

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE: :
 :
APPLICATION OF CELLCO PARTNERSHIP : DOCKET NO. 413
D/B/A VERIZON WIRELESS FOR A :
CERTIFICATE OF ENVIRONMENTAL :
COMPATIBILITY AND PUBLIC NEED FOR :
THE CONSTRUCTION, MAINTENANCE :
AND OPERATION OF A WIRELESS :
TELECOMMUNICATIONS FACILITY AT :
723 LEETES ISLAND ROAD, BRANFORD, :
CONNECTICUT : FEBRUARY 24, 2011

RESPONSES OF CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS TO
CONNECTICUT SITING COUNCIL PRE-HEARING QUESTIONS, SET ONE

On January 7, 2011, the Connecticut Siting Council (“Council”) issued Pre-Hearing Questions to Cellco Partnership d/b/a Verizon Wireless (“Cellco”), relating to the above-captioned docket. Below are Cellco’s responses.

Question No. 1

Would Cellco’s antennas comply with E911 requirements?

Response

Yes.

Question No. 2

Identify the adjacent sites with which the proposed site would hand off signals. Include addresses of these sites.

Response

The proposed Branford South Facility would interact with three (3) of Cellco’s existing facilities and one proposed facility. The existing facilities include Cellco’s Guilford South cell

site, an existing water tank off Sachems Head Road in Guilford; Guilford 2 cell site, an existing tower site at 1919 Boston Post Road in Guilford; and Branford 3 cell site, an existing tower site at 21 Acorn Road in Branford. Cellco also intends to share the recently approved T-Mobile tower at 123 Pine Orchard Road in Branford.

Question No. 3

What is the lowest height at which Cellco's antennas could achieve its coverage objectives from this site? Submit propagation maps showing the coverage at ten feet below this height.

Response

Cellco has determined that the 90-foot level is the minimum height needed to satisfy its Branford South coverage objectives. Plots showing Cellco's coverage at 80 feet from the proposed Branford South Facility are attached behind Tab 1. As illustrated on the plots, by reducing its antenna height to 80 feet, gaps in reliable service at both PCS and cellular frequencies begin to open up or widen along Route 146 to the west of the Branford South Facility. Likewise, existing coverage gaps at PCS frequencies to the east of the Branford South facility also begin to widen with Cellco's antennas at 80 feet.

The plots included behind Tab 1 of these responses assume an antenna height of 102 feet at Cellco's proposed Branford West cell site. At the time the Docket No. 413 application was filed, Cellco had reserved and anticipated installing antennas at the 92-foot level on this tower, below T-Mobile antennas at 122 feet, AT&T antennas at 112 feet and Pocket Communications antennas at 102 feet. Recently, Cellco learned that Pocket Communications would not be sharing the Pine Orchard Road tower making the 102-foot level available to Cellco. The additional 10

feet in antenna height at the Pine Orchard Road site does not, however, affect Cellco's need for a minimum antenna height of 90 feet at the proposed Branford South Facility.

Question No. 4

Of the letters sent to abutting property owners, how many certified mail receipts did Cellco receive? If any receipts were not returned, which owners did not receive their notice? Did Cellco make additional attempts to contact those property owners?

Response

Cellco received return receipts from all but one abutter. The notice letter to Ursula Pollak was returned marked "unclaimed". Notice to Ms. Pollak was resent on January 7, 2011 by first class mail. Ms. Pollak's daughter did contact Cellco's legal counsel on January 20, 2011 to discuss the application. That same day Ms. Pollak was sent a full copy of the Docket No. 413 application.

Question No. 5

What is the signal strength for which Cellco designs its system? For in-vehicle coverage? For in-building coverage? Does this signal strength differ according to the different frequencies Cellco is licensed to use?

Response

Cellco's network design threshold is -85 dBm for reliable in-vehicle service and -75 dBm for reliable in-building service. Cellco's design coverage threshold (-85 dBm) is the same for all of its operating frequencies.

Question No. 6

What is the existing signal strength in those areas Cellco is seeking to cover from this

site? At what frequencies?

Response

Cellco's existing signal strength in the area of the Branford South facility ranges from between -86 dBm to -106 dBm at cellular (850 MHz) and PCS (1900 MHz) frequencies.

Question No. 7

Does Cellco have any statistics on dropped calls in the vicinity of the proposed facility? If so, what do they indicate? Does Cellco have any other indicators of substandard service in this area?

