

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE: :
: :
APPLICATION OF MCF : DOCKET NO. 345
COMMUNICATIONS bg, INC. AND :
CELLCO PARTNERSHIP 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 EXETER DRIVE IN :
STERLING, CONNECTICUT : OCTOBER 30, 2007

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

On October 12, 2007, the Connecticut Siting Council (“Council”) issued Pre-Hearing Interrogatories to the Applicant, Cellco Partnership d/b/a Verizon Wireless (“Cellco”), relating to the above-captioned docket. Below are Cellco’s responses.

Question No. 1

On Tab 6 of MCF Communications bg, Inc.’s (MCF) and Cellco Partnership d/b/a Verizon Wireless’ (Verizon Wireless) (collectively, the Applicant) Application for a Certificate of Environmental Compatibility and Public Need (Application), coverage plots are provided to show the existing coverage and the coverage with the proposed antennas centered at 137’. Provide cellular and PCS coverage plots (using the same scale provided) assuming the antennas are located at 127’ and 117’, respectively.

Response

The coverage plots requested are included behind Tab 1 of these responses. As indicated on these plots, Cellco cannot satisfy its coverage objectives in Sterling with antennas mounted at 127 or 117 feet on the proposed tower. The table below quantifies the differences in coverage that Cellco would realize at 137', 127' and 117'.

Sterling Tower at 137 Feet

	<u>Coverage on Route 14</u>	<u>Coverage on Route 14a</u>	<u>Coverage Overall</u>
Cellular Frequencies	4.1 miles	3.5 miles	10.8 square miles
PCS Frequencies	2.31 miles	1.1 miles	6.6 square miles

Sterling Tower at 127 Feet

	<u>Coverage on Route 14</u>	<u>Coverage on Route 14a</u>	<u>Coverage Overall</u>
Cellular Frequencies	3.3 miles	2.9 miles	9.9 square miles
PCS Frequencies	2.1 miles	1.0 miles	5.0 square miles

Sterling Tower at 117 Feet

	<u>Coverage on Route 14</u>	<u>Coverage on Route 14a</u>	<u>Coverage Overall</u>
Cellular Frequencies	3.1 miles	2.6 miles	9.2 square miles
PCS Frequencies	2.0 miles	0.4 miles	4.1 square miles

Question No. 2

What were the results of the Applicant's notice to abutting property owners? Did the Applicant receive certified mail receipts from all abutters? If not, how many receipts were not returned? Did the Applicant make any additional attempts to notify property owners from whom it might not have received return receipts?

Response

All but one of the certified mail receipts were returned by the abutting landowners. One notice was returned marked “unclaimed”. That notice was resent by regular mail. It should also be noted that the one unclaimed abutter’s mailing was addressed to Sterling Hills Estates Homeowners at a North Providence, Rhode Island mailing address. A second notice was also sent to the Sterling Hills Estates Homeowners at a Wyoming, Rhode Island address. The receipt for this second mailing to Sterling Hills Estates Homeowners was returned indicating that this abutter did receive notice of the Cellco filing.

Question No. 3

What is the Verizon Wireless’ existing signal strength in the area that would be covered by this facility?

Response

Cellco’s existing signal strength in the area ranges from -86 dBm to -114 dBm.

Question No. 4

What is the minimum signal level Verizon Wireless would consider acceptable for service in the vicinity of the proposed site?

Response

Cellco’s nationwide threshold for reliable service is -85 dBm for in-vehicle coverage and -75 dBm for in-building coverage.

Question No. 5

What is the minimum signal level that Verizon Wireless requires in order to provide adequate in-vehicle coverage?

Response

-85 dBm.

Question No. 6

Identify the distance, direction, structure heights, antenna heights, and addresses of adjacent facilities with which the proposed facility would hand off traffic.

Response

1. Cellco's Plainfield cell site – Cellco antennas attached at the 110-foot level on the existing 150-foot AT&T tower off Spaulding Hill Road in Plainfield. This facility is located approximately 3.92 miles to the southwest of the proposed Sterling facility.
2. Cellco's Plainfield North cell site - Cellco antennas attached at the 125-foot level on the existing 178-foot SBA, Inc. tower at 548 Green Hollow Road in Plainfield. This facility is located approximately 3.64 miles to the northwest of the proposed Sterling facility.
3. Cellco's Plainfield North 2 cell site - Cellco antennas attached at the 127-foot level on the existing 160-foot Sprint tower at 47 Unity Drive in Plainfield. This facility is located approximately 3.74 miles to the west of the proposed Sterling facility.

