

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE: :
 :
APPLICATION OF CELLCO PARTNERSHIP : DOCKET NO. 475
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 OFF :
FOLLY LANE, COVENTRY, CONNECTICUT : SEPTEMBER 13, 2017

**RESPONSES OF CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS
TO CONNECTICUT SITING COUNCIL PRE-HEARING INTERROGATORIES**

On August 23, 2017, the Connecticut Siting Council (“Council”) issued Pre-Hearing Interrogatories to Cellco Partnership d/b/a Verizon Wireless (“Cellco”), relating to Docket No. 475. Cellco’s responses to all pre-hearing questions with the exception of No. 5 are provided below. The response to question no. 5 will be provided as soon as the information is available.

Question No. 1

Were return receipts received for each abutting landowner identified in the application? If not, list the abutters that did not receive notice and describe any additional effort to serve notice.

Response

Yes, return receipts were received for all abutting landowners listed in the Application.

Question No. 2

Which frequencies would Cellco initially install at the proposed site? What is the determining factor for the deployment of additional frequencies within the proposed service area?

Response

Cellco will initially deploy its 700 MHz and 2100 MHz frequencies at the Coventry NW Facility. Additional frequencies would be deployed and activated as required to meet service demands of Cellco's customers.

Question No. 3

How do the different frequencies interact? Are all frequencies used to transmit voice and data services? Are all frequencies LTE capable? Please explain.

Response

All of Cellco's licensed frequencies (700 MHz, 850 MHz, 1900 MHz, 2100 MHz) are LTE capable and are used to transmit both voice and data services. Cellco customer utilizing LTE services transfer seamlessly between Cellco's operating frequencies during handoff between cell sites. Handoff can also occur between frequencies at an individual cell site for load balancing purposes. Subject to availability at a particular cell site, LTE frequencies can also be used together (a feature called "carrier aggregation") making more of the existing bandwidth available to a particular user.

Question No. 4

What is Cellco's service design threshold for each frequency?

Response

Cellco's minimum design threshold for CDMA signal strength is -85 dBm Receive Signal Strength Indicator (RSSI) for in-vehicle service and -75 dBm RSSI for in-building service. For LTE signal strength, Cellco's minimum design threshold is -105 dBm Reference Signal Received Power (RSRP) for highway in-vehicle/rural in-building; -95 dBm RSRP for suburban residential in-building and; -85 dBm RSRP for urban/commercial in-building.

Question No. 5

Application page 8 describes wireless service from the proposed site. Provide information regarding the size of the existing wireless coverage gaps that will be served by the proposed Coventry NW facility.

Response

Cellco's RF Engineers are currently gathering the information needed to accurately respond to this question. A full response will be provided as soon as that information is available but in no case later than September 22, 2017.

Question No. 6

Could the proposed coverage and capacity services be met by a series of small cell facilities or a distributed antenna system instead of the proposed macro-tower facility? If small cells are feasible, approximately how many would be required, assuming optimum placement.

Response

It may be theoretically and technically possible to install a large number of small cell facilities in the area that could match or closely match the coverage footprint of the proposed Coventry NW macro cell. Such an approach, however, is not economically feasible and is not consistent with good RF Engineering practice. Typically, small cell facilities utilize existing infrastructure (i.e. electric distribution poles) along public rights of way in areas where coverage and/or capacity problems exist. In areas where this existing infrastructure does not exist, for example, along private roads or on private and municipal property, property rights would need to be obtained and new poles would need to be installed.

The actual number of small cell facilities that would be needed to provide a service comparable to that from the proposed Coventry NW Facility is not known but would be

significant given the overall size of the area that Cellco is attempting to serve.

Question No. 7

Provide an estimate of the residential population living within the 700 MHz target service area.

Response

Estimated residential population (Pops) covered at 700 MHz at the proposed Coventry NW Facility is 6,022 Pops.

Question No. 8

Provide a traffic count for major roads that would be served by the proposed facility.