Response

For those sectors of adjacent cell sites directed toward the Branford South search area, Cellco experiences dropped calls at an average rate of 1.35% and ineffective attempts at an average rate of 1.47%. Cellco's network design objective for dropped calls and ineffective attempts is less than one percent (1%). Other indicators of substandard service include the results of Cellco's monthly drive tests, customer complaints, propagation modeling data and system performance data.

Question No. 8

What are the lengths of the respective coverage gaps on Route 146 and along the Amtrak rail line that Cellco is seeking to cover from the proposed site at cellular frequencies? At PCS frequencies?

Response

Coverage gaps along Route 146 total 1.7 miles at cellular frequencies and 2.8 miles at PCS frequencies. Coverage gaps along the Amtrak rail line total 1.8 miles at cellular frequencies

and 3.1 miles at PCS frequencies. The length of these gaps assumes coverage from Cellco's antennas at the 102-foot level on the proposed Branford West Facility tower.

Question No. 9

What are the coverage gaps on local streets that Cellco would cover from the proposed site at cellular frequencies? At PCS frequencies?

Response

In addition to the gaps that exist along Route 146, Cellco experiences gaps in coverage along Old Quarry Road of 0.6 miles at both cellular and PCS frequencies; along Thimble Island Road of 0.9 miles at cellular frequencies and 1.1 miles at PCS frequencies; and along Quarry Road of 0.6 miles at cellular frequencies and 0.95 miles at PCS frequencies.

Question No. 10

Quantify the amounts of cut and fill that would be required to develop the proposed facility.

Response

Cellco anticipates the need for 258 cubic yards of cut and 195 cubic yards of fill to construct the proposed Branford South Facility.

Question No. 11

What was the approximate radius of Cellco's search ring for this area? What was the center of this search ring?

Response

Cellco's Branford South "search ring" although not a circle, measures a radius of approximately 0.3 miles and is centered south of Leetes Island Road and east of Saw Mill Road.

Question No. 12

Would any blasting be required to develop the site?

Response

Cellco does not anticipate the need for blasting to develop the cell site. A more thorough geotechnical survey of the project site would be completed if the Branford South Facility is approved by the Council. The geotechnical survey would be provided to the Council as a part of Cellco's Development and Management ("D&M") Plan.

Question No. 13

Has Cellco received any formal, written comments from any of the local government or advisory boards and commissions with which it consulted about its planned facility? If so, provide copies of any correspondence.

Response

No. Cellco has never received any "written" comments from any of the local government boards or commissions with which it met during the pre-application process. The only written comments offered by any local board or commission were provided by Karyl Lee Hall, on behalf of the Branford/Guilford Scenic Roads Advisory Committee to the State Historic Preservation Office ("SHPO"). Those comments were transmitted by e-mail on October 12, 2010. A copy of that e-mail is attached to the SHPO review letter behind Tab 10 of the application.

Question No. 14

Did representatives of AT&T and T-Mobile attend the October 8, 2010 meeting with town officials?

Response

Yes. As discussed in Cellco's notification pursuant to C.G.S. § 16-50I(e) filed with the Siting Council on December 15, 2010, the October 8, 2010 meeting with Branford Town officials and members of the Branford Telecommunications Committee was attended by representatives of Cellco, AT&T Wireless and T-Mobile.

Question No. 15

Describe the fuel storage and containment system for Cellco's diesel-fueled generator.

Response

Cellco's diesel-fueled generator will maintain a 210 gallon "belly tank" included as a part of the generator unit. The diesel fuel tank is double walled and maintains leak detection alarms. This leak detection system is monitored by Cellco's switch technicians 24-hours a day, seven days a week. As an additional level of containment, the generator room floor itself has been lowered several inches and is capable of containing 120% of the volume of all generator fluids (diesel fuel and other engine fluids) in the unlikely event of a complete generator unit failure. The floor of the generator room also maintains leak detection alarms.

Question No. 16

How would Cellco mount its antennas to the proposed tower?

Response

The water tank design drawing will include a custom antenna mounting system located inside the top portion of the stealth water tank structure. Neither the antennas nor the mounting structure will be visible from outside the water tank.

Question No. 17

Would the tower's setback radius encroach on any adjoining properties? If so, state the distance of the encroachment and who owns these properties?

Response

The 109-foot water tank structure is located approximately 105 feet from the nearest property line, located to the west, along the Amtrak right of way.