Question No. 7

Identify the area (in square miles) that would be covered by the proposed facility for cellular and also PCS.

Response

As discussed on page 11 of the Application narrative, the proposed Sterling Facility will provide reliable coverage to an area of approximately 10.8 square miles at cellular frequencies and 6.6 square miles at PCS frequencies.

Question No. 8

Approximately how long (in miles) is the existing coverage gap on Route 14?

Approximately how long (in miles) is the existing coverage gap on Route 14a?

Response

Cellco currently experiences an approximately 3.49 mile coverage gap along Route 14 and a 3.23 mile coverage gap along Route 14a at cellular frequencies and a 5.63 mile coverage gap along Route 14 and 3.51 mile coverage gap along Route 14a at PCS frequencies.

Question No. 9

Calculate the amounts of cut and fill that would be required to develop this facility.

Response

For installation of the access road and compound gravel, approximately 90 cubic yards of “cutting” of the existing topsoil and loose stone is required. No fill is required.

Question No. 10

Would any blasting be required at the proposed site?

Response

Until a final geotechnical survey is completed, at the time of D&M Plan approval, MCF will not know whether blasting will be required to construct the facility. However, based on existing site conditions, we do not anticipate the need for blasting.

Question No. 11

Is the site located within a flood zone (e.g. 100 yr., 500 yr.)?

Response

No. According to the FEMA Flood Insurance Rate Map, the Property is designated Zone C, an area of minimal flooding.

Question No. 12

What is the fuel type for the backup generator, e.g. diesel?

Response

Cellco intends to install a diesel-fueled back-up generator at the proposed Sterling facility.

Question No. 13

Has the Applicant considered using a fuel cell for backup power at this site? Does MCF or Verizon Wireless have fuel cells at other Connecticut sites?

Response

No. Neither MCF nor Cellco have installed fuel cells at any existing Connecticut cell site locations. As discussed in two recent dockets, Cellco recently integrated a hydrogen-powered fuel cell into its network in northern New Jersey, to provide back-up power to its existing West Milford cell site. This fuel cell test installation is being evaluated by Cellco technicians. Cellco is committed to continuing its fuel cell research program and will keep the Council updated on its progress.

Question No. 14

Is the cellular frequency band primarily a data transmitting system?

Response

No. Cellco's cellular frequencies are used primarily, but not exclusively, as a part of its voice transmitting system.

Question No. 15

Is the PCS frequency band primarily a data transmitting system?

Response

Yes. Cellco's PCS frequencies are used primarily, but not exclusively, for its data transmitting system. In certain locations around the State, where there are capacity or performance needs, PCS frequencies are also used for Cellco's voice transmitting system. These conditions exist in, among other places, Greenwich and Stamford, Litchfield County and at the University of Connecticut.

Question No. 16

Describe PCS functions by today's criteria and the potential future use.

