



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

Bureau of Natural Resources
Wildlife Division
Natural History Survey – Natural Diversity Data Base

February 10, 2014

Ms. Coreen Kelsey
Vanasse Hangen Brustlin, Inc.
54 Tuttle Place
Middletown, CT 06457
ckelsey@vhb.com

Regarding: Trumbull SE 4 CT, 60 Commerce Drive, Trumbull - Installation of a Telecommunications Facility Consisting of a Monopole Tower, Antennas and Associated Ground Equipment - Natural Diversity Data Base 201400583

Dear Ms. Kelsey:

In response to your request for a Natural Diversity Data Base (NDDDB) Review of State Listed Species for project Trumbull SE 4 CT, our records indicate the following extant populations of species on or within the vicinity of the site:

Eastern box turtle (*Terrapene carolina Carolina*) Protection Status: Species of Special Concern

Eastern box turtles inhabit old fields and deciduous forests, which can include power lines and logged woodlands. They are often found near small streams and ponds. The adults are completely terrestrial but the young may be semiaquatic, and hibernate on land by digging down in the soil from October to April. They have an extremely small home range and can usually be found in the same area year after year. Eastern box turtles have been negatively impacted by the loss of suitable habitat. Some turtles may be killed directly by construction activities, but many more are lost when important habitat areas for shelter, feeding, hibernation, or nesting are destroyed. As remaining habitat is fragmented into smaller pieces, turtle populations can become small and isolated.

Recommendations: The following guidelines should be met to protect turtles:

- ✦ Silt fencing should be installed around the work area prior to activity;
- ✦ After silt fencing is installed and prior to work being conducted, a sweep of the work area should be conducted to look for turtles;
- ✦ Workers should be apprised of the possible presence of turtles, and provided a description of the species
(http://www.ct.gov/dep/cwp/view.asp?a=2723&q=473472&depNav_GID=1655);

- ✦ Any turtles that are discovered should be moved, unharmed, to an area immediately outside of the fenced area, and positioned in the same direction that it was walking;
- ✦ Work conducted during early morning and evening hours should occur with special care not to harm basking or foraging individuals; and
- ✦ All silt fencing should be removed after work is completed and soils are stable so that reptile and amphibian movement between uplands and wetlands is not restricted.

The Natural Diversity Data Base includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Natural History Survey and cooperating units of DEEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Data Base should not be substituted for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Data Base as it becomes available. If the project is not implemented within 12 months, then another Natural Diversity Data Base review should be requested for up-to-date information.

Please be advised that this is a preliminary review and not a final determination. A more detailed review may be conducted as part of any subsequent environmental permit applications submitted to DEEP for the proposed site.

Thank you for consulting the Natural Diversity Data Base. If you have any questions, I can be reached by email at Elaine.Hinsch@ct.gov.

Sincerely,
/s/
Elaine Hinsch
Program Specialist II
Wildlife Division



Connecticut Department of

ENERGY &
ENVIRONMENTAL
PROTECTION



February 18, 2014

Ms. Elaine Hinsch
Department of Energy & Environmental Protection
79 Elm Street
Hartford, Connecticut 06106-5127
Elaine.Hinsch@ct.gov

APT Project No.: CT1411620

Re: **NDDB #201400583**
Proposed Verizon Wireless
Trumbull SE 4 CT Facility
60 Commerce Drive
Trumbull, Connecticut

Dear Ms. Hinsch,

On behalf of Verizon Wireless, All-Points Technology Corporation, P.C. ("APT") is pleased to respond to your letter of February 10, 2014 (enclosed) regarding Natural Diversity Data Base ("NDDB") records indicating the following extant populations of state species of special concern eastern box turtle (*Terrapene carolina Carolina*) within the vicinity of the referenced proposed telecommunications facility.

