |
| <b>Wetland Type</b> |                                   |
|                     | Estuarine and Marine Wetland      |
|                     | Freshwater Emergent Wetland       |
|                     | Freshwater Forested/Shrub Wetland |
|                     | Freshwater Pond                   |
|                     | Lake                              |
|                     | Other                             |
|                     | Riverine                          |

## State Endangered Threatened & Protected Species

- AZ - Areas of Environmental Concern
- CA - Spotted Owl Territory
- CA - NDDB T & E Species
- CT - NDDB Area Feature
- CT - DEP Critical Habitat**
- MA - NHESP Estimated Habitats of Rare Wildlife
- TX - Protected Species

- MA - NHESP Priority Habitats of Rare Species**
- \* FL - Conservation Species
- MA - NHESP Certified Vernal Pool
- ME - Candidate Vernal Pool
- NY - Important Bird Area**
- TX - Ecologically Unique Rivers Streams**

Sources: AZ BLM Page [http://www.blm.gov/az/st/en/prog/maps/gis\\_files.html](http://www.blm.gov/az/st/en/prog/maps/gis_files.html) ; CNDDB <http://www.dfg.ca.gov/biogeodata/cnddb/> ; CT DEP [http://www.ct.gov/deep/cwp/view.asp?a=2698&q=323342&deepNav\\_GID=1707%20](http://www.ct.gov/deep/cwp/view.asp?a=2698&q=323342&deepNav_GID=1707%20) ; MAGIS <http://www.mass.gov/mgis/laylist.htm> ; TX GIS <http://www.glo.state.tx.us/nri/data/index.html> ; Florida Fish and Wildlife [www.MyFWC.com](http://www.MyFWC.com) ; NY GIS Clearinghouse <http://gis.ny.gov/>

## Federal & National Coverage Data Layers

- USFWS Critical Habitat

### FEMA Q3 Flood Zone 2006

- 500-year inundation area.
- 100-year inundation area.
- 100-year inundation area with velocity hazard.
- Undetermined but possible flood hazard area.
- Floodway area, including watercourse extent.

No Flood Data No Flood Data Available

Sources: National Park Service [http://www.nps.gov/gis/data\\_info/](http://www.nps.gov/gis/data_info/) ; USFWS <http://crithab.fws.gov/> ; National Park Service <http://science.nature.nps.gov/nrdata/index.cfm> ; The National Map <http://nationalmap.gov/> ; Wilderness.net <http://www.wilderness.net/> ; FEMA - Q3 Flood Data <https://msc.fema.gov>

- USFWS Critical Habitat Area
- National Park Service
- National Wildlife Area or Refuge
- Federally Owned Land
- National Wilderness Areas

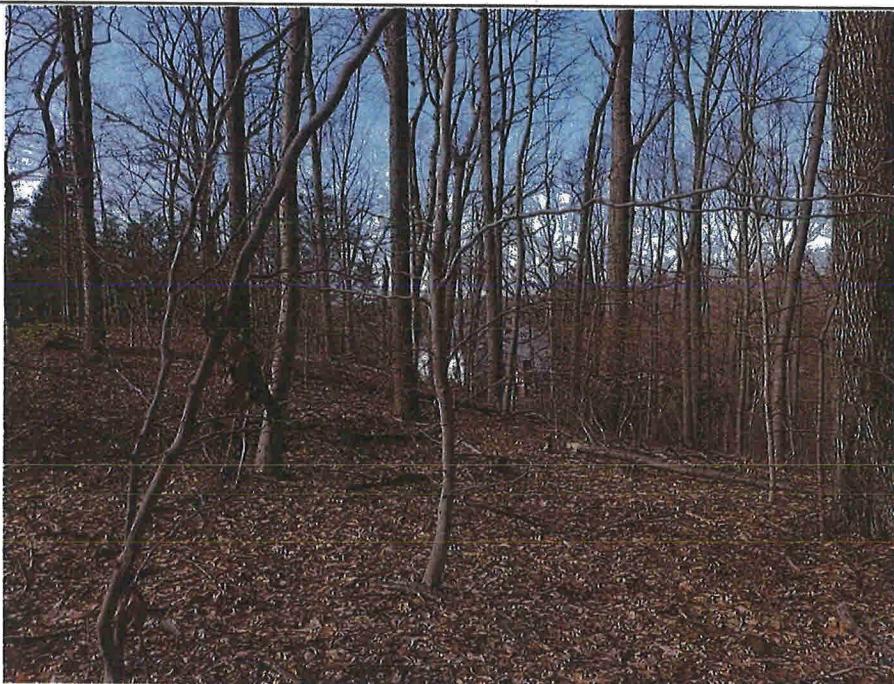
## **PHOTOGRAPHS**



**1.** View from the proposed tower location, facing north.



**2.** View from the proposed tower location, facing east.



3. View from the proposed tower location, facing south.



4. View from the proposed tower location, facing west.



**5. Proposed Access Road, facing east. Pond to right, downslope.**



**6. Overview of proposed Lease Area, facing west.**

## **SPECIES REVIEW DOCUMENTATION**



# United States Department of the Interior



**FISH AND WILDLIFE SERVICE**  
New England Ecological Services Field Office  
70 Commercial Street, Suite 300  
Concord, NH 03301-5094  
Phone: (603) 223-2541 Fax: (603) 223-0104  
<http://www.fws.gov/newengland>

In Reply Refer To:

April 01, 2021

Consultation Code: 05E1NE00-2021-SLI-2140

Event Code: 05E1NE00-2021-E-06752

Project Name: North Branford

**Subject:** List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

**To Whom It May Concern:**

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan

([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>;

<http://www.towerkill.com>; and

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**New England Ecological Services Field Office**  
70 Commercial Street, Suite 300  
Concord, NH 03301-5094  
(603) 223-2541

## Project Summary

Consultation Code: 05E1NE00-2021-SLI-2140

Event Code: 05E1NE00-2021-E-06752

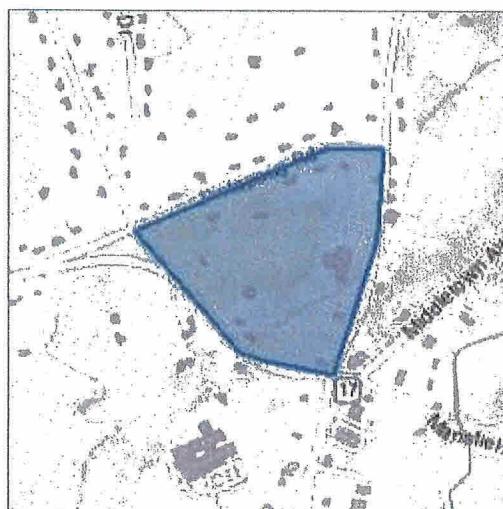
Project Name: North Branford

Project Type: COMMUNICATIONS TOWER

Project Description: Construction of a 100-foot (approximately 104-foot with appurtenance) monopole tower and associated support equipment located within a 4,061 square-foot fenced compound on a 4,361 square-foot lease area.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.3957732,-72.7933942537222,14z>



Counties: New Haven County, Connecticut

## Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Mammals

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i>	Endangered
There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/5949">https://ecos.fws.gov/ecp/species/5949</a>	
Northern Long-eared Bat <i>Myotis septentrionalis</i>	Threatened
No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	

### Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

al Linear Features

al Polygon Features

posed Linear Features

posed Polygon  
tures

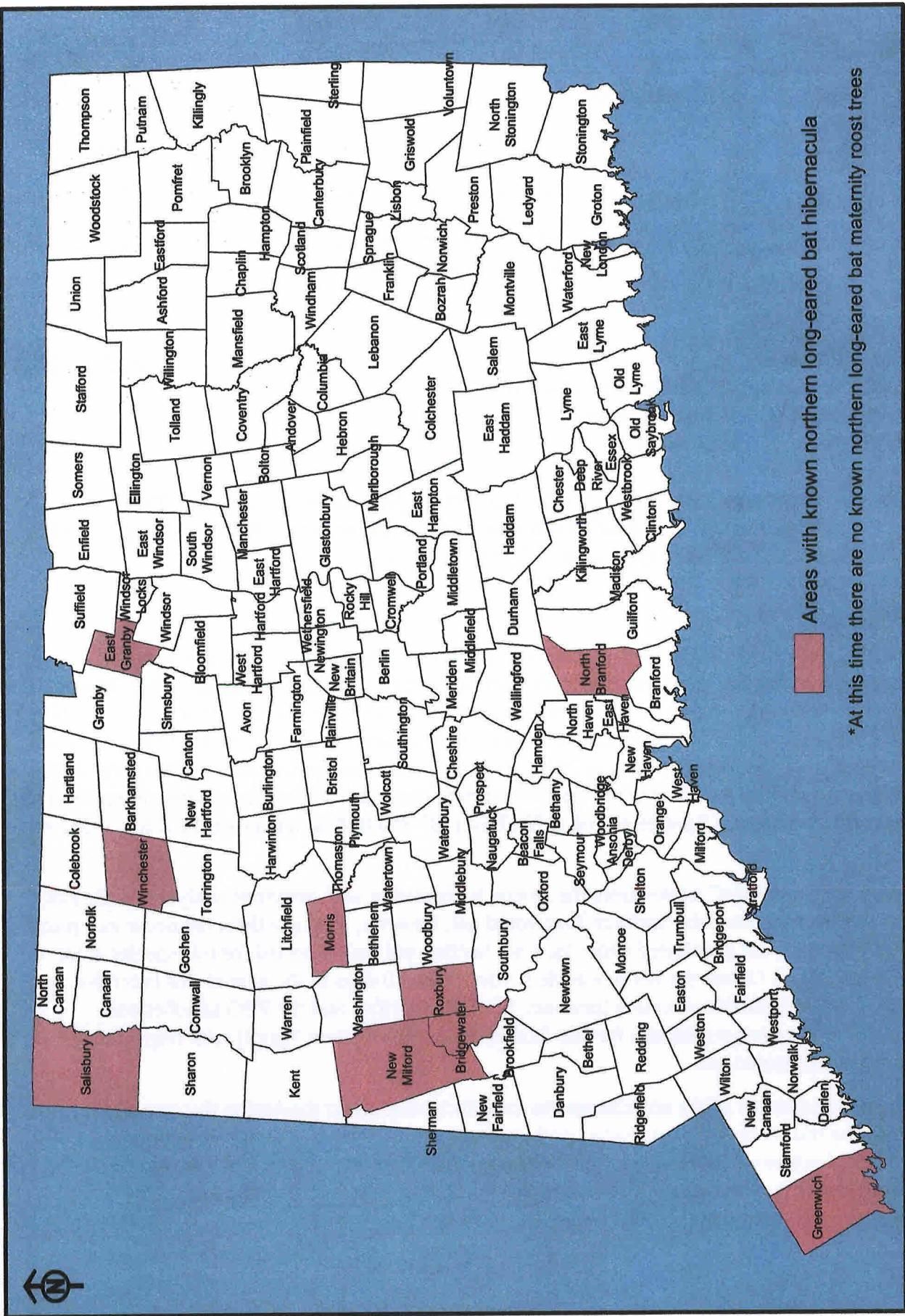


ecific geographic area(s) that contains features essential for the conservation of a threatened or endangered species  
that may require special management and protection.

200ft

Fish and Wildlife Service | The data found in this file were developed by the U.S. Fish & Wildlife Service field offices. For more information please refer to the species level metadata found with the individual shapefiles. The ECOS Joint Development Team is responsible for creating and serving this conglomerate file. No data alterations are made by ECOS. | Maxar, Microsoft

## Northern long-eared bat areas of concern in Connecticut to assist with Federal Endangered Species Act Compliance



March 6, 2019

For information on federal requirements visit <http://www.fws.gov/midwest/endangered/mammals/nleb/>



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
New England Ecological Services Field Office  
70 Commercial Street, Suite 300  
Concord, NH 03301-5094  
Phone: (603) 223-2541 Fax: (603) 223-0104  
<http://www.fws.gov/newengland>

In Reply Refer To:

April 01, 2021

Consultation code: 05E1NE00-2021-TA-2140

Event Code: 05E1NE00-2021-E-06755

Project Name: North Branford

Subject: Verification letter for the 'North Branford' project under the January 5, 2016, Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions.

Dear Jason Stayer:

The U.S. Fish and Wildlife Service (Service) received on April 01, 2021 your effects determination for the 'North Branford' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. This IPaC key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's January 5, 2016, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from "take"<sup>[1]</sup> prohibitions applicable to the northern long-eared bat under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under ESA Section 7(a)(2) with respect to the northern long-eared bat.

Please report to our office any changes to the information about the Action that you submitted in IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation. If the Action is not completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

This IPaC-assisted determination allows you to rely on the PBO for compliance with ESA Section 7(a)(2) only for the northern long-eared bat. It **does not** apply to the following ESA-protected species that also may occur in the Action area:

- Indiana Bat *Myotis sodalis* Endangered

If the Action may affect other federally listed species besides the northern long-eared bat, a proposed species, and/or designated critical habitat, additional consultation between you and this Service office is required. If the Action may disturb bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act is recommended.

---

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

**Action Description**

You provided to IPaC the following name and description for the subject Action.

**1. Name**

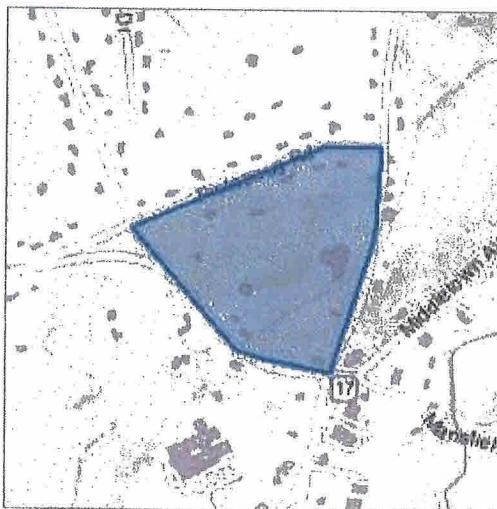
North Branford

**2. Description**

The following description was provided for the project 'North Branford':

Construction of a 100-foot (approximately 104-foot with appurtenance) monopole tower and associated support equipment located within a 4,061 square-foot fenced compound on a 4,361 square-foot lease area.

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.3957732,-72.7933942537222,14z>

**Determination Key Result**

This Federal Action may affect the northern long-eared bat in a manner consistent with the description of activities addressed by the Service's PBO dated January 5, 2016. Any taking that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o). Therefore, the PBO satisfies your responsibilities for this Action under ESA Section 7(a)(2) relative to the northern long-eared bat.

**Determination Key Description: Northern Long-eared Bat 4(d) Rule**

This key was last updated in IPaC on May 15, 2017. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for Federal actions is to assist determinations as to whether proposed actions are consistent with those analyzed in the Service's PBO dated January 5, 2016.

Federal actions that may cause prohibited take of northern long-eared bats, affect ESA-listed species other than the northern long-eared bat, or affect any designated critical habitat, require

ESA Section 7(a)(2) consultation in addition to the use of this key. Federal actions that may affect species proposed for listing or critical habitat proposed for designation may require a conference under ESA Section 7(a)(4).

## Determination Key Result

This project may affect the threatened Northern long-eared bat; therefore, consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.) is required. However, based on the information you provided, this project may rely on the Service's January 5, 2016, *Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions* to fulfill its Section 7(a)(2) consultation obligation.

### Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?  
**Yes**
2. Have you determined that the proposed action will have "no effect" on the northern long-eared bat? (If you are unsure select "No")  
**No**
3. Will your activity purposefully **Take** northern long-eared bats?  
**No**
4. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?  
**Automatically answered**  
**No**
5. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at [www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html](http://www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html).

6. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?  
**No**
7. Will the action involve Tree Removal?  
**Yes**

8. Will the action only remove hazardous trees for the protection of human life or property?

No

9. Will the action remove trees within 0.25 miles of a known northern long-eared bat hibernaculum at any time of year?

No

10. Will the action remove a known occupied northern long-eared bat maternity roost tree or any trees within 150 feet of a known occupied maternity roost tree from June 1 through July 31?

No

## Project Questionnaire

**If the project includes forest conversion, report the appropriate acreages below.**

**Otherwise, type '0' in questions 1-3.**

1. Estimated total acres of forest conversion:

0.5

2. If known, estimated acres of forest conversion from April 1 to October 31

0

3. If known, estimated acres of forest conversion from June 1 to July 31

0

**If the project includes timber harvest, report the appropriate acreages below.**

**Otherwise, type '0' in questions 4-6.**

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

**If the project includes prescribed fire, report the appropriate acreages below.**

**Otherwise, type '0' in questions 7-9.**

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

**If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.**

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0



## *A County Report of Connecticut's Endangered, Threatened and Special Concern Species*

### New Haven County

#### Amphibians

Scientific Name	Common Name	Protection Status
<i>Ambystoma jeffersonianum</i>	Jefferson salamander "complex"	SC
<i>Ambystoma laterale</i>	Blue-spotted salamander	E/SC
<i>Rana pipiens</i>	Northern leopard frog	SC
<i>Scaphiopus holbrookii</i>	Eastern spadefoot	E

