## **MEMORANDUM**



July 1, 2013

Ms. Alexandria Carter Verizon Wireless 99 East River Drive East Hartford, CT 06108

APT Project No.: CT1411060

Re: NDDB Update
Verizon Wireless Palmer Pond Facility
53 Gallup Rd. & 596 Pendletown Hill Rd.
Voluntown, Connecticut

Dear Ms. Carter,

All-Points Technology Corporation, P.C. ("APT") is pleased to present an update to the Natural Diversity Data Base ("NDDB") review of the referenced Palmer Pond project. APT's Pink Sallow Moth (*Psectraglaea carnosa*; a State Special Concern Species) Habitat Survey Reports for both the Gallup Road and Pendleton Hill Road sites, dated May 7, 2013, were submitted to the Connecticut Department of Energy & Environmental Protection ("DEEP") for review. The conclusions in both reports were consistent with conclusions provided in ATP's May 2, 2013 letters, provided behind Tab 12 of the Connecticut Siting Council Application for Certificate of Environmental Compatibility and Public Need ("Application"); no suitable habitat for Pink Sallow Moth exists at either of the two locations. DEEP responded in letters dated June 11, 2013 (Gallup Road Site) and June 12, 2013 (Pendleton Hill Road Site) that they were in agreement with APT's conclusion. However, since the project's original NDDB review in 2010 (October 1, 2010 letters issued by DEEP; provided behind Tab 12 of the Application), three additional rare species have been identified by the NDDB as potentially occurring within the vicinity of the Palmer Pond project, as summarized below.

- Eastern Box Turtle (Terrapene carolina Carolina) Protection Status: Species of Special Concern;
- Red Bat (Lasiurus borealis) Protection Status: Species of Special Concern; and,
- Silver-haired Bat (Lasionycteris noctivagans) Protection Status: Species of Special Concern.

APT responded in a June 28, 2013 letter to DEEP regarding these additional species and protective measures that will be taken to protect them during construction. A copy of the letter is enclosed, which also includes the DEEP letters of June 11 and 12, 2013 previously referenced. As you will note in our letter, measures to protect Eastern Box Turtle follow procedures that have been followed for previous Verizon Wireless construction projects that received approval from both DEEP and the Connecticut Siting Council. DEEP recommends seasonal restrictions for the two bat species, restricting work from being performed outside of the September through May period to protect the bats during their roosting season. On behalf of Verizon Wireless, APT has requested a modification to this seasonal restriction that is equally protective of Red Bat and Silver-haired Bat but provides greater flexibility for scheduling construction of this facility. I will forward DEEP's response upon receipt.

### ALL-POINTS TECHNOLOGY CORPORATION, P.C.

☑ 3 SADDLEBROOK DRIVE · KILLINGWORTH, CT 06419 · PHONE 860-663-1697 · FAX 860-663-0935

If you have any questions regarding the above-referenced information, please feel free to contact me at (860) 984-9515 or at dgustafson@allpointstech.com.

Sincerely,

All-Points Technology Corporation, P.C.

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Digitally signed by Dean Gustafson DN: cn=Dean Gustafson, o, ou=Senior Environmental Scientist, email=dgustafson@allpointstech.com, c=US Date: 2013.07.01 08:04:21 -04'00'

Dean Gustafson

Senior Environmental Scientist

Enclosure

## DEEP NDDB Response Letter, June 28, 2013



June 28, 2013

Department of Energy & Environmental Protection 79 Elm Street Hartford, Connecticut 06106-5127 APT Project No.: CT141060

Attn: Elaine Hinsch

Re: NDDB #201302435 & #201302436 Verizon Wireless Palmer Pond Facility 53 Gallup Rd. & 596 Pendletown Hill Rd. Voluntown, Connecticut

Dear Ms. Hinsch,

All-Points Technology Corporation, P.C. ("APT") is pleased to respond to your letters of June 11, 2013 (enclosed) regarding Natural Diversity Data Base ("NDDB") records indicating the following extant populations of species on or within the vicinity of the two referenced Verizon Wireless sites:

- Pink Sallow Moth (Psectraglaea carnosa) Protection Status: Threatened Species;
- Eastern Box Turtle (Terrapene carolina Carolina) Protection Status: Species of Special Concern;
- Red Bat (Lasiurus borealis) Protection Status: Species of Special Concern; and,
- Silver-haired Bat (Lasionycteris noctivagans) Protection Status: Species of Special Concern.