The enclosed eastern box turtle protective measures program ("Program") has been designed to avoid unintentional mortality to this turtle species as a result of construction activities occurring during this species' active period. Provided the project receives approval by the Connecticut Siting Council, this turtle protection program would be incorporated as environmental notes into the construction drawings (Development and Management Plans) to promote acknowledgement and implementation of the protective measures. The program follows previous Connecticut Department of Energy & Environmental Protection-approved turtle protection programs, that consist of several components: isolation of the project perimeter; periodic inspection and maintenance of isolation structures; turtle sweeps; education of all contractors and sub-contractors prior to initiation of work on the site; protective measures; and, reporting. An example of the poster material that would be posted at the construction site as part of the contractor education component is also enclosed. With adherence to this eastern box turtle protection program, the proposed development at this property would not have an adverse effect on this listed species.

It is our continuing pleasure to work with you regarding the protection of Connecticut's rare species. We thank you for your time and respectfully request your written concurrence to this approach. Please feel free to contact me by telephone at (860) 984-9515 or via email dgustafson@allpointstech.com with any questions or if additional information is required.

Sincerely,

A handwritten signature in blue ink that reads "Dean Gustafson". The signature is written in a cursive style with a large, stylized initial "D".

Dean Gustafson
Senior Environmental Scientist

Enclosures

February 10, 2014 NDDB Letter



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Bureau of Natural Resources
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Ms. Coreen Kelsey
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Dear Ms. Kelsey:

In response to your request for a Natural Diversity Data Base (NDDDB) Review of State Listed Species for project Trumbull SE 4 CT, our records indicate the following extant populations of species on or within the vicinity of the site:

Eastern box turtle (*Terrapene carolina Carolina*) Protection Status: Species of Special Concern

Eastern box turtles inhabit old fields and deciduous forests, which can include power lines and logged woodlands. They are often found near small streams and ponds. The adults are completely terrestrial but the young may be semiaquatic, and hibernate on land by digging down in the soil from October to April. They have an extremely small home range and can usually be found in the same area year after year. Eastern box turtles have been negatively impacted by the loss of suitable habitat. Some turtles may be killed directly by construction activities, but many more are lost when important habitat areas for shelter, feeding, hibernation, or nesting are destroyed. As remaining habitat is fragmented into smaller pieces, turtle populations can become small and isolated.

Recommendations: The following guidelines should be met to protect turtles:

- ✦ Silt fencing should be installed around the work area prior to activity;
- ✦ After silt fencing is installed and prior to work being conducted, a sweep of the work area should be conducted to look for turtles;
- ✦ Workers should be apprised of the possible presence of turtles, and provided a description of the species
(http://www.ct.gov/dep/cwp/view.asp?a=2723&q=473472&depNav_GID=1655);

- ✦ Any turtles that are discovered should be moved, unharmed, to an area immediately outside of the fenced area, and positioned in the same direction that it was walking;
- ✦ Work conducted during early morning and evening hours should occur with special care not to harm basking or foraging individuals; and
- ✦ All silt fencing should be removed after work is completed and soils are stable so that reptile and amphibian movement between uplands and wetlands is not restricted.

The Natural Diversity Data Base includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Natural History Survey and cooperating units of DEEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Data Base should not be substituted for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Data Base as it becomes available. If the project is not implemented within 12 months, then another Natural Diversity Data Base review should be requested for up-to-date information.

Please be advised that this is a preliminary review and not a final determination. A more detailed review may be conducted as part of any subsequent environmental permit applications submitted to DEEP for the proposed site.

Thank you for consulting the Natural Diversity Data Base. If you have any questions, I can be reached by email at Elaine.Hinsch@ct.gov.

Sincerely,
/s/
Elaine Hinsch
Program Specialist II
Wildlife Division

Eastern Box Turtle Protection Plan

EASTERN BOX TURTLE PROTECTION PROGRAM

State special concern eastern box turtle (*Terrapene carolina carolina*), afforded protection under the Connecticut Endangered Species Acts, is known to occur in the vicinity of this project. The following protective measures shall be followed to help avoid unintentional mortality as a result of construction activities for the site improvements proposed. These protective measures satisfy recommendations from the Connecticut Department of Energy & Environmental Protection ("CTDEEP") Wildlife Division as specified in a February 10, 2014 letter and follow protocols developed from previous rare species consultations and state-approved protection plans. This protection plan is valid until February 10, 2015, at which point if construction has not been initiated, a new Natural Diversity Data Base review request from CTDEEP is required.

