STATE OF CONNECTICUT
*CONNECTICUT SITING COUNCIL*
Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
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*Daniel F. Caruso*
*Chairman*

December 13, 2007

Julie Kohler, Esq.
Carrie L. Larson, Esq.
Cohen and Wolf, P.C.
1115 Broad Street
Bridgeport, CT 06604

RE: **DOCKET NO. 340** - Optasite Towers LLC and Omnipoint Communications, Inc. application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at 1 Deerfield Lane, Ansonia, Connecticut.

Dear Attorney Kohler and Attorney Larson:

By its Decision and Order dated November 29, 2007, the Connecticut Siting Council (Council) granted a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance and operation of a telecommunications facility located at 1 Deerfield Lane, Ansonia, Connecticut.

Enclosed are the Council's Certificate, Findings of Fact, Opinion, and Decision and Order.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/MP/laf

Enclosures (4)

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*Daniel F. Caruso*
*Chairman*

**CERTIFICATE**

**OF**

**ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED**

**DOCKET NO. 340**

Pursuant to General Statutes § 16-50k, as amended, the Connecticut Siting Council hereby issues a Certificate of Environmental Compatibility and Public Need to Optasite Towers LLC and Omnipoint Communications, Inc. for the construction, maintenance and operation of a telecommunications facility located at 1 Deerfield Lane, Ansonia, Connecticut. This Certificate is issued in accordance with and subject to the terms and conditions set forth in the Decision and Order of the Council on November 29, 2007.

By order of the Council,

Daniel F. Caruso, Chairman

November 29, 2007

STATE OF CONNECTICUT
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*Daniel F. Caruso*
*Chairman*

December 13, 2007

TO: Parties and Intervenors

FROM: S. Derek Phelps, Executive Director

RE: **DOCKET NO. 340** - Optasite Towers LLC and Omnipoint Communications, Inc. application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at 1 Deerfield Lane, Ansonia, Connecticut.

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Enclosed are the Council's Findings of Fact, Opinion, and Decision and Order.

SDP/MP/laf

Enclosures (3)

c: State Documents Librarian

**DOCKET NO. 340** - Optasite Towers LLC and Omnipoint Communications, Inc. application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at 1 Deerfield Lane, Ansonia, Connecticut. } Connecticut Siting Council November 29, 2007

## Findings of Fact
## Introduction

1. Optasite Towers LLC (Optasite) and Ominipoint Communications, Inc. (T-Mobile) (collectively, the Applicant), in accordance with provisions of Connecticut General Statutes (CGS) § 16-50g through 16-50aa, applied to the Connecticut Siting Council (Council) on June 7, 2007 for the construction, operation, and maintenance of a wireless telecommunications facility at 1 Deerfield Lane, Ansonia, Connecticut. (Applicant 1, p. 1)

2. Optasite is a Delaware limited liability company with offices in Westborough, Massachusetts. Optasite would construct and maintain the proposed facility. T-Mobile is a Delaware corporation with an office in Bloomfield, Connecticut. T-Mobile and its affiliated entities are licensed by the Federal Communications Commission to construct and operate a personal wireless services system in Connecticut. (Applicant 1, pp. 3-4)

3. The party in this proceeding is the Applicant. The intervenors in this proceeding are Cellco Partnership d/b/a Verizon Wireless (Verizon Wireless), Osbourne Lane Associates (Osbourne), Gennaro Savino, and Brian Freeman. (Transcript 1- 3:00 p.m. [Tr. 1], pp. 5-7)

4. The purpose of the proposed facility is to provide service to coverage gaps identified by T-Mobile in the City of Ansonia (City) and the Town of Woodbridge (Town) along Route 313, Peck Hill Road, and surrounding areas. (Applicant 1, p. 1)

5. Pursuant to General Statutes § 16-50m, the Council, after giving due notice thereof, held a public hearing on September 18, 2007, beginning at 3:10 p.m. and continuing at 7:00 p.m. at the Ansonia City Hall, 253 Main Street, Ansonia, Connecticut. (Council's Hearing Notice dated August 9, 2007; Tr. 1, pp. 1 and 3; Transcript 2 – 7:00 p.m. [Tr. 2], p. 3)