#### Birds

Scientific Name	Common Name	Protection Status
<i>Accipiter gentilis</i>	Northern goshawk	T
<i>Ammodramus caudacutus</i>	Saltmarsh sharp-tailed sparrow	SC
<i>Ammodramus henslowii</i>	Henslow's sparrow	SC*
<i>Ammodramus maritimus</i>	Seaside sparrow	T
<i>Ammodramus savannarum</i>	Grasshopper sparrow	E
<i>Ardea alba</i>	Great egret	T
<i>Asio flammeus</i>	Short-eared owl	T
<i>Asio otus</i>	Long-eared owl	E
<i>Botaurus lentiginosus</i>	American bittern	E
<i>Buteo platypterus</i>	Broad-winged hawk	SC
<i>Caprimulgus vociferus</i>	Whip-poor-will	SC
<i>Charadrius melanotos</i>	Piping plover	T
<i>Chordeiles minor</i>	Common nighthawk	E
<i>Circus hudsonius</i>	Northern harrier ( <i>Circus cyaneus</i> )	E
<i>Dolichonyx oryzivorus</i>	Bobolink	SC
<i>Egretta caerulea</i>	Little blue heron	SC
<i>Egretta thula</i>	Snowy egret	T

## New Haven County

### Birds

Scientific Name	Common Name	Protection Status
<i>Eremophila alpestris</i>	Horned lark	E
<i>Falco peregrinus</i>	Peregrine falcon	T
<i>Falco sparverius</i>	American kestrel	SC
<i>Gallinula galeata</i>	Common moorhen (Gallinula chloropus)	E
<i>Gavia immer</i>	Common loon	SC
<i>Haematopus palliatus</i>	American oystercatcher	T
<i>Haliaeetus leucocephalus</i>	Bald eagle	T
<i>Icteria virens</i>	Yellow-breasted chat	E
<i>Ixobrychus exilis</i>	Least bittern	T
<i>Nyctanassa violacea</i>	Yellow-crowned night-heron	SC
<i>Passerculus sandwichensis</i>	Savannah sparrow	SC
<i>Passerculus sandwichensis</i> ssp. <i>princeps</i>	Ipswich sparrow	SC
<i>Plegadis falcinellus</i>	Glossy ibis	SC
<i>Podilymbus podiceps</i>	Pied-billed grebe	E
<i>Pooecetes gramineus</i>	Vesper sparrow	E
<i>Progne subis</i>	Purple martin	SC
<i>Rallus elegans</i>	King rail	E
<i>Setophaga americana</i>	Northern parula	SC
<i>Sterna dougallii</i>	Roseate tern	E
<i>Sterna hirundo</i>	Common tern	SC
<i>Sternula antillarum</i>	Least tern	T
<i>Sturnella magna</i>	Eastern meadowlark	T
<i>Toxostoma rufum</i>	Brown thrasher	SC
<i>Tyto alba</i>	Barn owl	E
<i>Vermivora chrysoptera</i>	Golden-winged warbler	E

### Fish

Scientific Name	Common Name	Protection Status
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## New Haven County

### Fish

Scientific Name	Common Name	Protection Status
<i>Acipenser brevirostrum</i>	Shortnose sturgeon	E
<i>Acipenser oxyrinchus oxyrinchus</i>	Atlantic sturgeon	E
<i>Notropis bifrenatus</i>	Bridle shiner	SC*

### Invertebrates

Scientific Name	Common Name	Protection Status
<i>Abagrotis nefascia benjamini</i>	Coastal heathland cutworm	T
<i>Amara chalcea</i>	Ground beetle	SC
<i>Apamea inordinata</i>	Apamea moth	T
<i>Apamea lintneri</i>	Sand wainscot moth	SC
<i>Apodrepanulatrix liberaria</i>	New Jersey tea inchworm	E
<i>Argyrostrotis anilis</i>	Short-lined chocolate	SC
<i>Bembidion lacunarium</i>	Ground beetle	SC
<i>Bombus terricola</i>	Yellow-banded bumble bee	T
<i>Brachinus medius</i>	Bombardier beetle	SC
<i>Brachinus ovipennis</i>	Bombardier beetle	SC
<i>Carabus vinctus</i>	Ground beetle	SC
<i>Chlosyne harrisii</i>	Harris' checkerspot	SC*
<i>Chlosyne nycteis</i>	Silvery checkerspot	SC*
<i>Cicindela formosa generosa</i>	Big sand tiger beetle	SC
<i>Cicindela hirticollis</i>	Hairy-necked tiger beetle	SC
<i>Cicindela marginata</i>	Saltmarsh tiger beetle	SC
<i>Cicindela purpurea</i>	Purple tiger beetle	SC*
<i>Cicindela tranquebarica</i>	Dark-bellied tiger beetle	T
<i>Citheronia regalis</i>	Regal moth	SC*
<i>Cordulegaster erronea</i>	Tiger spiketail	T
<i>Drasteria graphica atlantica</i>	False heather underwing	T
<i>Eacles imperialis imperialis</i>	Imperial moth	SC

## New Haven County

### Invertebrates

Scientific Name	Common Name	Protection Status
<i>Erynnis horatius</i>	Horace's duskywing	SC
<i>Erynnis lucilius</i>	Columbine duskywing	E
<i>Erynnis persius persius</i>	Persius duskywing	E
<i>Eucosma morrisoni</i>	Morrison's mosaic	T
<i>Eumacaria latiferrugata</i>	Brown-bordered geometer	T
<i>Euxoa pleuritica</i>	Fawn brown dart moth	SC
<i>Euxoa violaris</i>	Violet dart moth	SC
<i>Exyra fax</i>	Pitcher plant moth	T
<i>Goniops chrysocoma</i>	Horse fly	SC
<i>Grammia phyllira</i>	Phyllira tiger moth	E
<i>Helluomorphoides praeustus bicolor</i>	Ground beetle	SC
<i>Ladona deplanata</i>	Blue corporal dragonfly	SC
<i>Ligumia nasuta</i>	Eastern pondmussel	SC
<i>Lomamyia flavigornis</i>	Yellow-horned beaded lacewing	SC
<i>Loxandrus vulneratus</i>	Ground beetle	SC
<i>Lycaena epixanthe</i>	Bog copper	SC
<i>Magicicada septendecula</i>	Little 17-year periodical cicada	E
<i>Melitara prodentalis</i>	Eastern cactus-boring moth	SC
<i>Papaipema duovata</i>	Seaside goldenrod stem borer	T
<i>Papaipema leucostigma</i>	Columbine borer	E
<i>Papaipema maritima</i>	Maritime sunflower borer moth	SC*
<i>Phaneta clavana</i>	Lanced phaneta	T
<i>Photodes inops</i>	Spartina borer moth	SC
<i>Pyreferra ceromatrica</i>	Anointed sallow moth	SC*
<i>Pyrrhia aurantiago</i>	Aureolaria seed borer	T
<i>Scaphinotus viduus</i>	Ground beetle	SC
<i>Schinia spinosae</i>	Spinose flower moth	SC
<i>Sphodros niger</i>	Purse web spider	SC

## New Haven County

### Invertebrates

Scientific Name	Common Name	Protection Status
<i>Stonemyia isabellina</i>	Tabanid fly	SC
<i>Sympistis perscripta</i>	Scribbled sallow moth	SC
<i>Sympistis riparia</i>	Dune sympistis	SC
<i>Thaumatopsis edonis</i>	Grassland thaumatopsis	T
<i>Tibicen auletes</i>	Northern dusk-singing cicada	E
<i>Valvata sincera</i>	Boreal turret snail	SC
<i>Valvata tricarinata</i>	Turret snail	SC
<i>Zale curema</i>	Black-eyed zale	E
<i>Zale obliqua</i>	Oblique zale	SC

### Mammals

Scientific Name	Common Name	Protection Status
<i>Cryptotis parva</i>	Least shrew	E
<i>Lasionycteris noctivagans</i>	Silver-haired bat	SC
<i>Lasiurus borealis</i>	Red bat	SC
<i>Lasiurus cinereus</i>	Hoary bat	SC
<i>Myotis septentrionalis</i>	Northern long-eared bat	E
<i>Myotis sodalis</i>	Indiana bat	E
<i>Perimyotis subflavus</i>	Tri-colored bat	E
<i>Myotis sodalis</i>	Indiana bat	E

### Plants

Scientific Name	Common Name	Protection Status
<i>Abies balsamea</i>	Balsam fir	E
<i>Agastache nepetoides</i>	Yellow giant hyssop	E
<i>Agastache scrophulariifolia</i>	Purple giant hyssop	E
<i>Alopecurus aequalis</i>	Short-awned meadow foxtail	T
<i>Anemone canadensis</i>	Canada anemone	T
<i>Angelica venenosa</i>	Hairy angelica	SC*