Response

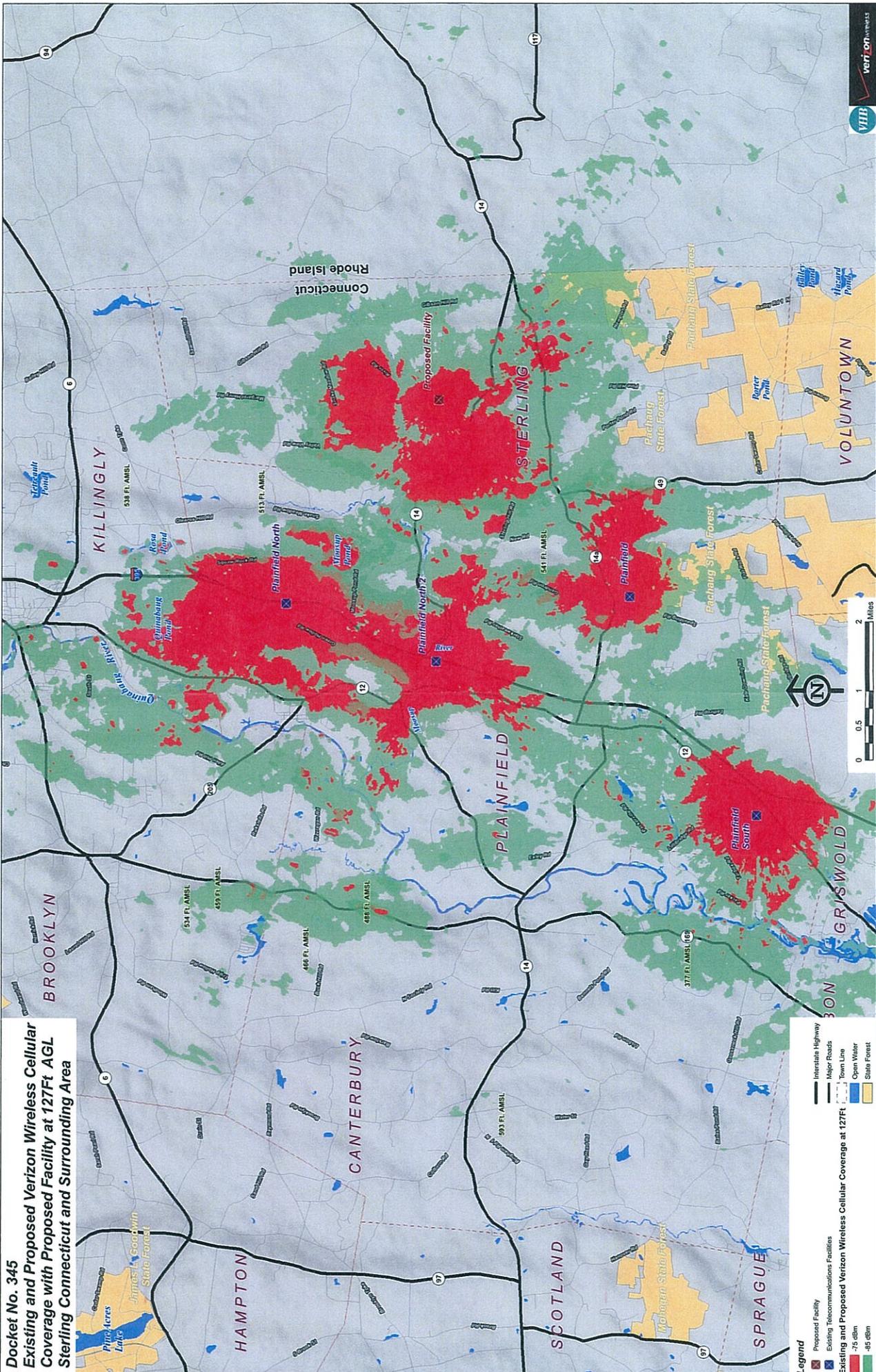
As mentioned in Response No. 15 above, in Connecticut today, PCS frequencies function primarily, but not exclusively, as a data carrier. In Litchfield County, Cellco offers both voice and data services on its PCS frequency bands. In Fairfield County, where Cellco provides both cellular and PCS service, voice traffic may, in some places, exceed the capacity of the cellular system. In these instances, voice traffic will utilize available spectrum at PCS frequencies.

In eastern Connecticut, primarily along the Rhode Island border, Cellco expects to begin using its PCS frequencies for voice transmissions in the very near future (within the next 12-months). In this area Cellco has entered into a spectrum sharing agreement with AT&T of Rhode Island. The agreement allows for the sharing of spectrum to help both carriers avoid cross-border

interference issues. Under the agreement, Cellco is limited to using only 4 of the 9 channels of its cellular license. Due to this limitation, Cellco will use PCS frequencies for additional capacity when these 4 channels of cellular spectrum are exhausted.