6. The Council and its staff conducted an inspection of the proposed site on September 18, 2007, beginning at 2:00 p.m. During the field inspection, the Applicant flew a black balloon at the proposed site to simulate the height of the proposed tower. Weather conditions during the field review were generally favorable, with winds calm in the morning but increasing after noon. During the field review, the balloon reached a height of 180 feet above ground level (agl). The balloon had to be offset by about 30 feet from the actual location of the tower due to its location on a horse farm and the presence of horses. The balloon was aloft from 8:00 a.m. to 6:00 p.m. for the convenience of the public. (Council's Hearing Notice dated April 9, 2007; Tr. 1, pp. 33-34)

7. On August 31, 2007, Optasite placed a sign at the beginning of Osbourne Lane which indicated the intended tower proposal, and the date, time, and location of the public hearing. (Applicant 5; Tr. 1, p. 34)

8. Pursuant to CGS § 16-50l (b), public notice of the application was published in The New Haven Register on June 4 and 6, 2007 and in the Amity Observer on June 7, 2007. (Applicant 2)

9. Pursuant to General Statute § 16-50l(b), notice of the application was provided to all abutting property owners by certified mail. (Applicant 1, p. 5)

10. Pursuant to CGS § 16-501 (b), Sprint provided notice to all federal, state and local officials and agencies listed therein. (Applicant 1, Exhibit D)

## State Agency Comment

11. Pursuant to General Statutes § 16-50j (h), on August 9, 2007 and September 19, 2007, the following State agencies were solicited by the Council to submit written comments regarding the proposed facility: Department of Environmental Protection (DEP), Department of Public Health (DPH), Council on Environmental Quality (CEQ), Department of Public Utility Control (DPUC), Office of Policy and Management (OPM), Department of Economic and Community Development (DECD), and the Department of Transportation (DOT). (Record)

12. The Council did not receive any responses from the State agencies. (Record)

## Municipal Consultation

13. Optasite notified the City of Ansonia (City) of the proposal on March 16, 2007 by sending a technical report to Mayor James T. Della Volpe. Optasite also met with Mayor Della Volpe and Corporation Counsel Kevin Blake, Esq. on April 3, 2007 to discuss the proposed facility. By letter dated April 24, 2007, Mayor Della Volpe indicated that the City received its technical report, waived its 60 day review period, and had no comments on the proposal. (Applicant 1, pp. 18-19; Applicant 1, Exhibit O)

14. Optasite also sent a technical report to First Selectman Edward Maum Sheehy of the Town of Woodbridge (Town) because the proposed facility would be located within 2,500 feet of the Woodbridge line. Optasite met with Terry Gilbertson, Building Official, Town of Woodbridge, on April 3, 2007. Mr. Gilbertson had no comments on the proposal for Ansonia. (Applicant 1, pp. 18-19; Applicant 1, Exhibit O)

15. Mayor Della Volpe made a limited appearance statement at the September 18, 2007 proceeding in which he expressed his support for the tower. Mayor Della Volpe believes that the tower would improve public safety because it would enhance communications in an emergency, especially at four nearby schools. Mayor Della Volpe also asked that the Council consider the tower's impact on the Ansonia Nature Center and suggested that a flagpole design might be safer for migratory birds. (Tr. 1, pp. 30-32)

16. Optasite would provide space on the tower for the City of Ansonia's and the Town of Woodbridge's emergency communication services for no compensation. (Tr. 1, pp. 38-39)

17. The City of Ansonia's emergency services has expressed an interest in locating its emergency services equipment at the proposed facility. (Applicant 4; Tr. 1, pp. 27-28; Tr. 2, p. 17)

18. The Town of Woodbridge's Police Department has expressed an interest in locating its emergency services equipment at the proposed facility. (Applicant 4; Tr. 1, pp. 27-28; Tr. 2, p. 17)

## Public Need for Service

19. In 1996, the United States Congress recognized a nationwide need for high quality wireless telecommunications services, including cellular telephone service. Through the Federal Telecommunications Act of 1996, Congress seeks to promote competition, encourage technical innovations, and foster lower prices for telecommunications services. (Council Administrative Notice Item No. 7)