## New Haven County

### Plants

Scientific Name	Common Name	Protection Status
<i>Antennaria howellii</i> ssp. <i>petaloidea</i>	Field pussytoes	SC*
<i>Aplectrum hyemale</i>	Puttyroot	SC*
<i>Arethusa bulbosa</i>	Dragon's-mouth	SC*
<i>Aristida longespica</i> var. <i>geniculata</i>	Needlegrass	SC
<i>Aristida purpurascens</i>	Arrowfeather	E
<i>Aristida tuberculosa</i>	Beach needle grass	E
<i>Asclepias purpurascens</i>	Purple milkweed	SC
<i>Asclepias viridiflora</i>	Green milkweed	E
<i>Asplenium montanum</i>	Mountain spleenwort	SC
<i>Asplenium ruta-muraria</i>	Wallrue spleenwort	T
<i>Atriplex glabriuscula</i>	Bracted orache	SC
<i>Bidens beckii</i>	Beck's water-marigold	SC
<i>Blephilia ciliata</i>	Downy wood-mint	SC*
<i>Blephilia hirsuta</i>	Hairy wood-mint	SC*
<i>Bolboschoenus maritimus</i> ssp. <i>paludosus</i>	Bayonet grass	SC
<i>Bolboschoenus novae-angliae</i>	Salt marsh bulrush	SC
<i>Bouteloua curtipendula</i>	Sideoats grama-grass	E
<i>Calystegia spithamea</i>	Low bindweed	SC*
<i>Cardamine douglassii</i>	Purple cress	SC
<i>Carex alata</i>	Broadwing sedge	E
<i>Carex bushii</i>	Bush's sedge	SC
<i>Carex buxbaumii</i>	Brown bog sedge	E
<i>Carex hitchcockiana</i>	Hitchcock's sedge	SC
<i>Carex magellanica</i>	Boreal bog sedge	E
<i>Carex oligocarpa</i>	Eastern few-fruit sedge	SC
<i>Carex polymorpha</i>	Variable sedge	E
<i>Carex reznicekii</i>	Reznicek's sedge	E
<i>Carex sterilis</i>	Dioecious sedge	SC

## New Haven County

### Plants

Scientific Name	Common Name	Protection Status
<i>Carex trichocarpa</i>	Hairy-fruited sedge	SC
<i>Carex tuckermanii</i>	Tuckerman's sedge	SC
<i>Carex typhina</i>	Cattail sedge	SC
<i>Carex viridula</i>	Little green sedge	E
<i>Carex willdenowii</i>	Willdenow's sedge	E
<i>Celastrus scandens</i>	American bittersweet	SC
<i>Chamaelirium luteum</i>	Devil's-bit	E
<i>Cheilanthes lanosa</i>	Hairy lip-fern	E
<i>Cirsium horridulum</i>	Yellow thistle	E
<i>Coeloglossum viride</i>	Long-bracted green orchid	E
<i>Corallorrhiza trifida</i>	Early coral root	SC
<i>Corydalis flavula</i>	Yellow corydalis	T
<i>Crassula aquatica</i>	Pygmyweed	E
<i>Crocanthemum propinquum</i>	Low frostweed	SC
<i>Crotonopsis elliptica</i>	Elliptical rushfoil	SC*
<i>Cuphea viscosissima</i>	Blue waxweed	SC*
<i>Cuscuta coryli</i>	Hazel dodder	SC*
<i>Cypripedium arietinum</i>	Ram's-head lady's-slipper	SC*
<i>Cypripedium parviflorum</i>	Yellow lady's-slipper	SC
<i>Desmodium cuspidatum</i>	Large-bracted tick-trefoil	E
<i>Desmodium glabellum</i>	Dillenius' tick-trefoil	SC
<i>Dicentra canadensis</i>	Squirrel corn	SC
<i>Diplazium pycnocarpon</i>	Narrow-leaved glade fern	E
<i>Draba reptans</i>	Whitlow-grass	SC
<i>Drymocallis arguta</i>	Tall cinquefoil	SC
<i>Dryopteris goldiana</i>	Goldie's fern	SC
<i>Eleocharis quadrangulata var. crassior</i>	Square-stemmed spikesedge	E

## New Haven County

### Plants

Scientific Name	Common Name	Protection Status
<i>Elymus wiegandii</i>	Wiegand's wild rye	SC
<i>Endodeca serpentaria</i>	Virginia snakeroot	SC
<i>Equisetum palustre</i>	Marsh horsetail	SC*
<i>Equisetum pratense</i>	Meadow horsetail	E
<i>Eriocaulon parkeri</i>	Parker's pipewort	E
<i>Eurybia radula</i>	Rough aster	E
<i>Floerkea proserpinacoides</i>	False mermaid-weed	E
<i>Gamochaeta purpurea</i>	Purple cudweed	SC*
<i>Gaylussacia bigeloviana</i>	Dwarf huckleberry	T
<i>Goodyera repens</i> var. <i>ophioides</i>	Dwarf rattlesnake plantain	SC*
<i>Heteranthera reniformis</i>	Kidneyleaf mud-plantain	SC*
<i>Hottonia inflata</i>	Featherfoil	SC
<i>Huperzia appressa</i>	Fir clubmoss	SC*
<i>Hybanthus concolor</i>	Green violet	SC*
<i>Hydrastis canadensis</i>	Goldenseal	E
<i>Hydrocotyle umbellata</i>	Water pennywort	E
<i>Hydrophyllum virginianum</i>	Virginia waterleaf	SC
<i>Hypericum ascyron</i>	Great St. John's-wort	SC
<i>Ilex glabra</i>	Inkberry	T
<i>Isotria medeoloides</i>	Small whorled pogonia	E
<i>Krigia biflora</i>	Two-flowered cynthia	T
<i>Leptochloa fusca</i> ssp. <i>fascicularis</i>	Saltpond Grass	E
<i>Lespedeza repens</i>	Creeping bush-clover	SC
<i>Liatris novae-angliae</i>	New England blazing-star	SC
<i>Limosella australis</i>	Mudwort	SC
<i>Linnaea borealis</i> ssp. <i>americana</i>	Twinflower	E
<i>Linum sulcatum</i>	Yellow flax	E
<i>Liparis liliifolia</i>	Lily-leaved twayblade	E

## New Haven County

### Plants

Scientific Name	Common Name	Protection Status
<i>Lipocarpha micrantha</i>	Dwarf bulrush	T
<i>Ludwigia sphaerocarpa</i>	Globe-fruited false-loosestrife	E
<i>Lycopus amplectens</i>	Clasping-leaved water-horehound	SC
<i>Lygodium palmatum</i>	Climbing fern	SC
<i>Maianthemum trifolium</i>	Three-leaved false Solomon's-seal	T
<i>Malaxis unifolia</i>	Green adder's-mouth	E
<i>Milium effusum</i>	Tall millet-grass	E
<i>Moehringia macrophylla</i>	Large-leaved sandwort	E
<i>Muhlenbergia capillaris</i>	Long-awn hairgrass	E
<i>Myriophyllum sibiricum</i>	Northern water-milfoil	T
<i>Nuphar microphylla</i>	Small yellow pond lily	SC*
<i>Oligoneuron rigidum</i>	Stiff goldenrod	E
<i>Onosmodium virginianum</i>	Gravel-weed	E
<i>Ophioglossum vulgatum</i>	Southern adder's-tongue	E
<i>Opuntia humifusa</i>	Eastern prickly pear	SC
<i>Orontium aquaticum</i>	Golden club	SC
<i>Orthilia secunda</i>	One-sided pyrola	SC*
<i>Oxalis violacea</i>	Violet wood-sorrel	SC
<i>Packera paupercula</i>	Balsam groundsel	E
<i>Panax quinquefolius</i>	American ginseng	SC
<i>Panicum amarum var. amarum</i>	Bitter panicgrass	T
<i>Panicum verrucosum</i>	Warty panic grass	SC*
<i>Paronychia fastigiata</i>	Hairy forked chickweed	SC*
<i>Paspalum laeve</i>	Field paspalum	T
<i>Pedicularis lanceolata</i>	Swamp lousewort	T
<i>Phaseolus polystachios var. polystachios</i>	Wild kidney bean	SC*
<i>Pityopsis falcata</i>	Sickle-leaved golden aster	E