#### Pink Sallow Moth

A pink sallow moth habitat report for each of the proposed Verizon Wireless sites, prepared by APT and dated May 7, 2013, was submitted to your office for review. In your June 11<sup>th</sup> letter you indicated that "...the overall conclusion is that the installation of this telecommunication facility is unlikely to negatively impact the pink swallow moth." Therefore, no further consultation regarding this species is required.

#### **Eastern Box Turtle**

In response to your suggested guidelines for protection of Eastern Box Turtle, please find enclosed details of protective measures, which will be incorporated into the construction drawings (referred to as Development and Management Plans by the Connecticut Siting Council) should the project receive approval by the Connecticut Siting Council. Implementation of these protective measures would avoid unintentional mortality to Eastern Box Turtle as a result of proposed construction activities for the Verizon Wireless facility. The proposed Eastern Box Turtle protection program, which is similar to previous DEEP-approved plans for similar projects, consists 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 either of the referenced sites would not have an adverse effect on this state-listed species.

#### Red Bat and Silver-haired Bat

Based on your June 11<sup>th</sup> letter, Red Bats are considered to be "tree-roosting" bats while Silver-haired bats typically roost in tree foliage, tree hollows, and crevices behind loose bark. Your recommendation to avoid impacting these bats is to restrict work from being performed outside of the September through May period. APT respectfully requests your consideration of alternate recommendations for the two proposed sites that will still provide appropriate protection to these two bat species, as detailed below.

596 Pendleton Hill Road Site: The proposed Verizon Wireless facility at 596 Pendleton Hill Road will not result in the removal of any trees (e.g., 6-inch DBH and larger) which could potentially provide habitat for either the Red Bat or Silver-haired Bat. Please refer to the enclosed site plans which reveals no trees are to be removed along with the protection of nearby trees during construction. This site is located immediately adjacent to actively cultivated agricultural fields to the east and south and a large forest block (Pachaug State Forest) to the west and north. Nearby Pachaug State Forest consists primarily of mature mixed coniferous-deciduous trees, including large trees with cavities that potentially provide suitable habitat for these two bat species. Considering the 596 Pendleton Hill Road site does not contain suitable habitat for the two bats and a nearby large forest block contains preferred bat roosting habitat, we respectfully request you reconsider the seasonal restriction recommendation. If you feel the seasonal restriction is still necessary for this site, we would suggest that provided the Connecticut Siting Council issues a Certificate of Environmental Compatibility and Public Need, the proposed development limits would be cleared of vegetation between the September to May period to eliminate potential bat roosting habitat so that construction could proceed without seasonal restriction as no impact to bats would then occur.

**53 Gallup Road Site:** The proposed Verizon Wireless facility at 53 Gallup Road will result in the removal of 29 trees (6-inch DBH and larger), of which 14 are 12-inch DBH or larger. Please refer to the enclosed site plan which depicts trees to be removed and the protection of three large oak trees during construction. This site is located immediately adjacent to a hayfield fields to the south, agricultural buildings and fields to the northwest and west, and a large forest block (Pachaug State Forest) to the northeast and east. Nearby Pachaug State Forest consists primarily of mature mixed coniferous-deciduous trees, including large trees with cavities that potentially provide suitable habitat for these two bat species. Considering the 53 Gallup Road potentially provides suitable habitat for these two bat species, we would recommend that provided the Connecticut Siting Council issues a Certificate of Environmental Compatibility and Public Need for this particular site, the proposed development limits would be cleared of vegetation between the September to May period to eliminate potential bat roosting habitat so that construction could proceed without seasonal restriction as no impact to bats would then occur. If clearing activities are not completed by May 1<sup>st</sup>, the recommended seasonal restriction would be observed.

Thank you for your consideration of our recommendations and we look forward to your response. Please feel free to contact me at (860) 984-9515 or dgustafson@allpointstech.com with any questions or if additional information is required.