20. In issuing cellular licenses, the Federal government has preempted the determination of public need for cellular service by the states, and has established design standards to ensure technical integrity and nationwide compatibility among all systems. T-Mobile is licensed by the Federal Communications Commission (FCC) to provide personal wireless communication service to New Haven County, Connecticut. (Council Administrative Notice Item No. 7; Applicant 1, p. 4)

21. The Telecommunications Act of 1996 prohibits local and state entities from discriminating among providers of functionally equivalent services. (Council Administrative Notice Item No. 7)

22. The Telecommunications Act of 1996, a Federal law passed by the United States Congress, prohibits any state or local entity from regulating telecommunications towers on the basis of the environmental effects of radio frequency emissions to the extent that such towers and equipment comply with FCC's regulations concerning such emissions. This Act also blocks the Council from prohibiting or acting with the effect of prohibiting the provision of personal wireless service. (Council Administrative Notice Item No. 7)

23. In 1999, Congress passed the Wireless Communications and Public Safety Act (the 911 Act) to facilitate and encourage the prompt deployment of a nationwide, seamless communication infrastructure for emergency services. T-Mobile's facility would be in compliance with the requirements of the 911 Act. (Applicant 1, p. 7)

## Site Selection

24. Optasite has been reviewing the area for a proposed tower since approximately March 2006. T-Mobile had a search ring for this area prior to March 2006. (Tr. 1, pp. 34-35)

25. Optasite established a search ring centered near the intersection of Ford Road and Milan Road in Woodbridge. The search ring consisted of a circle with a radius 1.5 miles. Prior to selecting the proposed site, the Applicant considered 26 existing structures (within a four-mile radius) in the Ansonia, Woodbridge, Seymour, Shelton, Orange, Derby, and New Haven areas. These sites consisted of electric transmission structures, existing monopole and lattice telecommunications towers, and one flagpole telecommunications tower. All of the sites were rejected due to inadequate coverage to the target service area. (Applicant 1, Exhibit H)

26. Five existing towers are located within a two-mile radius. T-Mobile is not located on any of these five existing towers. The locations of the five existing towers are as follows:

| Site | Facility Type | Height |
|---|---|---|
| Coe Road, Ansonia | Monopole | 79 feet |
| Pulaski Highway, Ansonia | Monopole | 79 feet |
| 11 Meetinghouse Lane, Woodbridge | Unknown | 91 feet |
| 4 Meetinghouse Lane, Woodbridge | Unknown | 105 feet |
| 22 West Main Street, Ansonia | Unknown | 45 feet |

T-Mobile could not successfully use these structures to provide coverage to the target area. (Applicant 1, Exhibit H)

27. After determining there were no suitable structures within the search area, Optasite searched for properties suitable for tower development. Optasite investigated 13 parcels/areas. The 12 rejected parcels/areas and reasons for their rejection are as follows:
a) 89 Milan Street – owner was not interested in executing a lease.
b) 100 Milan Street – owner was not interested in executing a lease.
c) 101 Milan Street – owner was not interested in executing a lease.
d) 99 Ford Street – owner rejected all lease proposals.
e) 23 Beaver Street – too far from target area and listed as class I and II lands that drain into the Quillinan Reservoir.
f) 15 Osborne Lane – contains extensive wetlands and little vegetative screening.
g) 154 Ford Street – contains extensive wetlands and little vegetative screening.
h) 140 Ford Road – owner not interested.
i) 128 Ford Road – owner not interested.
j) 14 Deerfield Lane – low ground elevation.
k) 10 Deerfield Lane – low ground elevation.
l) 75 Ford Street – low ground elevation.
(Applicant 1, Exhibit I)

28. Microcells, repeaters, and distributed antenna systems are not viable technological alternatives for providing coverage to the identified coverage gap. Significant terrain variations and tree cover in Ansonia, Woodbridge and the surrounding area, as well as other practical considerations, limit the use of such technologies. (Applicant 1, p. 8)

## Site Description

29. The proposed site is located on an approximately 16-acre parcel at 1 Deerfield Lane in Ansonia. The parcel, owned by Macabee Properties, LLC, contains a horse boarding and riding facility with associated structures, as well as a building with four occupied residential apartments. The parcel is adjacent to the Ansonia / Woodbridge town line. The site location is depicted on Figure 1. (Applicant 1, p. 2; Applicant 1, Exhibit B)

