

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE: :
: :
APPLICATION OF CELLCO PARTNERSHIP : DOCKET NO. 414
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 36 :
RITCH AVENUE, GREENWICH, :
CONNECTICUT : FEBRUARY 25, 2011

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

On February 8, 2011, the Connecticut Siting Council (“Council”) issued Pre-Hearing Interrogatories to Cellco Partnership d/b/a Verizon Wireless (“Cellco”), relating to the above-captioned docket. Below are Cellco’s responses.

Question No. 1

Did Cellco receive return receipts for all adjacent landowners listed in Application Attachment 4? If not, list the abutters that did not receive notice and describe any additional effort to serve notice.

Response

Cellco received return receipts from two of the four abutting property owners. Cellco’s notice letters to Dorethea Meilinggard and Albert Primo were returned marked “unclaimed”. Notices to Ms. Meilinggard and Mr. Primo were resent, by regular mail. In addition to the formal notice of intent to file the application required by C.G.S. Section 16-50l(b), the abutting property owners received notice of Cellco’s plans to rebuild the existing AT&T tower at various

times throughout the pre-application process, including notice of the schedule for the Town's public information hearings. Cellco's representatives also had direct conversations, either by phone or in person regarding specific aspects of the project with Mr. Lynn, Mr. Hartwell and Mr. Primo, three of the four abutting landowners.

Question No. 2

Would blasting be required for the construction of the proposed site? If so, would pre-blast surveys of abutting/surrounding properties be conducted?

Response

Cellco does not anticipate the need for blasting to complete the proposed improvements at 36 Ritch Avenue. To address issues raised by the Town of Greenwich and abutting property owners, Cellco decided to complete its geotechnical survey of the subject parcel in October of 2010. This survey was helpful in the development of the project plans and drainage studies. While no blasting is anticipated, given the proximity of the tower site to homes on abutting properties and the need for some rock excavation at the site, Cellco will ask its site contractor to conduct preconstruction surveys of the abutting properties and monitor existing site conditions throughout the construction period.

Question No. 3

Provide estimates of cut and fill. Will site construction have an impact on drainage on and off the parcel?

Response

Current cut and fill estimates are as follows:

Total Estimated Cut: 191 c.y.

Total Estimated Fill: 7 c.y.

The engineering design for the 36 Ritch Avenue will have no adverse impact on drainage

on or off the subject parcel. In fact, the drainage design incorporated into the project design will improve an existing drainage problem and encroachment at the bottom of the access driveway on property of John Hartwell.

Question No. 4

What is Cellco's minimum signal level threshold for in-building and in-vehicle use? Do the cellular, LTE and PCS frequencies have different thresholds?

Response

Cellco's minimum signal level design threshold is -75 dBm for in-building service and -85 dBm for in-vehicle service. These design thresholds are the same for all of Cellco's operating frequencies.

Question No. 5

How do the cellular, LTE and PCS systems interact in Cellco's network?

Response

As its technology evolves over the next several years, Cellco expects that its current cellular and PCS systems together with its new LTE (700 MHz) system will provide customers with advanced wireless services throughout its network in Connecticut and nationwide. Each of these wireless systems will provide customers with advanced voice and data services including but not limited to high speed wireless internet access, streaming videos, video downloads and mobile television in addition to the more traditional voice and data (text and e-mail) services Cellco customers enjoy today. Cellco expects that all three wireless systems will interact as one integrated unit providing a broad range of advanced wireless services.

As has been discussed in prior Council dockets, customers seeking to use the Cellco network will be directed to a particular channel from a particular cell site in the coverage area

where the customer is located. Depending upon the availability of a channel, a wireless call would, in all likelihood, be directed to an available cellular channel first. If no cellular channel is available at a particular cell site the call would search for and initiate on a PCS channel in the same area. If a customer is traveling while making a call, a call in progress would be “handed-off” from one cell to the next. Again, depending upon availability of channels on the adjacent cell site, a call that starts on Cellco’s cellular network would first attempt to hand-off to another cellular channel, if one is available. If a cellular channel is not available, the system is designed to hand-off that call to either a PCS or, in the future, an LTE channel. Provided Cellco maintains reliable signal strength in a particular area and adequate overlap of signal between cell sites, the network will allow for the hand-off of a call between cell sites at all of the available wireless frequencies deployed at those cell sites, without interruption.