Sincerely,

Dean Gustafson

Senior Environmental Scientist

Digitally signed by Dean Gustafson
DN: cn=Dean Gustafson, o, ou=Senior Environmental
Scientist, email=dgustafson@allpointstech.com, c=US
Date: 2013.07.01 08:03:39 -04:00

Enclosures

# June 11 & 12, 2013 NDDB Letters



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

June 11, 2013

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

Regarding:

Palmer Pond GALLUP CT, Voluntown - Cellco Partnership d.b.a. Verizon Wireless - telecommunications facility - Natural Diversity Data Base 201302435

Dear Ms. Kelsey:

In response to your request for a Natural Diversity Data Base (NDDB) Review of State Listed Species for Palmer Pond GALLUP CT, our records indicate the following extant populations of species on or within the vicinity of the site:

Red bat (Lasiurus borealis) Protection Status: Species of Special Concern

Red bats are considered to be "tree-roosting" bats. They roost out in the foliage of deciduous and coniferous trees, camouflaged as dead leaves or cones. Red bats are primarily solitary roosters. They can be found roosting and feeding around forest edges and clearings. Typically, larger diameter trees (12-inch DBH and larger) are more valuable to these bats. Additionally, trees with loose, rough bark such as maples, hickories, and oaks are more desirable than other tree species due to the increased cover that the loose bark provides. Large trees with cavities are also utilized by this species. Retaining the above mentioned trees, wherever possible, may minimize the potential for negative impacts to this state-listed species.

Silver-haired bat (Lasionycteris noctivagans) Protection Status: Species of Special Concern

Silver-haired bats typical roost sites include tree foliage, tree hollows, and crevices behind loose bark, but they are most likely to be found near water. They will typically give birth to their young in June or July, and the young will stay in roost until August.

**Recommendation:** Red bats and silver-haired bats migrate south during the winter months. Work should be conducted September through May, to avoid impacting these animals.

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

Eastern box turtles require old field and deciduous forest habitats, 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.

79 Elm Street, Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer **Recommendation:** Precautions should be taken to protect Eastern box turtles. The following guidelines should be implemented for the entire length of the project:

- 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 (<a href="http://www.ct.gov/dep/cwp/view.asp?a=2723&q=473472&depNav\_GID=1655">http://www.ct.gov/dep/cwp/view.asp?a=2723&q=473472&depNav\_GID=1655</a>);
- 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.

Pink Sallow (Psectraglaea carnosa) Protection Status: Threatened Species

The survey report provided on the pink sallow moth was reviewed and the overall conclusion is that the installation of this telecommunication facility is unlikely to negatively impact the pink swallow moth. Though the survey was conducted by experienced wetland and soil scientists, we would have preferred the survey was completed by an invertebrate biologist. An invertebrate biologist would be more knowledgeable in the habitat of the pink sallow.

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 with the Natural Diversity Data Base. (contact information: phone #860-424-3011 or email <a href="mailto:Elaine.Hinsch@po.state.ct.us">Elaine.Hinsch@po.state.ct.us</a>)

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



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

June 12, 2013

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

Regarding:

Palmer Pond CT PENDLETON, Voluntown - Cellco Partnership d.b.a. Verizon Wireless - telecommunications facility - Natural Diversity Data Base 201302436

Dear Ms. Kelsey:

In response to your request for a Natural Diversity Data Base (NDDB) Review of State Listed Species for Palmer Pond CT PENDLETON, our records indicate the following extant populations of species on or within the vicinity of the site:

Red bat (Lasiurus borealis) Protection Status: Species of Special Concern

Red bats are considered to be "tree-roosting" bats. They roost out in the foliage of deciduous and coniferous trees, camouflaged as dead leaves or cones. Red bats are primarily solitary roosters. They can be found roosting and feeding around forest edges and clearings. Typically, larger diameter trees (12-inch DBH and larger) are more valuable to these bats. Additionally, trees with loose, rough bark such as maples, hickories, and oaks are more desirable than other tree species due to the increased cover that the loose bark provides. Large trees with cavities are also utilized by this species. Retaining the above mentioned trees, wherever possible, may minimize the potential for negative impacts to this state-listed species.

Silver-haired bat (Lasionycteris noctivagans) Protection Status: Species of Special Concern

Silver-haired bats typical roost sites include tree foliage, tree hollows, and crevices behind loose bark, but they are most likely to be found near water. They will typically give birth to their young in June or July, and the young will stay in roost until August.

**Recommendation:** Red bats and silver-haired bats migrate south during the winter months. Work should be conducted September through May, to avoid impacting these animals.

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

Eastern box turtles require old field and deciduous forest habitats, 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.