Response

According to information available from the Connecticut Department of Transportation, in Coventry, there are 9,300 average daily trips (ADTs) at the intersection of Route 44 and Route 31; 8,100 ADTs at the intersection of Route 44 and North River Avenue; 1,200 ADTs at the intersection of Broadway and Carpenter Road; 950 ADTs at the intersection of Goose Lane and Folly Lane; 650 ADTs at the intersection of Goose Lane and Merrow Road (East Intersection); and 1,300 ADTs at the intersection of Goose Lane and Merrow Road (West Intersection).

In Tolland, there are 1,600 ADTs at the intersection of Grant Hill Road and Cider Mill Road; 11,000 ADTs at the westbound off ramp of I-84; 18,900 ADTs southeast of the eastbound off ramp of I-84; and 14,600 ADTs to the northwest of the eastbound off ramp of I-84.

Question No. 9

Can the proposed facility support text-to-911 service? Is additional equipment required for this purpose? Is Cellco aware of any Public Safety Answering Points in the area of the proposed site that are able to accept text-to-911?

Response

Yes, the proposed Coventry NW Facility will support text-to-911 as soon as the Public Safety Answering Point (PSAP) is capable of receiving text-to-911. No additional cell site equipment is necessary to support this service. Cellco is not aware of any Public Safety Answering Points in the area of the proposed Coventry NW cell site that are about to accept text-to-911 at this time.

Question No. 10

Would Cellco's installation comply with the intent of the *Warning, Alert and Response Network Act of 2006*?

Response

Yes.

Question No. 11

What measures are proposed to ensure site security?

Response

The tower and related equipment would be surrounded by an eight-foot security fence and a locked gate. Cellco's radio equipment cabinets are equipped with silent intrusion alarms. If someone attempts to tamper with or break-in to the cabinets, cell site technicians monitoring the site will be alerted and local police will be contacted.

Question No. 12

Identify the safety standards and/or codes by which equipment, machinery, or technology would be used or operated at the proposed facility.

Response

- 2012 International Building Code with the 2016 CT Building Code Amendments.

- National Electric Code (NFPA70).
- 2005 CT State Fire Safety Code with the 2009 Amendments.
- TIA-222-G-1 “Structural Standards for Steel Antenna Towers and Antenna Supporting Structures”.
- Occupational Safety and Health Administration (OSHA).

Question No. 13

Does the proposed site contain any Connecticut Prime Farmland and/or Important Agricultural Soils? If so, what is the acreage of prime and important soils that would be impacted by the proposed facility? Is any portion of the site currently in productive agricultural use?

Response

Farmland soils suitable for agricultural use includes land that is defined as prime or farmland of Statewide or local importance, based on soil type. It identifies the location and extent of the most suitable land for producing food, feed, fiber, forage, and oilseed crops and is available for these uses. According to the National Cooperative Soil Survey (U.S. Department of Agriculture, Natural Resources Conservation Service), north central portions of the Property contain “Statewide Important” Farmland soils, including areas where the Canterbury South Facility compound and gravel access drive upgrades are proposed. (See Farmland Soils Map included in Attachment 1). This area, however, is currently occupied by an existing driveway, maintenance facility and portions of the existing golf course.

Question No. 14

Would blasting be required to develop the site?

Response

Cellco does not anticipate the need for blasting to construct this facility. That said, if the facility is approved, a complete geotechnical survey will be prepared and subsurface conditions will be evaluated.

Question No. 15

Has Cellco received a response from the State Historic Preservation Office regarding the proposed project? If so, please provide a copy.