## New Haven County

### Plants

Scientific Name	Common Name	Protection Status
<i>Plantago virginica</i>	Hoary plantain	SC
<i>Platanthera blephariglottis</i>	White-fringed orchid	E
<i>Platanthera ciliaris</i>	Yellow-fringed orchid	E
<i>Platanthera flava</i> var. <i>herbiola</i>	Pale green orchid	SC
<i>Platanthera hookeri</i>	Hooker's orchid	SC*
<i>Polygala cruciata</i>	Field milkwort	E
<i>Polygala nuttallii</i>	Nuttall's milkwort	T
<i>Polymnia canadensis</i>	Small-flowered leafcup	E
<i>Populus heterophylla</i>	Swamp cottonwood	T
<i>Potamogeton friesii</i>	Fries' pondweed	E
<i>Potamogeton gemmiparus</i>	Capillary pondweed	T
<i>Potamogeton vaseyi</i>	Vasey's pondweed	T
<i>Pycnanthemum torrei</i>	Torrey mountain-mint	E
<i>Ranunculus ambigens</i>	Water-plantain spearwort	E
<i>Ranunculus pensylvanicus</i>	Bristly buttercup	SC
<i>Rhus aromatica</i>	Fragrant sumac	SC*
<i>Ribes rotundifolium</i>	Wild currant	SC
<i>Rubus cuneifolius</i>	Sand blackberry	SC
<i>Sabatia stellaris</i>	Marsh pink	E
<i>Sagittaria cuneata</i>	Northern arrowhead	E
<i>Sagittaria subulata</i>	Awl-leaved arrowhead	SC
<i>Salix pedicellaris</i>	Bog willow	E
<i>Saururus cernuus</i>	Lizard's tail	E
<i>Scheuchzeria palustris</i> ssp. <i>americana</i>	Pod grass	E
<i>Schizachne purpurascens</i>	Purple oat	SC
<i>Schoenoplectus torreyi</i>	Torrey bulrush	T
<i>Scleria triglomerata</i>	Whip nutrush	E
<i>Scutellaria parvula</i> var. <i>missouriensis</i>	Small skullcap	E

## New Haven County

### Plants

Scientific Name	Common Name	Protection Status
<i>Senecio suaveolens</i>	Sweet-scented Indian-plantain	E
<i>Senna hebecarpa</i>	Wild senna	T
<i>Sibbaldiopsis tridentata</i>	Three-toothed cinquefoil	T
<i>Silene stellata</i>	Starry campion	T
<i>Sporobolus clandestinus</i>	Rough dropseed	E
<i>Sporobolus cryptandrus</i>	Sand dropseed	T
<i>Sporobolus heterolepis</i>	Northern dropseed	E
<i>Sporobolus neglectus</i>	Small dropseed	E
<i>Stellaria borealis</i>	Northern stitchwort	SC
<i>Taenidia integerrima</i>	Yellow pimpernel	E
<i>Triphora trianthophora</i>	Nodding pogonia	E
<i>Verbena simplex</i>	Narrow-leaved vervain	SC*
<i>Viburnum nudum</i>	Possum haw	SC*
<i>Xyris smalliana</i>	Small's yellow-eyed	E
<i>Zizia aptera</i>	Golden Alexanders	E

### Reptiles

Scientific Name	Common Name	Protection Status
<i>Clemmys guttata</i>	Spotted turtle	SC
<i>Crotalus horridus</i>	Timber rattlesnake	E
<i>Glyptemys insculpta</i>	Wood turtle	SC
<i>Glyptemys muhlenbergii</i>	Bog turtle	E
<i>Heterodon platirhinos</i>	Eastern hognose snake	SC
<i>Malaclemys terrapin terrapin</i>	Northern diamondback terrapin	SC
<i>Opheodrys vernalis</i>	Smooth green snake	SC
<i>Plestiodon fasciatus</i>	Five-lined skink	T
<i>Terrapene carolina carolina</i>	Eastern box turtle	SC
<i>Thamnophis sauritus</i>	Eastern ribbon snake	SC

E = Endangered, T = Threatened, SC = Special Concern, \* Believed Extirpated

*State of Connecticut*  
*Department of Energy and Environmental Protection*  
*Bureau of Natural Resources, Wildlife Division*  
*79 Elm St., Hartford, CT 06106*





**Connecticut Department of  
Energy & Environmental Protection  
Bureau of Natural Resources  
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 (NDDB) State Listed Species Review**

Please complete this form in accordance with the instructions (DEEP-INST-007) to ensure proper handling of your request.

**There are no fees associated with NDDB 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.

Does your site, including all affected areas, fall in an NDDB Area according to the map instructions:

Yes     No

Enter the date of the map reviewed for pre-screening: 04.26.2021

This form is being submitted for a :

New NDDB request

Renewal/Extension of a NDDB Request, **without modifications and within one year of issued NDDB determination** (no attachments required)

New Safe Harbor Determination (optional) must be associated with an application for a GP for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

Renewal/Extension of an existing Safe Harbor Determination

With modifications

Without modifications (no attachments required)

CPPU Use Only - NDDB-Listed Species Determination # 1736

CPPU Use Only - NDDB-Safe Harbor Determination # 1736

Enter NDDB Determination Number for Renewal/Extension:

Enter Safe Harbor Determination Number for Renewal/Extension:

## Part 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 State. If applicable, the name shall be stated exactly as it is registered with the Secretary of State. Please note, for those entities registered with the Secretary of State, the registered name will be the name used by DEEP. This information can be accessed at the Secretary of the State's database CONCORD. ([www.concord-sots.ct.gov/CONCORD/index.jsp](http://www.concord-sots.ct.gov/CONCORD/index.jsp))*

*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\* Kimberly Narel

Company Name: EBI Consulting

Contact Name:

Address: 21 B Street

City/Town: Burlington

State: MA Zip Code: 08015

ext.

\*\*E-mail: [knarel@ebiconsulting.com](mailto:knarel@ebiconsulting.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 #: <sup>0611807</sup> This information can be accessed at the Secretary of the State's database (CONCORD). ([www.concord-sots.ct.gov/CONCORD/index.jsp](http://www.concord-sots.ct.gov/CONCORD/index.jsp))

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

#### b) Acting as (Affiliation), pick one:

Property owner  Consultant  Engineer  Facility owner  Applicant

Biologist  Pesticide Applicator  Other representative:

### 2. List Primary Contact to receive Natural Diversity Data Base correspondence and inquiries, if different from requester.

Company Name:

Title:

Contact Person:

Mailing Address:

City/Town:

State: Zip Code:

Business Phone:

ext.

\*\*E-mail:

## Part III: Site Information

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

### 1. SITE NAME AND LOCATION

Site Name or Project Name: CT021 / North Branford

Town(s): Northford

Street Address or Location Description: 06472 222 Clintonville Road, Northford, New Haven CT

Size in acres, or site dimensions: 4,361 sq. ft lease area

Latitude and longitude of the center of the site in decimal degrees (e.g., 41.23456 -71.68574):

Latitude: 41.395912055555556

Longitude: -72.79316944444444

Method of coordinate determination (check one):

GPS  Photo interpolation using [CTECO map viewer](#)  Other (specify):

### 2a. Describe the current land use and land cover of the site.

Undeveloped wooded land. Subject Property totals 7.86 acres

### b. Check all that apply and enter the size in acres or % of area in the space after each checked category.

Industrial/Commercial \_\_\_\_\_

Residential \_\_\_\_\_

Forest 100%

Wetland \_\_\_\_\_

Field/grassland \_\_\_\_\_

Agricultural \_\_\_\_\_

Water \_\_\_\_\_

Utility Right-of-way \_\_\_\_\_

Transportation Right-of-way \_\_\_\_\_

Other (specify): \_\_\_\_\_

## Part IV: Project Information

### 1. PROJECT TYPE:

Choose Project Type: Choose Type From Dropdown List , If other describe: Comm Tower Facility

2. Is the subject activity limited to the maintenance, repair, or improvement of an existing structure within the existing footprint?  Yes  No If yes, explain.

## Part IV: Project Information (continued)

3. 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 facility will include a 100-foot (approximately 104-foot with appurtenance) monopole tower and associated support equipment located within a 4,061 square-foot fenced compound on a 4,361 square-foot lease area. Access will be gained via an existing paved driveway emanating northwest from Clintonville Road for approximately 105 feet, and then constructing a 12-foot wide gravel drive for approximately 680 feet to the proposed compound. Utilities will follow the access route to an existing point-of-connection.

Any take of the Northern Long-eared bat is not prohibited by the USFWS May Affect 4(d) rule. May Affect, Unlikely to Adversely Affect the Indiana Bat, with tree clearing occurring between Oct. 1 - March 31.

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

N/A

5. Provide a contact for questions about the project details if different from Part II primary contact.

Name:

Phone:

E-mail:

## Part V: Request Requirements and Associated Application Types

Check one box from either Group 1, Group 2 or Group 3, indicating the appropriate category for this request.

**Group 1.** If you check one of these boxes, complete Parts I – VII of this form and submit the required attachments A and B.

- Preliminary screening was negative but an NDDB review is still requested  
 Request regards a municipally regulated or unregulated activity (no state permit/certificate needed)  
 Request regards a preliminary site assessment or project feasibility study  
 Request relates to land acquisition or protection  
 Request is associated with a *renewal* of an existing permit, with no modifications

**Group 2.** If you check one of these boxes, complete Parts I – VII of this form and submit required attachments A, B, and C.

- Request is associated with a *new* state or federal permit application  
 Request is associated with modification of an existing permit  
 Request is associated with a permit enforcement action  
 Request regards site management or planning, requiring detailed species recommendations  
 Request regards a state funded project, state agency activity, or CEPA request

**Group 3.** If you are requesting a **Safe Harbor Determination**, complete Parts I-VII and submit required attachments A, B, and D. Safe Harbor determinations can only be requested if you are applying for a GP for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

If you are filing this request as part of a state or federal permit application(s) enter the application information below.