79 Elm Street, Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer **Recommendation:** Precautions should be taken to protect Eastern box turtles. The following guidelines should be implemented for the entire length of the project:

- 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 (<a href="http://www.ct.gov/dep/cwp/view.asp?a=2723&q=473472&depNav\_GID=1655">http://www.ct.gov/dep/cwp/view.asp?a=2723&q=473472&depNav\_GID=1655</a>);
- 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
- 4 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.

Pink Sallow (Psectraglaea carnosa) Protection Status: Threatened Species

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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 with the Natural Diversity Data Base. (contact information: phone #860-424-3011 or email Elaine.Hinsch@po.state.ct.us)

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

## Eastern Box Turtle Protection Plan

#### EASTERN BOX TURTLE PROTECTION PROGRAM

The construction area is located in proximity to Eastern Box Turtle (*Terrapene c. carolina*) habitat, a State Special Concern Species. The following protective measures will avoid unintentional mortality to Eastern Box Turtle as a result of construction activities for the site improvements proposed. With adherence to this Eastern Box Turtle protection program, the proposed development at this property will not have an adverse effect on this rare species.

It is of the utmost importance that the Contractor complies with the requirements for the installation of protective measures and the education of employees and subcontractors performing work on the project site if work will occur during the Eastern Box Turtle's active period (April 1 to November 1). All-Points Technology Corporation, P.C. ("APT") will serve as the Environmental Monitor for this project to ensure that the Eastern Box Turtle protection measures are implemented properly. The Contractor shall contact Dean Gustafson, Senior Wetland Scientist at APT, at least 5 business days prior to the pre-construction meeting. Mr. Gustafson can be reached at (860) 984-9515 and at <a href="mailto:dgustafson@allpointstech.com">dgustafson@allpointstech.com</a>.

The proposed Eastern Box Turtle protection program consists 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.

#### 1. Isolation Measures

- a. Installation of conventional silt fencing, which will also serve as an isolation of the work zone from surrounding areas and is required for erosion control compliance, shall be performed by the Contractor following clearing activities and prior to any earthwork. APT will inspect the work zone area prior to and following erosion control barrier installation to ensure the area is free of Eastern Box Turtles.
- b. The fencing will consist of conventional erosion control woven fabric, installed approximately six inches below surface grade to bury the bottom of the silt fence 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 approximately one-week intervals or within 24 hours of a storm event of 0.25 inch or greater by APT. Inspections will be conducted by APT throughout the course of the construction project.
- c. The extent of the barrier fencing will effectively isolate the construction area, including equipment and material storage areas, from possible migrating turtles. Field conditions may require the installation of additional barrier fencing at the direction of APT. The Contractor shall maintain additional supplies of barrier fencing and erosion controls on site for this purpose.
- d. No equipment, vehicles or construction materials shall be stored outside of barrier fencing.

#### 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 session with photos identifying Eastern Box Turtle, stressing the non-aggressive nature of this species and the absence of need to destroy animals that might be encountered, how to properly handle these species if encountered and the need to follow Protective Measures as described in Section 3.

- b. Also stressed in the education session will be means to discriminate between the species of concern and other native species to avoid unnecessary, "false alarms".
- c. The Contractor will be provided with cell phone and email contacts for APT Environmental Monitor staff to immediately report any encounters with Eastern Box Turtle. Poster materials will be provided by APT to the Contractor for posting on the job site to maintain worker awareness, along with any visitors, to the sensitive environmental nature of the job site.

#### 3. Protective Measures

- a. A thorough cover search of the construction area will be performed by an APT Environmental Monitor for Eastern Box Turtle prior to and following installation of silt fencing to remove any species from the work zone prior to the initiation of construction activities.
- b. Prior to the start of construction each day, the Contractor shall search the entire work area for Eastern Box Turtle.
- c. If Eastern Box Turtle are found, it should be 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 heading.
- d. 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.
- e. Erosion control measures will be removed no later than 30 days following final site stabilization so as not to impede migration of turtles or other wildlife.

#### 4. Reporting

- a. Weekly inspection reports (brief narrative and applicable photos) will be submitted to the Connecticut Siting Council for compliance verification. Any observations of Eastern Box Turtle will be included in the reports.
- 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 observations of any Eastern Box Turtle encountered.

## Eastern Box Turtle Poster

# 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 <u>cannot</u> 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 <u>Dean Gustafson of All-Points Technology Corporation</u>, P.C. at (860) 984-9515.

## 596 Pendleton Hill Road Site Plan