Question No. 6

What is the existing signal level in the proposed service area? What is the interruption of service percentage in the proposed service area? What percentage is acceptable to Cellco?

Response

The existing signal level in the target area in southwest Greenwich ranges from -86 dBm to -98 dBm at cellular (850 MHz) and PCS (1900 MHz) frequencies. For those sectors of adjacent cell sites directed toward the 36 Ritch Avenue search area, Cellco currently experiences dropped calls at an average rate of 2.56% and ineffective attempts at an average rate of 1.46 %. Cellco’s standard for dropped calls and ineffective attempts is less than one-percent. Given the high vehicular traffic volumes in southwest Greenwich, these percentages equate to a significant number of actual dropped calls (9,400 during an average “busy hour”) and ineffective attempts (2,100 during an average busy hour).

Question No. 7

The Town's letter of November 22, 2010 states the property owner at 56 Ritch Avenue was offered to Cellco but Cellco could not agree to the offer. Please expand on this statement.

Response

The property at 56 Ritch Avenue is a 0.63 acre residential parcel located to the northeast of the subject site at 36 Ritch Avenue and is owned by John Bowman. (See - aerial photograph attached behind Tab 1). To put this discussion into some context, I think it is important for the Council to know that Mr. Bowman was a vocal opponent of Cellco's tower proposal during the local input hearing before the Greenwich Planning and Zoning Commission ("PZC"). Mr. Bowman's testimony during that hearing is available for review in the November 9, 2010 public information hearing transcript, beginning on page 16. Five (5) copies of the PZC hearing transcripts are attached to these responses and are filed in bulk as a part of this record. At the same time Mr. Bowman opposed the Cellco proposal at 36 Ritch Avenue, he offered his front yard as an alternative location for the tower. Cellco considered Mr. Bowman's property and, for the reasons discussed below, rejected it.

The lot at 56 Ritch Avenue is occupied by a residential dwelling and associated garage in the rear portion of the parcel. An existing access driveway extends from Ritch Avenue along the lot's easterly boundary. This driveway appears to be used for access to the residences at 56 Ritch Avenue, 52 Ritch Avenue and 58 Ritch Avenue. Due to existing site improvements, the only area on this lot available for development of a tower is the open lawn area in front of Mr. Bowman's home. Mr. Bowman's property slopes down from the rear portion of the parcel, adjacent to the I-95 corridor, to Ritch Avenue. The front yard area of the Bowman property is at a ground elevation approximately 15 to 20 feet lower than the ground elevation at the proposed

36 Ritch Avenue tower site (54.4' AMSL). The use of the Bowman parcel would therefore require construction of a taller monopole or tree tower than that proposed in the Docket No. 414 application. During the PZC hearing Mr. Bowman also mentioned the possible use of a flagpole tower on his property. A flagpole tower, capable of accommodating Cellco, AT&T, T-Mobile and the Greenwich Police Department antennas would need to be in excess of 120 feet tall to satisfy the carriers' objectives in the area. A multi-carrier flagpole of this size would also likely maintain a diameter at the top of the pole of approximately 54" in order to accommodate all of the antennas and antenna cables. Under either scenario a structure of this size in Mr. Bowman's front yard would have a more significant impact on surrounding land uses than the proposed Ritch Avenue Facility.

Finally, while not directly related to the issues discussed above, Cellco, as a courtesy to Mr. Bowman, had VHB complete some additional photosimulations of the proposed Ritch Avenue tower from specific locations, selected by Mr. Bowman, on his property. A copy of these additional photosimulations is attached behind Tab 2.

Question No. 8

The Town's letter of November 22, 2010, states that Cellco investigated another parcel that would require a 120-foot tower. Please identify the property investigated and indicate why it was rejected.