Response

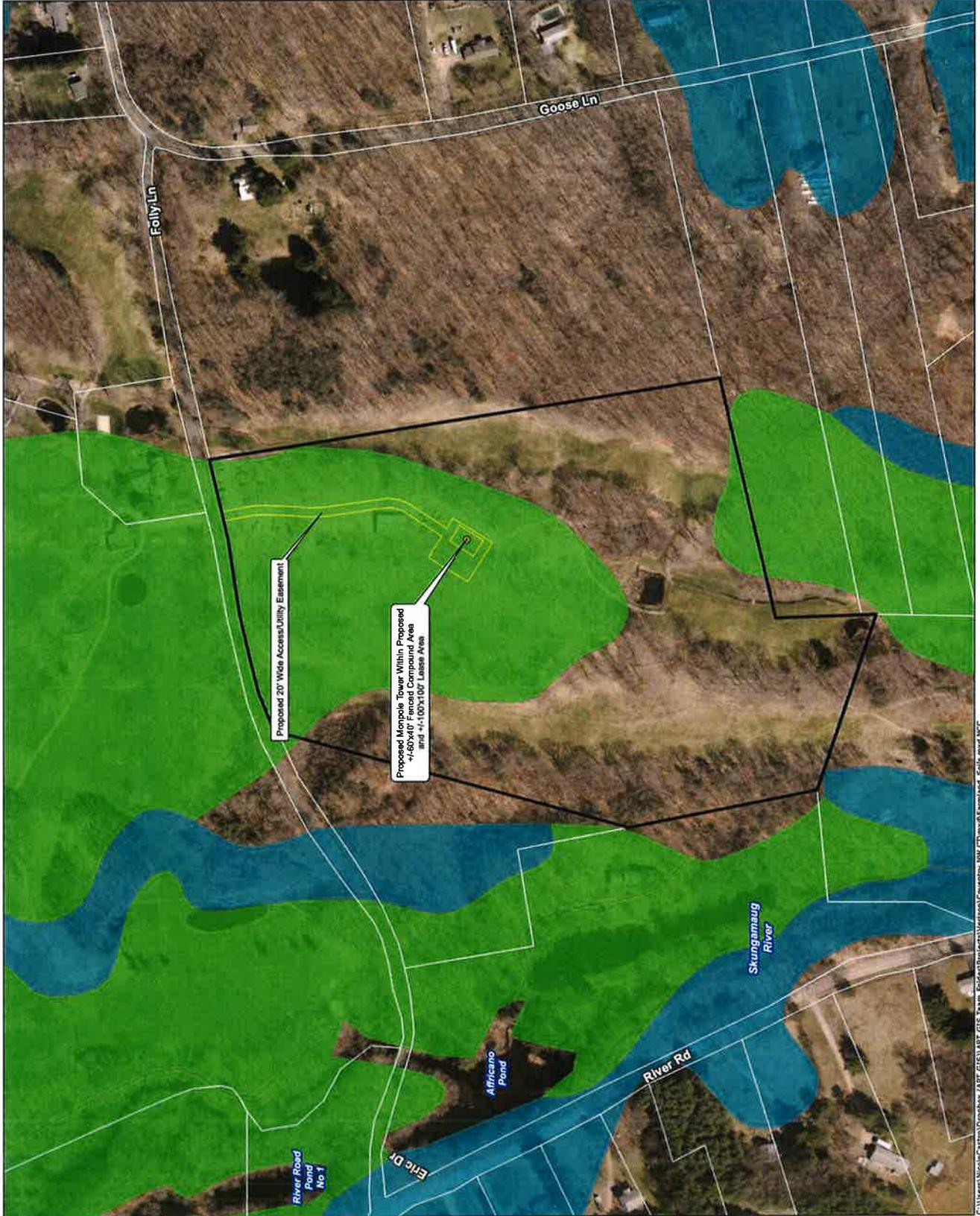
Cellco submitted a request to the SHPO (including the information included in Attachment 12 of the Application, on August 15, 2017 and has not yet received a response. A copy of SHPO's response will be provided to the Council upon receipt.

ATTACHMENT 1

Farmland Soils
Proposed Wireless Telecommunications Facility
 Coventry Northwest CT
 Folly Lane
 Coventry, Connecticut
 verizon

Legend

- ⊙ Proposed Monopole
- Proposed Facility Layout
- Approximate Subject Property
- Approximate Parcel Boundary (CTDEEP)
- Prime Farmland Soils
- Statewide Important Farmland Soils



Map Sources:
 Ortho Base Map: CTECO 2016 Aerial Imagery
 CTDEEP's data library (<http://www.ct.gov/deep>)
 Data layers are maintained and updated by CTDEEP and represent
 the most recent publications.
 Map Date: August 2017