Question No. 18

Has Cellco received any response to VHB's letter of December 3, 2010 to DEP, regarding the site habitat survey for the roseate tern and the maritime sunflower borer moth, in which it asked for DEP's written opinion regarding the potential of its proposed facility to impact these two listed species?

Response

Yes. On December 8, 2010, Dean Gustafson received confirmation from Julia Victoria from the State's Wildlife Division, that the DEP concurs with Mr. Gustafson's assessment and "does not anticipate that there will be any impacts on these two [Roseate Tern or maritime sunflower borer moth] species by this project". A copy of Ms. Victoria's letter is attached behind Tab 2.

Question No. 19

Would Cellco's proposed facility comply with recommended guidelines of the United States Fish and Wildlife Service for minimizing the potential for telecommunications towers to impact bird species?

Response

Yes. (See discussion on pages 4-6 of the Migratory Bird Impact Evaluation attached behind Tab 3). In addition, the Branford South Facility is not located within an Important Bird Area (“IBA”) as designated by the National Audubon Society. The closest IBA to the Branford South Facility is Falkner Island located in Long Island Sound approximately 4.45 miles to the south/southeast. (See discussion on page 2 of the Migratory Bird Impact Evaluation attached).

Question No. 20

Are the diameters at breast height of the ten trees to be removed for the proposed facility greater than six inches?

Response

Yes. Diameter, at breast height, of the trees to be removed range from 12 to 24 inches.

Question No. 21

The total estimated cost of Cellco’s proposed facility does not equal the sum of the itemized costs listed on page 24 of the application. What is the correct total?

Response


The itemized listing of construction costs for the Branford South Facility are correct. The total cost should be \$930,000.00.

CERTIFICATION

I hereby certify that on this 24th day of February, 2011, a copy of the foregoing was sent,
postage prepaid, to the following parties and intervenors:

Julie Donaldson Kohler, Esq.
Jesse Langer, Esq.
Cohen and Wolf, P.C.
1115 Broad Street
P.O. Box 1821
Bridgeport, CT 06604-4247

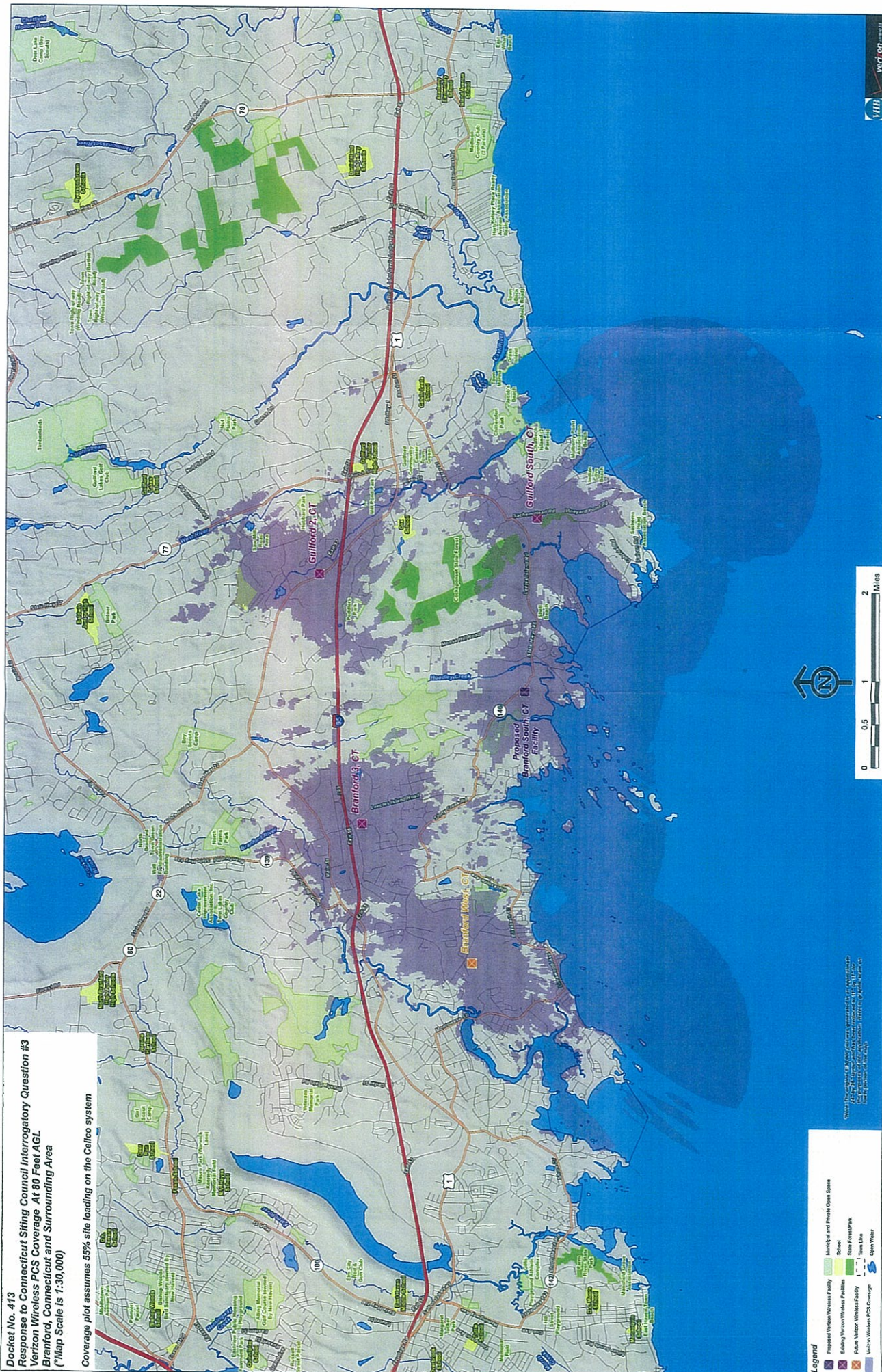
Christopher B. Fisher, Esq.
Lucia Chiocchio, Esq.
Cuddy & Feder LLP
445 Hamilton Avenue, 14th Floor
White Plains, NY 10601