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Existing and Proposed Verizon Wireless Cellular Coverage with Proposed Facility at 127Ft AGL Sterling Connecticut and Surrounding Area



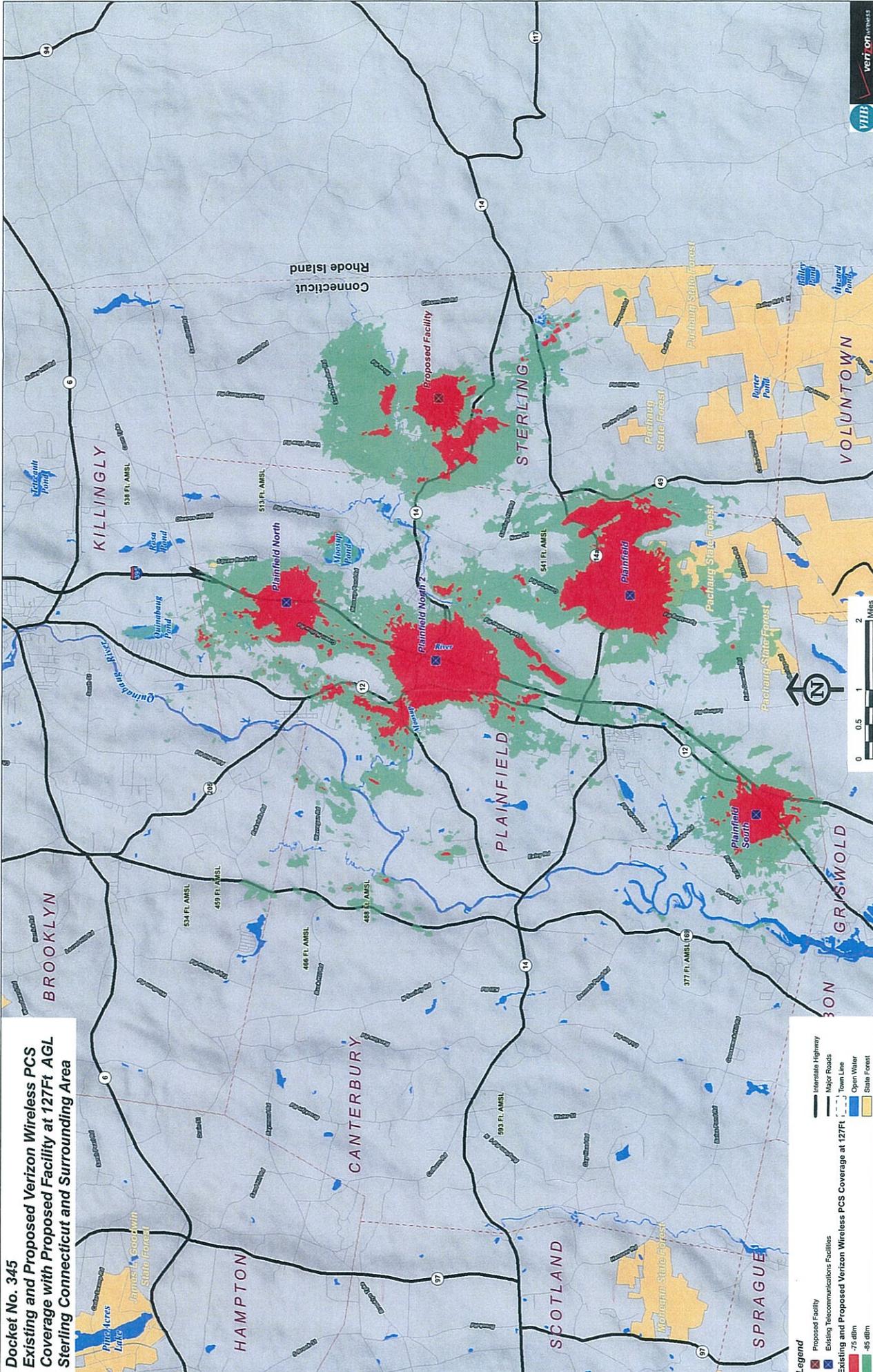
Legend

- Proposed Facility
- Existing Telecommunications Facilities
- Existing and Proposed Verizon Wireless Cellular Coverage at 127Ft AGL
- 75 dBm
- 85 dBm
- Interstate Highway
- Major Roads
- Town Line
- Open Water
- State Forest