30. The property is zoned residential, AA. The City does not have any zoning regulations applicable to the development of wireless telecommunications facilities. However, public utility installations and substations are a permitted use in the AA zone with a site plan approval. Schedule B of the City Zoning Regulations requires that any installation be properly screened with a masonary wall, fence or landscaping. (Applicant 1, p. 16; Applicant 1b and 1c)

31. The tower would be located approximately 140 feet to the southwest of the horse corral, at an elevation of 480 feet above mean sea level (amsl). (Applicant 1, Exhibit B and K )

32. The proposed facility would consist of a 180-foot monopole within a 45-foot by 75-foot leased area. The tower would be designed to support four levels of antennas with a 10-foot center-to-center vertical separation. (Applicant 1, Exhibit B)

33. A handheld GPS did not provide an accurate ground elevation when T-Mobile used a crane to raise its antennas to perform a test. The actual ground elevation where the crane was located was determined to be higher than originally predicted by the GPS, so the required height of the proposed tower was over-estimated by ten feet. The tower was originally proposed to be 180 feet tall, but could be reduced to 170 feet if the Council decides, because 167 feet agl is the corrected minimum antenna centerline height that T-Mobile needs. The T-Mobile coverage map that indicates an antenna centerline height of 177 feet actually depicts coverage for antennas at 167 feet. See Figure 5. (Applicant 1, Exhibit B; Tr. 1, pp. 20-22, 60, 67-69)

34. T-Mobile would install nine platform-mounted mounted antennas at a centerline height of 167 feet agl. The total height of the facility with antennas would be 170 feet agl. Verizon proposes to install 12 platform-mounted antennas at a centerline height of 157 feet agl. (Tr. 1, pp. 20-23, 77-78)

35. Both T-Mobile and Verizon Wireless could use T-arm mounts if requested by the Council. (Tr. pp. 32 and 77)

36. T-arms do require a crane to install the antennas, as opposed to a platform mount. With a platform, workers can install antennas and perform maintenance without a crane, which improves safety for the workers. (Tr. 1, pp. 60-62 and 66)

37. Flush-mounting T-Mobile's antennas would still provide the desired coverage footprint, but capacity would be reduced. T-Mobile would only have adequate capacity for approximately two to three years with the flush-mounted configuration. (Tr. 1, pp. 37, 50)

38. Flush-mounting Verizon Wireless' antennas would have an effect similar to lowering their antennas by ten feet. Thus, flush-mounting Verizon Wireless' antennas at 157 feet would be equivalent to locating at 147 feet, which would not provide adequate coverage. (Tr. 1, pp. 77-78 and 83-84)

39. Optasite is aware of instances of flagpole towers having their flags wrap around the tower and damage the antennas. Optasite is also concerned that it may not be feasible to disguise the municipal antennas on a flagpole tower since they likely cannot be internally mounted. (Tr. 1, pp. 41-42)

40. A 43-foot by 73-foot equipment compound enclosed by an eight-foot high chain link fence (without barbed wire) that would be established at the base of the tower. The size of the lease area would be able to accommodate the equipment of four wireless carriers. T-Mobile would install equipment cabinets, including an emergency battery backup system, on a concrete pad within the compound. Verizon Wireless would install a 12-foot by 30-foot equipment shelter within the compound. An emergency backup diesel generator would be located inside Verizon Wireless' shelter. (Applicant 1, p. 36; Applicant 1, Exhibit B; Tr. 1, pp. 37 and 78)

41. Brian Freeman is interested in installing an amateur radio repeater on the proposed facility in order to provide amateur radio communications during emergencies. Optasite would be willing to provide space on the tower for a fee. (Brian Freeman, Request to Intervene; Tr. 1, pp. 38-39)

42. Development of the site would require minimal grading and 220 cubic yards of topsoil to be cut to develop the compound and the access. No fill is required. (Applicant 3, response 9)

43. Access to the site would extend from Osbourne Lane over an existing 700-foot long paved driveway and would continue over an existing 370-foot long dirt driveway to be improved with gravel to a width of 20 feet. (Applicant 1, Exhibit B; Applicant 1, p. 10)