Kenneth C. Baldwin

TAB 1

Docket No. 413
 Response to Connecticut Siting Council Interrogatory Question #3
 Verizon Wireless PCS Coverage At 80 Feet AGL
 Branford, Connecticut and Surrounding Area
 (*Map Scale is 1:30,000)

Coverage plot assumes 65% site loading on the Celco system



- Legend**
- Proposed Verizon Wireless Facility
 - Existing Verizon Wireless Facilities
 - Future Verizon Wireless Facility
 - Verizon Wireless PCS Coverage
 - Municipal and Private Open Spaces
 - School
 - Open Water



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Docket No. 413
Response to Connecticut Siting Council Interrogatory Question #3
Verizon Wireless Cellular Coverage At 80 Feet AGL
Branford, Connecticut and Surrounding Area
 (*Map Scale is 1:30,000)

Coverage plot assumes 55% site loading on the Collico system



- Legend**
- Proposed Verizon Wireless Facility
 - Existing Verizon Wireless Facilities
 - Future Verizon Wireless Facility
 - Verizon Wireless Cellular Coverage
 - Municipal and Private Open Space
 - School
 - State Forest/Park
 - State Forest/Park
 - Stream/Line
 - Open Water



TAB 2



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
FRANKLIN WILDLIFE
391 ROUTE 32
N FRANKLIN CT 06254
860-642-7239



December 8, 2010

Mr. Dean Gustafson
Vanasse Hangen Brustlin, Inc.
54 Tuttle Place
Middletown, CT 06457

re: telecommunication facility (Branford South) for Verizon Wireless at 723 Leetes Island Road, Branford

Dear Mr. Gustafson:

Your additional letter and thirty five pages of materials and maps was received on 12/6/2010 regarding the federal and state endangered species, Roseate Tern (*Sterna dougalii*) and a state species of special concern, the maritime sunflower borer moth (*Papaipema maritima*) that was recorded in the vicinity of your project.

This report indicates that work will not be conducted in the habitats of these two listed species. The DEP Wildlife Division concurs with this assessment and does not anticipate that there will be any impacts on these two species by this project.

Please be advised that the Wildlife Division has not made a field inspection of any of your project nor have we seen detailed timetables for work to be done. Consultation with the Wildlife Division should not be substituted for site-specific surveys that may be required for environmental assessments. If the proposed project has not been initiated within 12 months of this review, contact the NDDB for an updated review. If you have any additional questions, please feel free to contact me at Julie.Victoria@ct.gov, please reference the NDDB # at the bottom of this letter when you e-mail. Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in black ink that reads "Julie Victoria".