Permitting Agency and Application Name(s):

State DEEP Application Number(s), if known: \_\_\_\_\_

State DEEP Enforcement Action Number, if known: \_\_\_\_\_

State DEEP Permit Analyst(s)/Engineer(s), if known: \_\_\_\_\_

Is this request related to a previously submitted NDDB request?  Yes  No

If yes, provide the previous NDDB Determination Number(s), if known: \_\_\_\_\_

## 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 and Safe Harbor renewals/extensions with modifications.** 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:	<b>Overview Map:</b> 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:	<b>Detailed Site Map:</b> 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:	<b>Supplemental Information, Group 2 requirement (attached, DEEP-APP-007C)</b> <input checked="" type="checkbox"/> Section i: Supplemental Site Information and supporting documents <input checked="" type="checkbox"/> Section ii: Supplemental Project Information and supporting documents
<input type="checkbox"/> Attachment D:	<b>Safe Harbor Report Requirements, Group 3 (attached, DEEP-APP-007D)</b>

## 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.

"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."

Kimberly Narel

May 7, 2021

Signature of Requester (a typed name will substitute for a handwritten signature)

Date

Kimberly Narel

Biologist I

Name of Requester (print or type)

Title (if applicable)

Signature of Preparer (if different than above)

Date

Name of Preparer (print or type)

Title (if applicable)

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](mailto:deep.nddbrequest@ct.gov)

## Attachment C: Supplemental Information, Group 2 requirement

### Section i: Supplemental Site Information

#### 1. Existing Conditions

Describe all natural and man-made features including wetlands, watercourses, 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 that must be submitted. Photographs of current site conditions may be helpful to reviewers.

NWI Wetlands Map identifies a freshwater pond approximately 50 feet east/northeast of the access/utility easement. Although this mapped wetland will not be directly impacted by the proposed project, EBI recommends best management practices (i.e. silt fencing, wattles, erosion controls etc.) are utilized during all construction related activities to minimize secondary or indirect impacts. Proposed Project Site is undeveloped wooded land.

Site Photographs (optional) attached

Site Plan/sketch of existing conditions attached

#### 2. 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, complete the following questions and submit any reports of biological surveys, documentation of the biologist's qualifications, and any NDDB survey forms.

Biologist(s) name: \_\_\_\_\_

Habitat and/or species targeted by survey: \_\_\_\_\_

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

### Section ii: Supplemental Project Information

#### 1. Provide a schedule for all phases of the project including the year, the month and/or season that the proposed activity will be initiated and the duration of the activity.

TBD

#### 2. Describe and quantify the proposed changes to existing conditions and describe any on-site or off-site impacts. In addition, provide an annotated site plan detailing the areas of impact and proposed changes to existing conditions.

Undeveloped wooded land (4,361 square feet) will be removed for a 100-foot monopile tower and ground support equipment within a fenced compound. A 12-foot wide gravel drive will be constructed from an existing paved driveway to the least area (route is approx. 680 feet). Utilities will follow the access route.

Annotated Site Plan 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

**From:** [vonOettingen, Susi](#)  
**To:** [Kimberly Narel](#)  
**Subject:** Fw: [EXTERNAL] RE: Indiana bats in CT  
**Date:** Monday, September 27, 2021 11:47:10 AM

---

Hi,

I am very sorry, I must not have closed the loop on this. Consultation is complete for the NLEB with the verification letter. The Indiana bat is not considered to be present in Connecticut in the summer and the project is not located near a hibernaculum. Therefore, it is a "no effect" for the Indiana bat and no concurrence required. The CT DEEP has confirmed that (I suggest you go through the DEEP in the future for bat-related questions).

My apologies.

Susi

\*\*\*\*\*

Susi von Oettingen  
**New Telephone Number: 603-748-8357 (mobile)**  
Endangered Species Biologist  
New England Field Office  
70 Commercial Street, Suite 300  
Concord, NH 03301

### **Teleworking indefinitely**

---

**From:** Hess, Brian <[Brian.Hess@ct.gov](mailto:Brian.Hess@ct.gov)>  
**Sent:** Thursday, May 27, 2021 8:33 AM  
**To:** vonOettingen, Susi <[susi\\_vonoettingen@fws.gov](mailto:susi_vonoettingen@fws.gov)>  
**Cc:** Fraser, Devaughn <[Devaughn.Fraser@ct.gov](mailto:Devaughn.Fraser@ct.gov)>  
**Subject:** [EXTERNAL] RE: Indiana bats in CT

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hi Susi,

Your understanding is correct. We have one record for a solitary MYSO from 1997. That was a hibernaculum survey in North Branford in February.

Thanks,

Brian

---

**From:** vonOettingen, Susi <susi\_vonoettingen@fws.gov>  
**Sent:** Thursday, May 27, 2021 07:57  
**To:** Hess, Brian <Brian.Hess@ct.gov>  
**Subject:** Indiana bats in CT

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

Good morning,

I received a letter for a communications facility in Northford, CT. The consulting company biologist is requesting concurrence for a "not likely to adversely affect" Indiana bat because tree clearing will occur in the winter.

My understanding is that Indiana bats have never been documented occurring in Connecticut in the summer, only small numbers were documented hibernating. I believe this is a no effect because Indiana bats are not present. Would you agree? Or does DEEP consider Connecticut to be within the summer range of Indiana bat?

Just checking to make sure.

Thanks.

Susi

\*\*\*\*\*

Susi von Oettingen  
**New Telephone Number: 603-748-8357 (mobile)**  
Endangered Species Biologist  
New England Field Office  
70 Commercial Street, Suite 300  
Concord, NH 03301

**Teleworking indefinitely**

**From:** [New England FO, FW5](#)  
**To:** [Kimberly Narel](#)  
**Subject:** Automatic reply: [EXTERNAL] Federal Consultation - EBI Natural Resource Review 6121001068 Northford CT  
**Date:** Friday, May 21, 2021 8:42:04 AM

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Thank you for contacting the New England Field Office via their general mailbox. If you have contacted us with a request for regulatory review, please consider this a receipt of your submittal. We will respond to your request as soon as possible.

If you have submitted a section 7 consultation concurrence request for Not Likely to Adversely Affect determination, we will respond within 60 days. For all other requests for review, consultation, comments, etc., we will strive to respond within the same time period, if not sooner.

If your email is unrelated to the topics above, we will reply shortly. If you do not receive a timely response, please call us at 603-223-2541.

## **SUPPORTING DOCUMENTATION**

## National Flood Hazard Layer FIRMette

72°47'54" W 41°23'59"N



## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone J

Future Conditions 1% Annual Chance Flood Hazard Zone X

Area with Reduced Flood Risk due to Levee, See Notes, Zone X

Area with Flood Risk due to Levee Zone D

OTHER AREAS OF FLOOD HAZARD

This legend provides a key for understanding the symbols used in the map to represent different areas and structures.

- NO SCREEN**: Represented by a blue rectangle, this area is labeled **Area of Minimal Flood Hazard** and **Zone X**.
- OTHER AREAS**: Represented by a grey rectangle, this area is labeled **Effective LOMRs**.
- GENERAL STRUCTURES**: Represented by a grey rectangle with a vertical line on the right, this area is labeled **Area of Undetermined Flood Hazard** and **Zone**.
- STRUCTURES**: Represented by a grey rectangle with a vertical line on the right, this area is labeled **Channel, Culvert, or Storm Sewer**, **Levee, Dike, or Floodwall**, and **GENERAL**.