Response

With the exception of the Bowman property discussed in response to Question No. 7, all of the sites investigated by Cellco and discussed with the Town are listed in the Site Search Summary behind Tab 8 of the application. The only discussion of a 120-foot structure during the local input hearing before the PZC followed questions about Cellco's ability to build another

flagpole tower at the 36 Ritch Avenue site rather than the proposed tree tower. It was explained during the hearing that the use of a flagpole tower would result in the need for carriers to take multiple antenna locations thereby increasing the height of the tower to perhaps as tall as 120 feet. (See pages 67 and 68 from the Greenwich PZC hearing transcript of October 26, 2010 attached behind Tab 3). Five (5) copies of the transcript from the PZC's October 26, 2010 and November 9, 2010 public information hearing are attached as a bulk file exhibit.

Question No. 9

Are there any DOT parcels within the search area that could meet telecommunications needs? If so, identify the location of the parcel(s) and indicate if Cellco considered it as a viable site.

Response

Cellco is not aware of any DOT parcels in or near the search area that would be available to the siting of a telecommunications facility like the one proposed at 36 Ritch Avenue.

Question No. 10

Is Cellco allowed to transmit coverage from New York State into Fairfield County?

Response


Similar to limitations Cellco experiences along the Connecticut-Rhode Island boarder, Cellco cannot provide wireless service, at cellular frequencies (850 MHz) from a New York base station into Connecticut or from a Connecticut base station into New York. These limitations, however, do not exist at 1900 MHz (PCS) or 700 MHz (LTE) frequencies. In the 1900 MHz and 700 MHz frequency ranges, Cellco's proposed 36 Ritch Avenue Facility would interact with two existing Cellco facilities in Portchester, New York.

CERTIFICATION

I hereby certify that on this 25th 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

John Hartwell
42 Ritch Avenue W.
Greenwich, CT 06830



Kenneth C. Baldwin

TAB 1



Attachment 1
Responses To Interrogatories

- Image Not To Scale
- Source: Bing Birdseye Image

TAB 2

Photographic Documentation and Simulations

Proposed Telecommunications Facility - Ritch Avenue

Neighboring Property
56 Ritch Avenue
Greenwich, CT

SUBMITTED TO:



SUBMITTED BY:



Photolog Map



Photographic Documentation

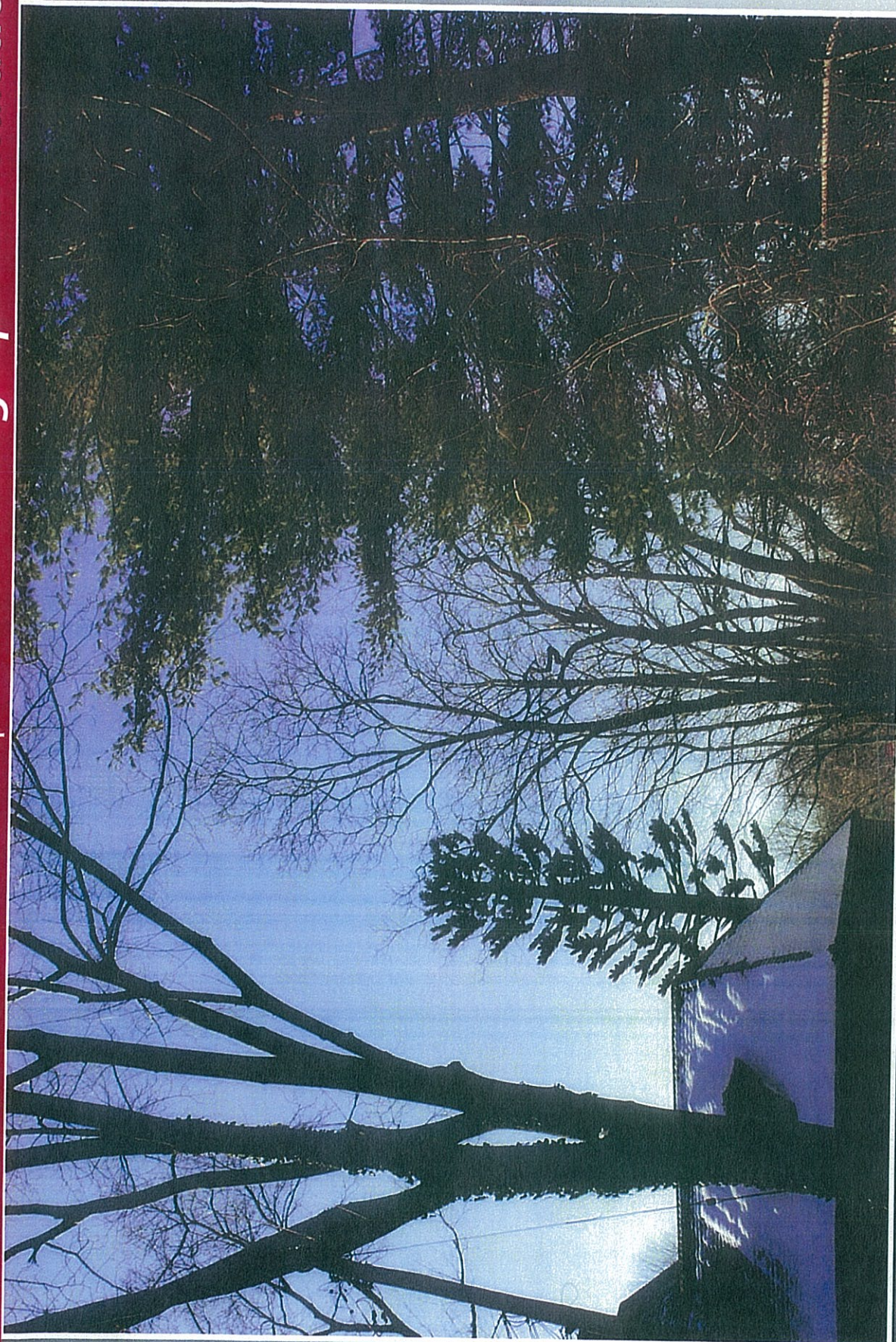


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| VIEW | | LOCATION | | ORIENTATION | DISTANCE TO SITE | VISIBILITY |
|------|--|----------|--|-------------|------------------|------------|
| 1 | REAR PARKING AREA OF ADJACENT PROPERTY (24mm Focal Length) | | | SOUTHWEST | 165 FEET +/- | YEAR-ROUND |



Photographic Simulation



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| VIEW | LOCATION | ORIENTATION | DISTANCE TO SITE | VISIBILITY |
|------|--|-------------|------------------|------------|
| 1 | REAR PARKING AREA OF ADJACENT PROPERTY (24mm Focal Length) | SOUTHWEST | 165 FEET +/- | YEAR-ROUND |