Julie Victoria, Wildlife Biologist
Franklin Swamp Wildlife Management Area
391 Route 32
N. Franklin, CT 06254

cc: NDDB – 17143

TAB 3



Vanasse Hangen Brustlin, Inc.

54 Tuttle Place
Middletown, Connecticut 06457
860 632-1500
FAX 860 632-7879

Memorandum

To: Ms. Alexandria Carter
Verizon Wireless
99 East River Drive
East Hartford, Connecticut 06108

Date: February 22, 2011

Project No.: 41479.38

From: Dean Gustafson
Senior Environmental Scientist

Re: Connecticut Siting Council Docket No. 413
Migratory Bird Impact Evaluation
Proposed Verizon Wireless Facility
723 Leetes Island Road
Branford, Connecticut

Vanasse Hangen Brustlin, Inc. (VHB) is pleased to provide the following information with respect to potential impacts on migratory birds from a proposed wireless telecommunications facility (Facility) proposed by Verizon Wireless at 723 Leetes Island Road in Branford, Connecticut.

VHB understands that Verizon Wireless is proposing to construct a new telecommunications facility at 723 Leetes Island Road in Branford, Connecticut (referred to herein as "Site"). The proposed facility will consist of a ±109-foot tall stealth monopole tower designed to resemble a rustic-style water tank, concealed (interior-mount) antennas, and associated ground equipment within a fenced-enclosed compound area (referred to herein as "Facility"). Access to the Facility would initially follow an existing woods road/grass path (to be improved as a 12-foot wide gravel access drive) for approximately 275 feet then continue for an additional 100± feet to the proposed compound area in a northeasterly direction through a successional upland forested area.

The 19.12± acre Site is an agricultural property known as Medlyn Farms, whose operations also extend onto a separate parcel to the north across Leetes Island Road. The Site is developed with a greenhouse in the northwest parcel corner, while the majority of the site is encompassed by various agricultural operations including wood/mulch/compost storage areas near the greenhouse, cultivated fields in the western half of the property, successional forest in the central/east portion of the property and a small field and inland wetlands in the eastern end of the site. Surrounding land use consists of an Amtrak rail line to the south, an intertidal salt marsh associated with Stony Creek to the west, Leetes Island Road and residential development to the north and inland wetlands and residential properties to the east.

VHB's research revealed the proposed Facility complies with the U.S. Fish and Wildlife Service (USFWS) guidelines for minimizing potential impacts to birds and no migratory bird species would be impacted by development of the proposed Facility. As a result, no seasonal restrictions would be recommended in association with construction or operation of the proposed Facility.

Provided below is a detailed analysis of potential impacts to migratory birds from the proposed Verizon Wireless Facility and the Facility's compliance with the USFWS guidelines.

Flyways

The proposed Facility is located in an agricultural and rural residential section of Branford near the Connecticut coast approximately 0.25 mile north of Stony Creek estuary into Long Island Sound. The Connecticut coast lies within the Atlantic Flyway, one of the four generalized regional migratory bird flyways (Mississippi, Central, and Pacific being the others). This regional flyway is used by migratory birds traveling to and from summering and wintering grounds. The Atlantic Flyway is particularly important for many species of migratory waterfowl and shorebirds, and Connecticut's coast serves as vital stopover habitat. Migratory land birds also stop along coastal habitats before making their way inland. Smaller inland migratory flyways are often concentrated along major riparian areas as birds make their way further inland to their preferred breeding habitats.

The proposed Verizon Wireless Facility will be located within a successional upland forested area surrounded by various agricultural operations (e.g., wood/mulch/compost storage areas, greenhouse, cultivated fields, etc.), Amtrak rail line and Leetes Island Road. No federal or state-regulated coastal resources (e.g., tidal wetlands, beaches, estuary, etc.) are located within the proposed Facility's development limits. Coastal resources, consisting of an intertidal salt marsh associated with tidally influenced Stony Creek, are located along the western boundary of the Site approximately 1,000 feet west of the proposed Facility. A closer tidal salt marsh is located off the Site 450± feet southeast of the proposed Facility, although it is separated by the Amtrak rail line.

No impact to nearby wetland areas would occur as a result of the proposed development. Although the proposed Verizon Wireless Facility is located in the Atlantic Flyway, no impact to avian habitat potentially used by migrating species will occur due to the lack of impact to bird concentration areas (discussed in detail in the following sections) and the relatively low height of the proposed Facility. In addition, since the proposed Facility complies with the U.S. Fish and Wildlife Service guidelines (as discussed in a following section) for minimizing potential impacts to birds, no migratory bird species would be impacted by development of the proposed Facility.