Docket No. 345

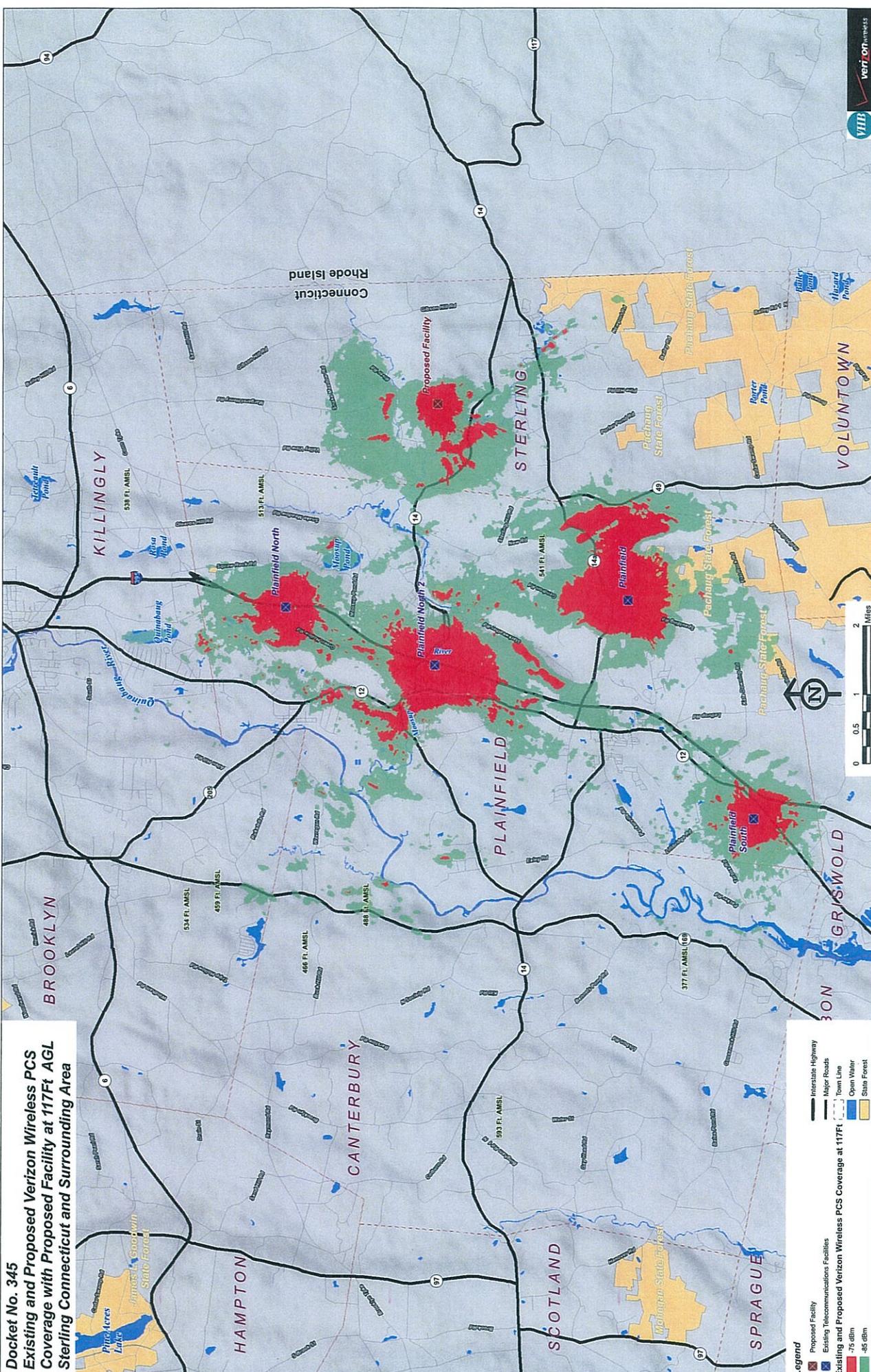
Existing and Proposed Verizon Wireless PCS Coverage with Proposed Facility at 127Ft AGL Sterling Connecticut and Surrounding Area



Legend

- Proposed Facility
- Existing Telecommunications Facilities
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Docket No. 345
 Existing and Proposed Verizon Wireless PCS
 Coverage with Proposed Facility at 117Ft AGL
 Sterling Connecticut and Surrounding Area

Docket No. 345

Existing and Proposed Verizon Wireless Cellular Coverage with Proposed Facility at 117ft AGL Sterling Connecticut and Surrounding Area