**Cross Sections with 1% Annual Chance**

**Water Surface Elevation**

**Coastal Transect**

**Base Flood Elevation Line (BFE)**

**Limit of Study**

**Jurisdiction Boundary**

**Coastal Transect Baseline**

**Profile Baseline**

**Huron-Clinton Feature**

**OTHER FEATURES**

**B-20.2**

**B-17.5**

**17.5**

point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not valid as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHIL web services provided by FEMA. This map was exported on **4/1/2021 at 12:40 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHIL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map Images for unmapped and unmodernized areas cannot be used for

72°47'17" W 41°23'32"N

Feet 1:6,000

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## National Wetlands Inventory

## North Branford



Project Site

April 1, 2021

**Wetlands**

- Estuarine and Marine Wetland
- Estuarine and Marine Deepwater
- Freshwater Pond
- Freshwater Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Emergent Wetland
- Riverine
- Other
- Lake

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)





United States  
Department of  
Agriculture

**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for **State of Connecticut**

**North Branford**



# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

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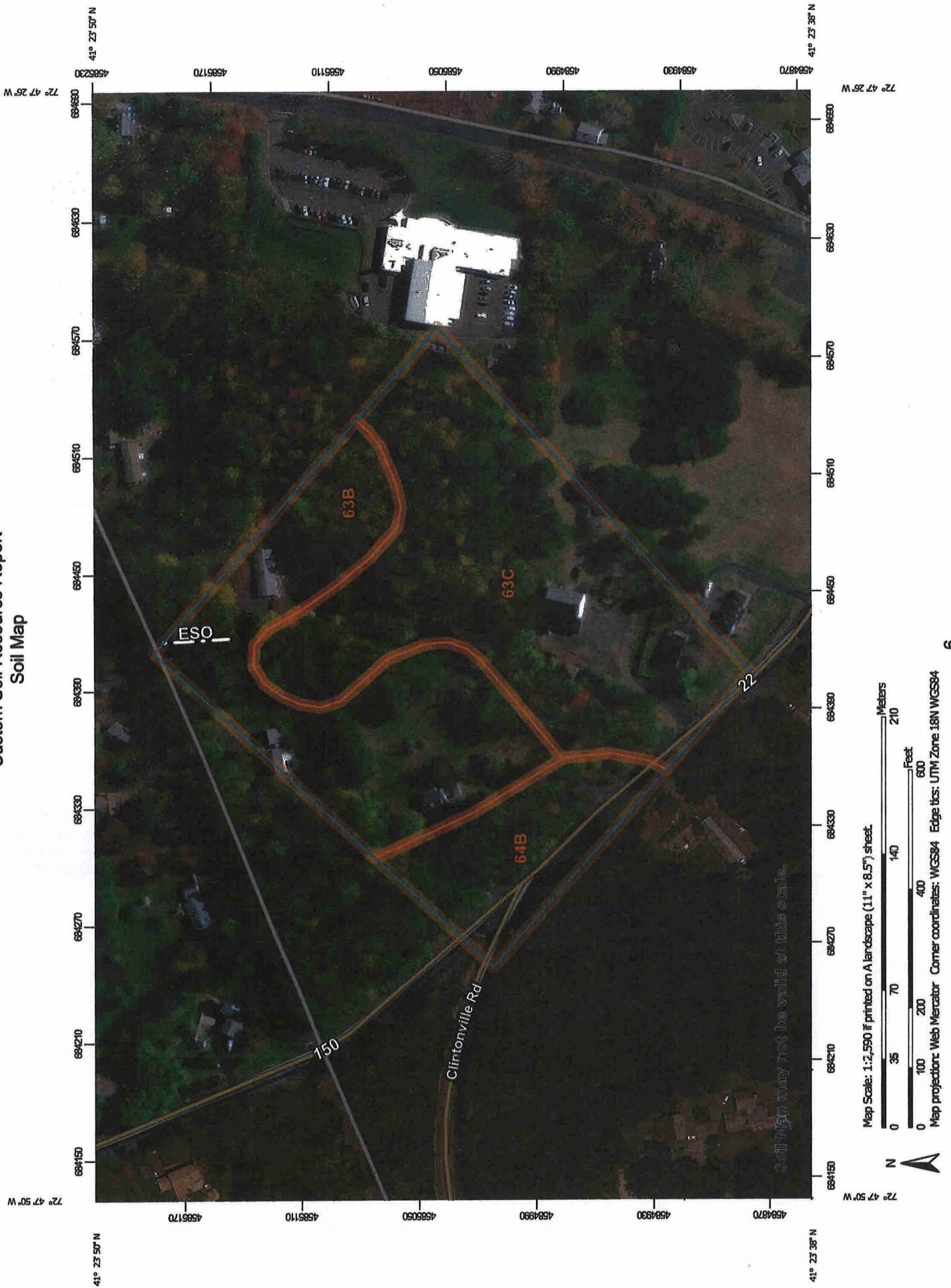
# Soil Map

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The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

## Custom Soil Resource Report

### Soil Map



## 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

The soil surveys that comprise your 1:12,000.

Warning: Soil Map may not be valid

Enlargement of maps beyond the scale may result in a misunderstanding of the detail of map features. Line placement. The maps do not show contrasting soils that could have been combined.

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

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator

Maps from the Web Soil Survey are in a Albers equal-area conic projection, which preserves direction and area. A projection that provides accurate calculations of distance or

This product is generated from the latest version of the version date(s) listed below.

Soil Survey Area: State of Connecticut  
Survey Area Data: Version 20, Jurisdiction

Soil map units are labeled (as spaced) 1:50,000 or larger.

Date(s) aerial images were photographed: 30, 2017

The orthophoto or other base map used to compile and digitize probably differs from the imagery displayed on these maps. A shifting of map unit boundaries may occur.

## MAP INFORMATION

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
63B	Cheshire fine sandy loam, 3 to 8 percent slopes	4.3	34.6%
63C	Cheshire fine sandy loam, 8 to 15 percent slopes	6.3	51.0%
64B	Cheshire fine sandy loam, 3 to 8 percent slopes, very stony	1.8	14.4%
<b>Totals for Area of Interest</b>		<b>12.4</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

## Custom Soil Resource Report

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## State of Connecticut

### 63B—Cheshire fine sandy loam, 3 to 8 percent slopes

#### Map Unit Setting

*National map unit symbol:* 9lpw  
*Elevation:* 0 to 1,200 feet  
*Mean annual precipitation:* 43 to 54 inches  
*Mean annual air temperature:* 45 to 55 degrees F  
*Frost-free period:* 140 to 185 days  
*Farmland classification:* All areas are prime farmland

#### Map Unit Composition

*Cheshire and similar soils:* 80 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Cheshire

##### Setting

*Landform:* Till plains, hills  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Coarse-loamy melt-out till derived from basalt and/or sandstone and shale

##### Typical profile

*Ap - 0 to 8 inches:* fine sandy loam  
*Bw1 - 8 to 16 inches:* fine sandy loam  
*Bw2 - 16 to 26 inches:* fine sandy loam  
*C - 26 to 65 inches:* gravelly sandy loam

##### Properties and qualities

*Slope:* 3 to 8 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water capacity:* Moderate (about 7.8 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2e  
*Hydrologic Soil Group:* B  
*Ecological site:* F145XY013CT - Well Drained Till Uplands  
*Hydric soil rating:* No

#### Minor Components

##### Wilbraham

*Percent of map unit:* 5 percent  
*Landform:* Depressions, drainageways

## Custom Soil Resource Report

*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

### **Yalesville**

*Percent of map unit:* 3 percent  
*Landform:* Hills, ridges  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

### **Watchaug**

*Percent of map unit:* 3 percent  
*Landform:* Hills, till plains  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Hydric soil rating:* No

### **Wethersfield**

*Percent of map unit:* 3 percent  
*Landform:* Drumlins, hills  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

### **Menlo**

*Percent of map unit:* 2 percent  
*Landform:* Depressions, drainageways  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

### **Unnamed, brown subsoil**

*Percent of map unit:* 2 percent  
*Hydric soil rating:* No

### **Unnamed, less sloping**

*Percent of map unit:* 2 percent  
*Hydric soil rating:* No

## **63C—Cheshire fine sandy loam, 8 to 15 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 9lpx  
*Elevation:* 0 to 1,200 feet  
*Mean annual precipitation:* 43 to 54 inches  
*Mean annual air temperature:* 45 to 55 degrees F  
*Frost-free period:* 140 to 185 days  
*Farmland classification:* Farmland of statewide importance

### **Map Unit Composition**

*Cheshire and similar soils:* 80 percent

## Custom Soil Resource Report

*Minor components: 20 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Cheshire

#### Setting

*Landform: Hills, till plains*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Parent material: Coarse-loamy melt-out till derived from basalt and/or sandstone and shale*

#### Typical profile

*Ap - 0 to 8 inches: fine sandy loam*

*Bw1 - 8 to 16 inches: fine sandy loam*

*Bw2 - 16 to 26 inches: fine sandy loam*

*C - 26 to 65 inches: gravelly sandy loam*

#### Properties and qualities

*Slope: 8 to 15 percent*

*Depth to restrictive feature: More than 80 inches*

*Drainage class: Well drained*

*Runoff class: Low*

*Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Available water capacity: Moderate (about 7.8 inches)*

#### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 3e*

*Hydrologic Soil Group: B*

*Ecological site: F145XY013CT - Well Drained Till Uplands*

*Hydric soil rating: No*

### Minor Components

#### Wilbraham

*Percent of map unit: 5 percent*

*Landform: Depressions, drainageways*

*Down-slope shape: Concave*

*Across-slope shape: Concave*

*Hydric soil rating: Yes*

#### Wethersfield

*Percent of map unit: 5 percent*

*Landform: Drumlins, hills*

*Down-slope shape: Linear*

*Across-slope shape: Convex*

*Hydric soil rating: No*

#### Yalesville

*Percent of map unit: 5 percent*

*Landform: Hills, ridges*

*Down-slope shape: Convex*

*Across-slope shape: Linear*

## Custom Soil Resource Report

*Hydric soil rating:* No

### Watchaug

*Percent of map unit:* 3 percent

*Landform:* Hills, till plains

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Hydric soil rating:* No

### Menlo

*Percent of map unit:* 2 percent

*Landform:* Depressions, drainageways

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Hydric soil rating:* Yes

## 64B—Cheshire fine sandy loam, 3 to 8 percent slopes, very stony

### Map Unit Setting

*National map unit symbol:* 9lpz

*Elevation:* 0 to 1,200 feet

*Mean annual precipitation:* 43 to 54 inches

*Mean annual air temperature:* 45 to 55 degrees F

*Frost-free period:* 140 to 185 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Cheshire and similar soils:* 80 percent

*Minor components:* 20 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Cheshire

#### Setting

*Landform:* Hills, till plains

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Coarse-loamy melt-out till derived from basalt and/or sandstone and shale

#### Typical profile

*Ap - 0 to 8 inches:* fine sandy loam

*Bw1 - 8 to 16 inches:* fine sandy loam

*Bw2 - 16 to 26 inches:* fine sandy loam

*C - 26 to 65 inches:* gravelly sandy loam

#### Properties and qualities

*Slope:* 3 to 8 percent

*Surface area covered with cobbles, stones or boulders:* 1.6 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

## Custom Soil Resource Report

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 5.95 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water capacity:* Moderate (about 7.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6s

*Hydrologic Soil Group:* B

*Ecological site:* F145XY013CT - Well Drained Till Uplands

*Hydric soil rating:* No

### Minor Components

#### Wilbraham

*Percent of map unit:* 5 percent

*Landform:* Depressions, drainageways

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Hydric soil rating:* Yes

#### Yalesville

*Percent of map unit:* 5 percent

*Landform:* Hills, ridges

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Hydric soil rating:* No

#### Wethersfield

*Percent of map unit:* 5 percent

*Landform:* Drumlins, hills

*Down-slope shape:* Linear

*Across-slope shape:* Convex

*Hydric soil rating:* No

#### Watchaug

*Percent of map unit:* 3 percent

*Landform:* Hills, till plains

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Hydric soil rating:* No

#### Menlo

*Percent of map unit:* 2 percent

*Landform:* Depressions, drainageways

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Hydric soil rating:* Yes

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## **QUALIFICATIONS**



## Jason Stayer

Biologist II

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### SUMMARY OF EXPERIENCE

Mr. Stayer received his BS in the Management of Information Systems from the University of Texas at Arlington with an emphasis in database management. Mr. Stayer also received a MS in Wildlife Ecology from Texas State University with an emphasis on avian species, specifically a Master's Thesis on raptor species. He has spent 5 years working for the U.S. Fish and Wildlife Service (USFWS) responsible for conducting numerous wildlife and habitat assessments, understanding and implementing all sections of the Endangered Species Act (ESA), responsible for reviewing National Environmental Policy Act (NEPA) documents, writing and reviewing grant proposals, writing and reviewing biological reports, and publication of numerous documents related to the Endangered Species Act.

### RELEVANT PROJECT EXPERIENCE

Mr. Stayer has worked with EBI Consulting as a Biologist II since January of 2014. Prior to working with EBI, Mr. Stayer worked as a wildlife biologist for the USFWS Carlsbad Field Office. Mr. Stayer worked closely with the U.S. Navy and National Park Service to establish a habitat monitoring program for the Federally threatened island night lizard. He has also worked with numerous water districts to assess project impacts, develop project alternatives, and propose mitigation for numerous Federally listed threatened and endangered species in compliance with the ESA and NEPA. As a USFWS fish and wildlife biologist Jason has conducted numerous species and habitat assessments and developed ESA Section 4 documents for the Coccochella Valley Fringe-toed Lizard, Island Night Lizard, Coastal California Gnatcatcher, Santa Ana Sucker, and Southwestern Willow Flycatcher. Jason has also drafted Section 7 Consultation documents for 30 different state and federally listed species.

### EDUCATION

**Bachelor of Science, Management of Information Systems, December 2002**  
University of Texas at Arlington, Arlington, TX

**Master of Science, Wildlife Ecology, August 2008**  
Texas State University, San Marcos, TX

### PROFESSIONAL REGISTRATIONS

**Seabird Assessment Oil Spill Response, March 2009**  
Carlsbad Fish and Wildlife Office, Carlsbad, CA

**Listing and Candidate Assessment (Section 4 - ESA), March 2010**  
Lakewood Fish and Wildlife Office, Lakewood, CO

**Habitat Conservation Plan Development (Section 10 - ESA), March 2011**  
Carlsbad Fish and Wildlife Office, Carlsbad, CA

**Recovery Planning Implementation (Section 4 - ESA), April 2011**  
National Convention Training Center, Shepherdstown, WV



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**Interagency Consultation (Section 7 - ESA), April 2012**  
Carlsbad Fish and Wildlife Office, Carlsbad, CA

**Critical Writing and Critical Thinking, June 2012**  
National Convention Training Center, Shepherdstown, WV

**24 hour HAZWOPER Certification, March 2013**  
Carlsbad Fish and Wildlife Office, Carlsbad, CA

**PUBLICATIONS**

USFWS Publication    5-year review on the Coachella Valley fringe-toed lizard (August 10, 2010)

Federal Register    Proposed revised critical habitat for the southwestern willow flycatcher – assist Arizona Fish and Wildlife Office (Carlsbad Field Office lead) (August 15, 2011)

Federal Register    90-day finding on the coastal California gnatcatcher (October 26, 2011)

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Federal Register    Island night lizard proposed delisting rule (February 04, 2013)

Federal Register    Draft post-delisting monitoring plan for the night lizard (February 04, 2013)

Federal Register    Island night lizard final delisting rule (April, 01 2014)

Federal Register    Final post-delisting monitoring plan for the night lizard (April, 01 2014)



**Kimberly Narel**  
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## **Summary of Experience**

Kimberly Narel, Biologist I, has experience in environmental consulting since 2016 specializing in both natural resources/marine science and environmental health and safety.

At EBI Consulting, Ms. Narel serves as a Biologist I within the West Telecom Environmental practice. Her primary responsibilities in this role include conducting Biological and Natural Resource Assessments for FCC National Environmental Policy Act (NEPA) Compliance Reviews.

## **Relevant Project Experience**

Ms. Narel prepares Biological and Natural Resource Assessments for a wide range of properties and clients. Natural Resource Assessments focus on evaluating site conditions for potential endangered species and habitats, wetlands, and floodplains, as well as other areas of critical importance to the natural environment. Additionally, Ms. Narel conducts various Biological Assessments, ranging from Avian Nest Surveys to habitat- and/or species-specific surveys and monitoring.

In addition to the above-referenced assessments, Ms. Narel has experience in preparing Environmental Assessments, Marine Biological Resource Assessments, Environmental Impact Reports, and technical reports related to coastal construction projects throughout California.

## **Education**

B.S. Biology: Ecology, Behavior, and Evolution, Minor: Environmental Systems; University of California at San Diego

## **Professional Affiliations**

Member, Society of Environmental Toxicology and Chemistry, Southern California Chapter

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## **SUMMARY OF EXPERIENCE**

Mr. Stayer received his BS in the Management of Information Systems from the University of Texas at Arlington with an emphasis in database management. Mr. Stayer also received a MS in Wildlife Ecology from Texas State University with an emphasis on avian species, specifically a Master's Thesis on raptor species. He has spent 5 years working for the U.S. Fish and Wildlife Service (USFWS) responsible for conducting numerous wildlife and habitat assessments, understanding and implementing all sections of the Endangered Species Act (ESA), responsible for reviewing National Environmental Policy Act (NEPA) documents, writing and reviewing grant proposals, writing and reviewing biological reports, and publication of numerous documents related to the Endangered Species Act.

## **RELEVANT PROJECT EXPERIENCE**

Mr. Stayer has worked with EBI Consulting as a Biologist II since January of 2014. Prior to working with EBI, Mr. Stayer worked as a wildlife biologist for the USFWS Carlsbad Field Office. Mr. Stayer worked closely with the U.S. Navy and National Park Service to establish a habitat monitoring program for the Federally threatened island night lizard. He has also worked with numerous water districts to assess project impacts, develop project alternatives, and propose mitigation for numerous Federally listed threatened and endangered species in compliance with the ESA and NEPA. As a USFWS fish and wildlife biologist Jason has conducted numerous species and habitat assessments and developed ESA Section 4 documents for the Cacachella Valley Fringe-toed Lizard, Island Night Lizard, Coastal California Gnatcatcher, Santa Ana Sucker, and Southwestern Willow Flycatcher. Jason has also drafted Section 7 Consultation documents for 30 different state and federally listed species.

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**Recovery Planning Implementation (Section 4 - ESA), April 2011**  
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