Focus Areas

The Atlantic Joint Coast Venture (AJCV) is an affiliation of federal, state, regional, and local partners working together to address bird conservation planning along the Atlantic Flyway. The AJCV has identified focus areas identifying the most important habitats for waterfowl along the Atlantic Flyway. Connecticut contains several of these focus areas. Although the proposed project is not located within one of them (refer to attached map of CT Waterfowl Focus Areas), it is near the New Haven Harbor Focus Area. Since the proposed project occurs on an existing developed agricultural property and will not directly impact waterfowl habitat, no adverse impact to the nearby focus area is anticipated.

CTDEP Migratory Waterfowl Data

The Connecticut Department of Environmental Protection (CTDEP) created a Geographic Information System (GIS) data layer in 1999 identifying concentration areas of migratory waterfowl at specific locations in Connecticut. The intent of this data layer is to assist in the identification of migratory waterfowl resource areas in the event of an oil spill or other condition that might be a threat to waterfowl species. This data layer identifies conditions at a particular point in time and has not been updated since 1999.

The closest migratory waterfowl area is located along the Connecticut coast, approximately 0.25 mile south of the proposed Facility; refer to the enclosed Avian Resources Map. Species utilizing this nearby coastal habitat (e.g., shallow marine waters, estuaries, bays) primarily for non-breeding

wintering and migratory grounds include American Black Duck, Common Goldeneye, Greater Scaup, Lesser Scaup, Surf Scoter and white-winged scoter. The exception to this group is American Black Duck which would also use the identified migratory waterfowl area as breeding habitat. Black duck nesting preferences include a wide variety of wetland habitats with proximity to open water, dense ground cover and low human disturbance¹. Three important factors were considered in our determination that no impact to migratory or wintering waterfowl will result from the proposed development (and therefore no seasonal restrictions are recommended for the project), including: 1) the proposed project will not directly impact this migratory, wintering and breeding (limited to Black Duck) waterfowl area; 2) there is sufficient buffer from this area to the proposed development; and, 3) the area surrounding the proposed Facility contains a relatively high level of human activity (e.g., agricultural activities, roadway, active rail line) that would currently discourage waterfowl usage.

Important Bird Areas and Sites

Audubon Connecticut has identified 27 Important Bird Areas and Sites (IBAs) in the state. The closest IBA to the proposed Facility is the Falkner Island Unit of Stewart B. McKinney National Wildlife Reserve off the coast in Guilford, located approximately 5.5 miles to the south/southeast. Refer to the enclosed Avian Resources Map. This island is home to Connecticut's largest Common and Roseate Tern colony in addition to providing important migratory and breeding habitat to several other bird species. Due to the significant distance between the proposed Facility and this IBA, no impact to this area will result from the proposed development and therefore no seasonal restrictions are recommended for the project.

Critical Habitat

Connecticut Critical Habitats depicts the classification and distribution of 25 rare and specialized wildlife habitats in the state resulting in the creation of habitat maps to be used in land use planning and natural resource protection. It represents a compilation of ecological information collected over many years by state agencies, conservation organizations and many individuals. The Connecticut Critical Habitats information can serve to highlight ecologically significant areas and to target areas of species diversity for land conservation and protection. The nearest Critical Habitat is associated with coastal resources consisting of an intertidal salt marsh bordering Stony Creek located along the western boundary of the Site approximately 1,000 feet west of the proposed Facility. A closer Critical Habitat is associated with tidal salt marsh located off the subject property 450± feet southeast of the proposed Facility, although it is separated by the Amtrak rail line. The proposed Facility would be located in an upland area in proximity to Leetes Island Road and the Amtrak rail line on property currently in active agricultural use, with the nearest coastal resource 450± feet to the southeast across the railroad tracks. Therefore, due to the distance between the proposed Facility and this nearest Critical Habitat and the existing high level of human activity (e.g., agricultural activities, roadway, active rail line), no impact to these Critical Habitats will result from the proposed development and therefore no seasonal restrictions are recommended for the project.