It is of the utmost importance that the Contractor complies with the requirement for the installation of protective measures and the education of its employees and subcontractors performing work on the project site particularly if work will occur during the turtle's active period (April 1 to November 15). All-Points Technology Corporation, P.C. ("APT") will serve as the Environmental Monitor for this project to ensure that eastern box turtle protection measures are implemented properly and will provide an education session on eastern box turtle prior to the start of construction activities. The Contractor shall contact Dean Gustafson, Senior Environmental Scientist at APT, at least 5 business days prior to the pre-construction meeting. Mr. Gustafson can be reached by phone at (860) 984-9515 or via email at dgustafson@allpointstech.com.

The proposed project will not result in direct impact to wetlands or watercourses. The Contractor is strictly prohibited from placing fill in wetlands or watercourse or temporarily storing equipment or materials in wetlands or watercourses.

The proposed eastern box turtle protection program consists of several components: isolation of the project perimeter; use of appropriate erosion control measures to minimize wildlife entanglement; periodic inspection and maintenance of isolation structures and erosion control measures; education of all contractors and sub-contractors prior to initiation of work on the site; protective measures; and, reporting.

1. Isolation Measures & Erosion and Sedimentation Controls

- a. Plastic netting used in a variety of erosion control products (i.e., erosion control blankets, fiber rolls [wattles], reinforced silt fence) has been found to entangle wildlife, including reptiles, amphibians, birds and small mammals. No permanent erosion control products or reinforced silt fence will be used on the Verizon Wireless project. Temporary Erosion control products will use either erosion control blankets and fiber rolls composed of processed fibers mechanically bound together to form a continuous matrix (net less) or netting composed of planar woven natural biodegradable fiber to avoid/minimize wildlife entanglement.
- b. Installation of conventional silt fencing, which will also serve as an isolation of the work zone from surrounding areas and required for erosion control compliance, shall be performed by the Contractor prior to any earthwork. APT will inspect the work zone area prior to and following barrier installation to ensure the area is free of eastern box turtles prior to start of construction activities.
- c. The fencing will consist of non-reinforced conventional erosion control woven fabric, installed approximately six inches below surface grade and staked at seven to ten-foot intervals using four-foot oak stakes or approved equivalent. In addition to required daily inspection by the Contractor, the fencing will be inspected for tears or breeches in the fabric following installation and at either on a weekly or biweekly

inspection frequency by APT. If inspections are performed on a biweekly basis, such inspections will also include inspections following storm events of 0.25 inch or greater. Inspections will be conducted by APT throughout the course of the construction project.

- d. The extent of the barrier fencing will be as shown on the site plans. The Contractor shall have additional barrier fencing should field conditions warrant extending the fencing as directed by APT.
- e. No equipment, vehicles or construction materials shall be stored outside of barrier fencing.
- f. All silt fencing shall be removed within 30 days of completion of work and permanent stabilization of site soils so that reptile and amphibian movement between uplands and wetlands is not restricted.

2. Contractor Education

- a. Prior to work on site, the Contractor shall attend an educational session at the pre-construction meeting with APT. This orientation and educational session will consist of an introductory meeting with APT providing photos of eastern box turtles and emphasizing the non-aggressive nature of eastern box turtles, the absence of need to destroy animals that might be encountered and the need to follow Protective Measures as described in Section 4 below. Workers will also be provided information regarding the identification of other turtle species that could be encountered.
- b. The education session will also focus on means to discriminate between the species of concern and other native species to avoid unnecessary "false alarms". Encounters with any species of turtles will be documented.
- c. The Contractor will be provided with cell phone and email contacts for APT personnel to immediately report any encounters with eastern box turtle or other turtle species. Educational poster materials will be provided by APT and displayed on the job site to maintain worker awareness as the project progresses.