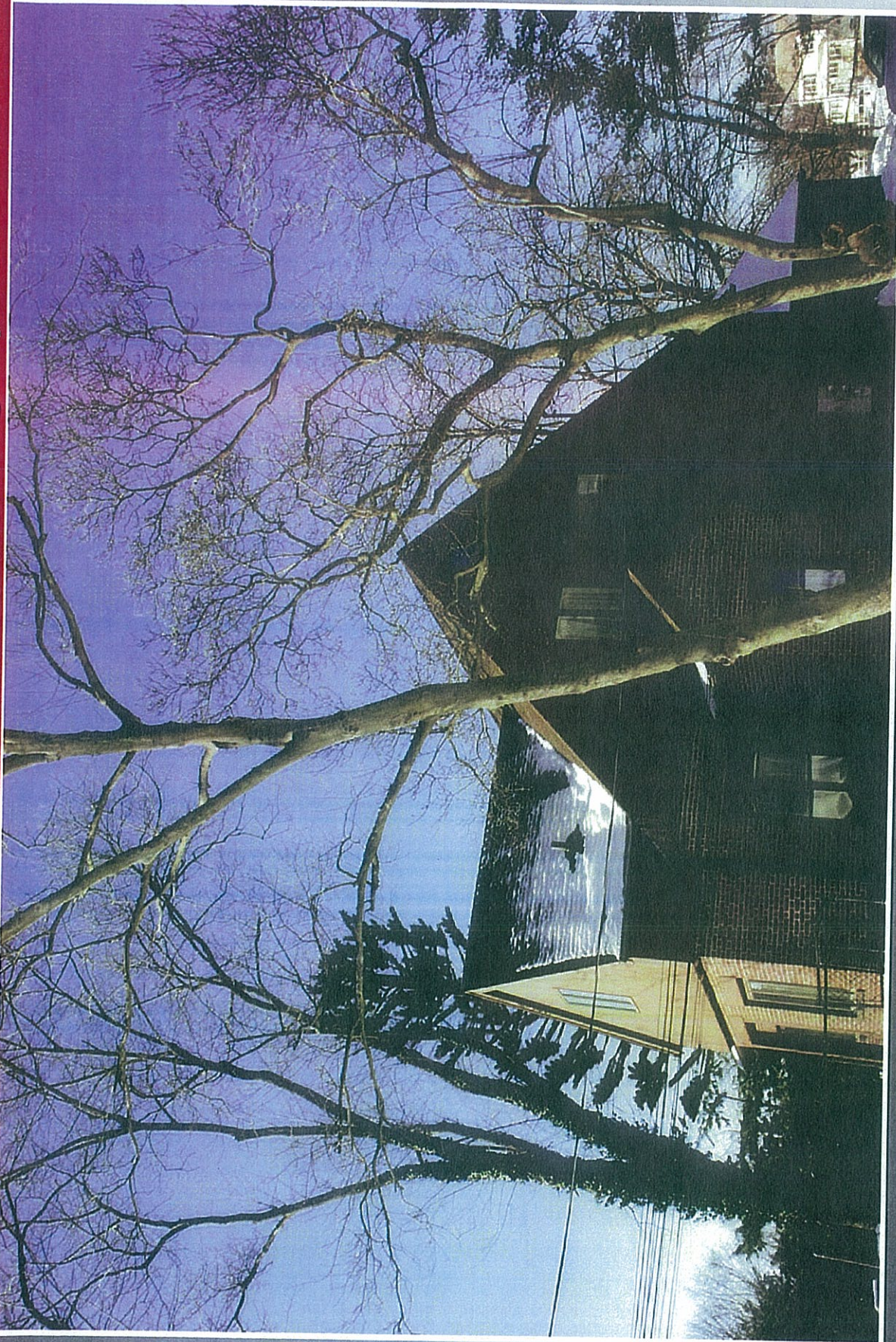
Photographic Documentation



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| VIEW | LOCATION | ORIENTATION | DISTANCE TO SITE | VISIBILITY |
|------|--|-------------|------------------|------------|
| 2 | FRONT YARD AREA OF ADJACENT PROPERTY (24mm Focal Length) | SOUTHWEST | 177 FEET +/- | YEAR-ROUND |

Photographic Simulation



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| VIEW | LOCATION | ORIENTATION | DISTANCE TO SITE | VISIBILITY |
|------|--|-------------|------------------|------------|
| 2 | FRONT YARD AREA OF ADJACENT PROPERTY (24mm Focal Length) | SOUTHWEST | 177 FEET +/- | YEAR-ROUND |

Photographic Documentation



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| VIEW | LOCATION | ORIENTATION | DISTANCE TO SITE | VISIBILITY |
|------|---|-------------|------------------|------------|
| 3 | DRIVEWAY OF ADJACENT PROPERTY (24mm Focal Length) | SOUTHWEST | 244 FEET +/- | SEASONAL |

Photographic Simulation



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| VIEW | | LOCATION | | ORIENTATION | DISTANCE TO SITE | VISIBILITY |
|------|---|----------|--|-------------|------------------|------------|
| 3 | DRIVEWAY OF ADJACENT PROPERTY (24mm Focal Length) | | | SOUTHWEST | 244 FEET +/- | SEASONAL |