Breeding Bird Survey Route

The North American Breeding Bird Survey is a cooperative effort between various agencies and volunteer groups to monitor the status and trends of North American bird populations. Routes are randomly located to sample habitats that are representative of an entire region. Each year during the height of the avian breeding season (June for most of the United States) participants skilled in avian identification collect bird population data along roadside survey routes. Each survey route is approximately 24.5 miles long and contains 50 stops located at 0.5-mile intervals. At each stop, a 3-minute count is conducted. During the count, every bird seen within a 0.25-mile radius or heard is recorded. The resulting data are used by conservation managers, scientists, and the general public

¹ Bevier, L.R., The Atlas of Breeding Birds of Connecticut (State Geological and Natural History Survey of Connecticut, Dept. of Environmental Protection, Bulletin 113, 1994), 74.

to estimate population trends and relative abundances and to assess bird conservation priorities. No survey routes are located within 5 miles of the proposed Facility. Bird survey routes do not represent a potential restriction to development, including the proposed Facility.

Hawk Watch Site

The Hawk Migration Association of North America (HMANA) is a membership-based organization committed to the conservation of raptors through the scientific study, enjoyment, and appreciation of raptor migration. HMANA collects hawk count data from almost two hundred affiliated raptor monitoring sites throughout the United States, Canada, and Mexico, identified as "Hawk Watch Sites." The nearest Hawk Watch Site is located approximately 8.75 miles west of the proposed Facility in East Haven (beyond the scale of the enclosed Avian Resources Map). Hawk Watch Sites do not represent a potential restriction to development, including the proposed Facility.

Bald Eagle Site

Bald Eagle Sites consist of locations of midwinter Bald Eagle counts from 1986-2005 with an update provided in 2008. This survey was initiated in 1979 by the National Wildlife Federation. This database includes data from 1986-2005 midwinter counts and includes some statewide, regional and national trends. Survey routes are included in the database only if they were surveyed consistently in at least 4 years and where at least 4 eagles were counted in a single year. A Bald Eagle Site is located near Lake Saltonstall in Branford approximately 4.6 miles west of the proposed Facility; refer to the enclosed Avian Resources Map. Due to the significant distance separating the proposed Facility from this Bald Eagle Site no impact to Bald Eagles will result from the proposed development and therefore no seasonal restrictions are recommended for the project.

Compliance with USFWS's Interim Guidance on the Siting, Construction, Operation and Decommissioning of Communications Towers

The United States Fish and Wildlife Service's *Interim Guidance on the Siting, Construction, Operation and Decommissioning of Communications Towers* (September 14, 2000), recommends 12 voluntary actions be implemented in order to mitigate tower strikes caused by the construction of telecommunications towers:

1. *Any company/applicant/licensee proposing to construct a new communications tower should be strongly encouraged to collocate the communications equipment on an existing communication tower or other structure (e.g., billboard, water tower, or building mount). Depending on tower load factors, from 6 to 10 providers may collocate on an existing tower.*

Response: Collocation on an existing building, tower or non-tower structure is not available while achieving the required radio frequency (RF) coverage objectives of the proposed Facility.

2. *If collocation is not feasible and a new tower or towers are to be constructed, communications service providers should be strongly encouraged to construct towers no more than 199 feet above ground level (AGL), using construction techniques which do not require guy wires (e.g., use a lattice structure, monopole, etc.). Such towers should be unlighted if Federal Aviation Administration regulations permit.*

Response: The proposed Verizon Wireless Facility consists of a ±109-foot tall stealth monopole tower designed to resemble a rustic-style water tank which requires neither guy wires nor lighting.

3. *If constructing multiple towers, providers should consider the cumulative impacts of all of those towers to migratory birds and threatened and endangered species as well as the impacts of each individual tower.*

Response: Multiple towers are not proposed to be constructed at the subject property. The proposed ±109-foot tall stealth monopole tower designed to resemble a rustic-style water tank will

accommodate two additional wireless telecommunications carriers to minimize the need to construct additional towers.

4. *If at all possible, new towers should be sited within existing "antenna farms" (clusters of towers). Towers should not be sited in or near wetlands, other known bird concentration areas (e.g., state or Federal refuges, staging areas, rookeries), in known migratory or daily movement flyways, or in habitat of threatened or endangered species. Towers should not be sited in areas with a high incidence of fog, mist, and low ceilings.*

Response: There are no existing antenna farms in the area that would satisfy the RF coverage objectives for this portion of Branford. Due to the proposed tower's proximity to the coast, incidence of fog, mist, and low ceilings are anticipated over the course of a typical year. Although the proposed Facility is located within the Atlantic Flyway, the low height of the proposed Facility and its distance to known bird concentration areas (e.g., 0.25± miles north of migratory waterfowl concentration area) mitigate potential impacts to migratory avian species. According to CTDEP, federal and state endangered species, Roseate Tern (*Sterna dougallii*), and a state species of special concern, the maritime sunflower borer moth (*Papaipema maritima*), are recorded in the vicinity of the proposed project. VHB performed a habitat survey and concluded that work would not be conducted in the habitats of these two listed species. The DEP Wildlife Division concurred with this assessment and does not anticipate that there will be any impacts on these two species by this project (J. Victoria, CTDEP, pers. comm., December 8, 2010).