3. Petroleum Materials Storage and Spill Prevention

- a. Certain precautions are necessary to store petroleum materials, refuel and contain and properly clean up any inadvertent fuel or petroleum (i.e., oil, hydraulic fluid, etc.) spill due to the project's location in proximity to sensitive wetlands.
- b. A spill containment kit consisting of a sufficient supply of absorbent pads and absorbent material will be maintained by the Contractor at the construction site throughout the duration of the project. In addition, a waste drum will be kept on site to contain any used absorbent pads/material for proper and timely disposal off site in accordance with applicable local, state and federal laws.
- c. The following petroleum and hazardous materials storage and refueling restrictions and spill response procedures will be adhered to by the Contractor.
 - i. Petroleum and Hazardous Materials Storage and Refueling
 - 1. Refueling of vehicles or machinery shall occur a minimum of 100 feet from wetlands or watercourses and shall take place on an

impervious pad with secondary containment designed to contain fuels.

2. Any fuel or hazardous materials that must be kept on site shall be stored on an impervious surface utilizing secondary containment a minimum of 100 feet from wetlands or watercourses.

ii. Initial Spill Response Procedures

1. Stop operations and shut off equipment.
2. Remove any sources of spark or flame.
3. Contain the source of the spill.
4. Determine the approximate volume of the spill.
5. Identify the location of natural flow paths to prevent the release of the spill to sensitive nearby waterways or wetlands.
6. Ensure that fellow workers are notified of the spill.

iii. Spill Clean Up & Containment

1. Obtain spill response materials from the on-site spill response kit. Place absorbent materials directly on the release area.
2. Limit the spread of the spill by placing absorbent materials around the perimeter of the spill.
3. Isolate and eliminate the spill source.
4. Contact the appropriate local, state and/or federal agencies, as necessary.
5. Contact a disposal company to properly dispose of contaminated materials.

iv. Reporting

1. Complete an incident report.
2. Submit a completed incident report to the Connecticut Siting Council.

4. Turtle Protective Measures

- a. Prior to the start of construction each day, the Contractor shall search the entire work area for turtles.
- b. If a turtle is found, it shall be immediately moved, unharmed, by carefully grasped in both hands, one on each side of the shell, between the turtle's forelimbs and the hind limbs, and placed just outside of the isolation barrier in the approximate direction it was walking.
- c. Special care shall be taken by the Contractor during early morning and evening hours so that possible basking or foraging turtles are not harmed by construction activities.

5. Herbicide and Pesticide Restrictions

- a. The use of herbicides and pesticides at the proposed wireless telecommunications facility and along the proposed access drive are strictly prohibited.

6. Reporting

- a. Biweekly inspection reports (brief narrative and applicable photos) will be submitted to the Connecticut Siting Council for compliance verification.
- b. Following completion of the construction project, APT will provide a summary report to CTDEEP documenting the monitoring and maintenance of the barrier fence and erosion control measures.
- c. Any observations of eastern box turtle will be reported to CTDEEP by APT, with photo-documentation (if possible) and with specific information on the location and disposition of the animal.

Eastern Box Turtle Poster

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CAUTION

EASTERN BOX TURTLES ARE KNOWN TO INHABIT THIS AREA



Identification: Eastern Box Turtles (*Terrapene c. carolina*) are small, terrestrial turtles ranging from 4.5 to 6.6 inches in length. The shell (carapace) is readily distinguished by its high domed shaped. The color of the shell is brown or black with numerous irregular yellow, orange or reddish markings. The belly (plastron) typically has a light and dark variable pattern, but may be completely tan, brown or black. The head, neck and legs also vary in color but are generally dark with orange or yellow mottling. Box turtles are terrestrial and inhabit many types of habitats including deciduous forests, brushy fields, thickets, streams, ponds and wetlands.

What to do if you find a box turtle: Box turtles are protected by Connecticut's threatened and endangered species legislation and **cannot** be injured, killed, or retained as a pet. If you find a box turtle move the turtle to a safe location away from any construction activity in the direction that the turtle was heading. Carefully pick up the turtle by its shell (carapace) between the front and hind legs with both hands. Be sure to hold the turtle closer to their hind legs as they may reach over and bite if your hands are too close to the head. The turtle may hiss and should retract into its shell.

Who to contact: Please report any finds and relocation of Eastern Box Turtle immediately to **Dean Gustafson of All-Points Technology Corporation, P.C. at (860) 984-9515.**