44. Utilities would be installed overhead from existing service on Osbourne Lane to the compound. Approximately ten, 30-foot utility poles would be installed along the proposed access roadway with approximately 100-foot spacing. However, the Applicant is amenable to installing its utilities underground in the direction of the access drive if requested by the Council. (Tr. 1, pp. 35-36 and 57)

45. A geotechnical report has not been completed, so it is not known if ledge would be encountered during excavation. However, mechanical chipping is preferred to blasting should ledge be encountered. (Applicant 3, response 11)

46. The tower setback radius (assuming the proposed 180-foot tower) would extend approximately 31 feet onto the adjacent City of Ansonia property, located to the northwest of subject property. (Applicant 1, Exhibit B)

47. If requested by the Council, Optasite could have the tower designed with a yield point to prevent the tower from encroaching upon the City property in the unlikely event of a tower failure. (Applicant 3, response 10)

48. The nearest property boundary from the proposed tower is approximately 150 feet to the northwest. This property is owned by the City of Ansonia. (Applicant 1, Exhibit B)

49. There are 0 residences within 1,000 feet of the tower site, excluding the apartment building on the subject property. This building has four residential apartments and is located approximately 710 feet northeast of the tower site. (Applicant 1, p. 11, Applicant 1, Exhibit L; Tr. 1, p. 35)

50. The compound site is approximately 1,270 feet to the property of Gennaro Savino, an intervenor in this proceeding. Osborne Lane Associates, an intervenor, has its nearest property boundary located approximately 850 feet to the east of the proposed facility. (Applicant 1, Exhibit B; Tr. 1, p. 27; Brian Freeman, Request to Intervene)

51. The estimated construction cost of the proposed facility is:

| | |
|---|---|
| Site Work | $ 86,000 |
| Monopole & Foundation | $ 69,000 |
| Electrical & Telephone | $ 31,000 |
| Total | $ 186,000 |

(Applicant 1, p. 20)

## Environmental Considerations

52. The proposed facility would have no effect upon historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places or upon properties of traditional cultural importance to Connecticut's Native American community. (Applicant 1, Exhibit M)

53. There are no known existing populations of federal or state endangered or threatened species, or any state special concern species at the proposed site, based on a review of the Connecticut Department of Environmental Protection Natural Diversity Database. (Applicant 1, Exhibit M)

54. Trees surrounding the site consist of a mix of deciduous hardwoods with an average height of 65 feet. There are no trees with a diameter of six inches or greater diameter at breast height (dbh) within the area of the proposed access road and compound. (Applicant 1, Exhibit B)

55. The proposed access road would be located approximately 200 feet north of the forested wetland area, while the actual facility would be located more than 400 feet away. (Applicant 1, Exhibit J)

56. The proposed facility would not be located within a flood zone. (Applicant 3, response 12)

57. Obstruction marking and lighting of the tower would not be required, per a Federal Aviation Administration Letter. (Applicant 1, Exhibit P).

58. The type of towers that result in the most bird fatalities are usually very tall towers approximately 300 feet and up, guyed towers, and towers that are lit. Neither the proposed monopole nor a flagpole design are the types of towers that are associated with bird fatalities. The flagpole design would not materially change the safety of the birds versus the monopole. (Tr. 1, pp. 42-45)

59. The maximum power density from the radio frequency emissions of T-Mobile's proposed antennas (at 167 feet) would be 0.0146 $mW/cm^2$ or 1.46% of the standard for Maximum Permissible Exposure, as adopted by the FCC, at the base of the proposed tower. Verizon Wireless' power density with its proposed antennas at 157 feet would be 0.0263 $mW/cm^2$ or 4.54% of the standard for cellular and 0.0175 $mW/cm^2$ or 1.75% for PCS. The total for the site is 7.75% of the standard. These calculations was based on methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997) that assumes all antennas would be pointed at the base of the tower and all channels would be operating simultaneously. (Applicant 1, Exhibit N)

60. The site was formerly utilized as a Nike missile site from the late 1950s to 1971. Therefore, there is potential that hazardous materials may have been utilized at the site and potentially released into the environment. VHB, Inc. recommends that during re-development activities, no soils should be removed from the site without proper waste characterization to determine disposal requirements. (Applicant 1, Exhibit L)