5. *If taller (>199 feet AGL) towers requiring lights for aviation safety must be constructed, the minimum amount of pilot warning and obstruction avoidance lighting required by the FAA should be used.*

Response: The proposed tower height of ±109 feet is less than 199 feet AGL and does not require lighting as determined by a FAA review.

6. *Tower designs using guy wires for support which are proposed to be located in known raptor or waterbird concentration areas or daily movement routes, or in major diurnal migratory bird movement routes or stopover sites, should have daytime visual markers on the wires to prevent collisions by these diurnally moving species.*

Response: The proposed tower will be unguyed and therefore visual markers are not required.

7. *Towers and appendant facilities should be sited, designed and constructed so as to avoid or minimize habitat loss within and adjacent to the tower "footprint". However, a larger tower footprint is preferable to the use of guy wires in construction. Road access and fencing should be minimized to reduce or prevent habitat fragmentation and disturbance, and to reduce above ground obstacles to birds in flight.*

Response: The proposed tower and appendant Facility is sited, designed, and constructed to accommodate proposed equipment and to allow for future collocations within the smallest footprint possible. The Facility is located in a successional forest area surrounded by a high level of human activity (e.g., agricultural activities, roadway, active rail line) and therefore will not result in habitat fragmentation.

8. *If significant numbers of breeding, feeding, or roosting birds are known to habitually use the proposed tower construction area, relocation to an alternate site should be recommended. If this is not an option, seasonal restrictions on construction may be advisable in order to avoid disturbance during periods of high bird activity.*

Response: Significant numbers of breeding, feeding, or roosting birds are not known to habitually use the proposed tower construction area, which is subject to active agricultural activity surrounded by an active rail line and roadway that currently discourage high level of bird activity.

9. *In order to reduce the number of towers needed in the future, providers should be encouraged to design new towers structurally and electrically to accommodate the applicant/licensee's antennas and comparable antennas for at least two additional users (minimum of three users for each tower structure), unless this design would require the addition of lights or guy wires to an otherwise unlighted and/or unguyed tower.*

Response: The proposed unguyed and unlit tower has been designed to accommodate two additional users antennas for a total of three users on this tower.

10. *Security lighting for on-ground facilities and equipment should be down-shielded to keep light within the boundaries of the site.*

Response: Security lighting will be down-shielded using Dark Sky compliant fixtures set on motion sensor with timer.

11. *If a tower is constructed or proposed for construction, Service personnel or researchers from the Communication Tower Working Group should be allowed access to the site to evaluate bird use, conduct dead-bird searches, to place net catchments below the towers but above the ground, and to place radar, Global Positioning System, infrared, thermal imagery, and acoustical monitoring equipment as necessary to assess and verify bird movements and to gain information on the impacts of various tower sizes, configurations, and lighting systems.*

Response: With prior notification to Verizon Wireless, USFWS personnel would be allowed access to the proposed Facility for evaluation.

12. *Towers no longer in use or determined to be obsolete should be removed within 12 months of cessation of use.*

Response: If the proposed tower was no longer in use or determined to be obsolete, it would be removed within 12 months of cessation of use.

Summary

Potentially impacted waterfowl species: American Black Duck, Common Goldeneye, Greater Scaup, Lesser Scaup, Surf Scoter, White-winged Scoter
Closest Important Bird Area: Falkner Island Unit of Stewart B. McKinney National Wildlife Reserve (5.5± miles south/southeast)
Closest CTDEP Critical Habitat: intertidal salt marsh bordering Stony Creek (1,000± feet west & 450± feet southeast [across active rail line])
Recommended Seasonal Restriction: None

cc: Kenneth C. Baldwin, Robinson & Cole LLP

Enclosures

ATLANTIC COAST JOINT VENTURE CONNECTICUT WATERFOWL FOCUS AREAS