Photographic Documentation



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| VIEW | LOCATION | ORIENTATION | DISTANCE TO SITE | VISIBILITY |
|------|--|-------------|------------------|------------|
| 4 | INTERSECTION OF RITCH AVENUE AND OUR DRIVE (24mm Focal Length) | WEST | 275 FEET +/- | SEASONAL |

Photographic Simulation



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| VIEW | LOCATION | ORIENTATION | DISTANCE TO SITE | VISIBILITY |
|------|--|-------------|------------------|------------|
| 4 | INTERSECTION OF RITCH AVENUE AND OUR DRIVE (24mm Focal Length) | WEST | 275 FEET +/- | YEAR-ROUND |



EXISTING TELECOMMUNICATIONS FACILITY

| VIEW | | LOCATION | | ORIENTATION | DISTANCE TO SITE | VISIBILITY |
|------|--|----------|--|-------------|------------------|------------|
| 5 | SECOND STORY WINDOW OF HOST PROPERTY (24mm Focal Length) | | | SOUTHWEST | 185 FEET +/- | YEAR-ROUND |

Photographic Simulation



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| VIEW | | LOCATION | | ORIENTATION | DISTANCE TO SITE | VISIBILITY |
|------|--|----------|--|-------------|------------------|------------|
| 5 | SECOND STORY WINDOW OF HOST PROPERTY (24mm Focal Length) | | | SOUTHWEST | 185 FEET +/- | YEAR-ROUND |



TAB 3

HEARING RE: GREENWICH PLANNING & ZONING COMMISSION
OCTOBER 26, 2010

1 a site in the same area, has actually filed a technical
2 report as I understand it with the town. I'll ask
3 Attorney Kohler to address those issues specifically, but
4 has filed a technical report for another facility on
5 Talbot Avenue, I believe, in town. It has been working
6 with us and speaking with us about our plans to pursue
7 this tower modification at 36 Ritch Avenue and this site
8 would satisfy their needs at the same time.

9 MR. FARRICKER: I think his question --
10 his question is more of a design --

11 CHAIRMAN HELLER: That's not his question.

12 MR. FARRICKER: -- why not a flagpole with
13 a bunch of bumps instead you need a big Christmas tree?

14 MR. BALDWIN: Right. What happens when
15 you start going to a flagpole design is the antennas are
16 now reduced in number at each level to three as opposed
17 to 12 or 15 depending upon which carrier you're talking
18 about on a single platform. AT&T for example has two
19 spots on their existing tower, they have antennas at the
20 top and then 10 feet below that another set of antennas.
21 If you go to a flagpole design each carrier has to do the
22 same thing. Verizon Wireless operates at three different
23 frequencies so we would need three different levels on
24 the tower similar to what we did up in Round Hill. In

HEARING RE: GREENWICH PLANNING & ZONING COMMISSION
OCTOBER 26, 2010

1 that case everyone is internal to the antenna structure
2 itself, but has multiple levels.

3 If then T-Mobile adds their two levels on
4 the tower the problem you have is now this 70 foot
5 flagpole becomes 120 foot flagpole.

6 MR. FARRICKER: Just to shorten it up, you
7 can keep the tower lower but technically you can't have
8 three carriers and utilize that bubble system that he was
9 talking about?

10 MR. BALDWIN: Correct. Correct. The
11 bubbles become the very wide structure at the top also
12 become the antennas.

13 CHAIRMAN HELLER: Do you understand that
14 sir?

15 MR. HARTWELL: The only thing I've gotten
16 is that by adding a third carrier we have to now expand -
17 -

18 COURT REPORTER: I can't hear you.

19 VOICE: Mic. please.

20 MR. FARRICKER: I think --

21 MR. HARTWELL: -- all I've understood out
22 of this is by adding a third carrier we can no longer use
23 a simple bubble each 10 feet, we now have to spread this
24 out, which sounds crazy, but okay.