## Visibility

61. The proposed tower would be visible year-round from approximately 14 acres within a two-mile radius of the site (refer to Figure 14). The tower would be seasonally visible from approximately 54 acres within a two-mile radius of the site. (Applicant 1, Exhibit K)

62. Visibility of the proposed tower from roads within a two-mile radius of the site is presented in the table below:

| Road | Length of Road Visibility (Seasonal) | Length of Road Visibility (Year-round) | Nearest Distance with Visibility to Tower |
|---|---|---|---|
| Osborne Lane | 0.2 miles | 0.03 miles | 0.2 miles northeast |
| Ford Road | 0.25 miles | 0.01 miles | 0.38 miles east |
| Debby Lane | 0.08 miles | - | 0.25 miles southeast |

(Applicant 1, Exhibit K)

63. There are no state or locally-designated scenic roadways within a two-mile radius of the proposed site. (Applicant 1, Exhibit K, p. 3)

64. Visibility of the proposed tower from specific locations within a two-mile radius of the site is presented in the table below:

| Location | Visible | Approx. Portion of Tower Visible | Approx. Distance to Tower |
|---|---|---|---|
| Osborne Lane, adjacent to house #3 | Yes | 30 feet – unobstructed | 0.18 miles southwest |
| Northern boundary of Ansonia Nature and Recreation Center | Yes | 80 feet - unobstructed | 0.11 miles northeast |
| Ford Road – adjacent to house #121 | Yes | 15 feet - unobstructed | 0.36 miles northwest |
| Milan Street – looking northeast | Yes | 25 feet - unobstructed | 0.52 miles northeast |
| Kimberly Lane – adjacent to house #12 | Yes | 20 feet - unobstructed | 0.51 miles northeast |

(Applicant 1, Exhibit K)

65. Approximately half of the total visibility of the proposed facility is located on the host property. (Applicant 1, Exhibit K, p. 4)

66. Seven residences would have partial year-round views of the facility and eight additional residences would have partial, seasonal views of the facility. (Applicant 1, p. 13)

67. The proposed tower would be visible from select portions of Ansonia Nature Center. Approximately one acre or less of visibility is expected from the Ansonia Nature Center. (Applicant 1, Exhibit K; Tr. 1, p. 48)

68. There are no bicycle trails within a two-mile radius of the proposed site. (Applicant 1, Exhibit K)

69. The nearest public hiking trails are located at the Ansonia Nature Center. The tower is expected to be visible from the trails up to a few hundred feet from the property line. (Applicant 1, Exhibit K)

70. No landscaping is proposed for this facility. (Applicant 1, Exhibit B)

71. Relocating the facility to the southtwest corner of the subject property would not significantly reduce visibility from properties to the east and could increase visibility from the Ansonia Nature Center. (Tr. 1, pp. 25-27)

72. While a ten-foot reduction in the height of the tower (from 180 feet to 170 feet) would not significantly reduce visibility, some of the nearer views of the tower would be minimized by this reduction. (Tr. 1, p. 27)

73. The proposed tower is not expected to be visible from 128 Ford Road, the residence of intervenor Gennaro Savino. (Tr. 1, pp. 27-28, 70)

74. Optasite is willing to paint the tower if requested by the Council. (Tr. 1, p. 33)

## Existing and Proposed Wireless Coverage – T-Mobile

75. T-Mobile operates in the 1935 - 1945 MHz frequency band and at a signal level service design of -84 dBm for this area, sufficient for in-vehicle coverage. (Applicant 3, responses 3 and 4; Applicant 1, Exhibit N)

76. T-Mobile has an existing coverage gap of 4.53 miles along Route 313, 2.1 miles along Peck Hill Road, and 1.58 miles along Northrop Road. T-Mobile's existing signal level in the area of the proposed facility varies from -85 dBm to -100 dBm. Coverage from surrounding sites is depicted on Figure 4. (Applicant 3, responses 2 and 8)

77. T-Mobile's antennas (at a centerline height of 167-feet agl) would cover approximately 3.11 miles of the gap on Route 313, 1.3 miles on Peck Hill Road, and 1.2 miles on Northrop Road. (Applicant 3, responses 7 and 8)

78. Adjacent T-Mobile facilities that could interact with the proposed facility are as follows:

| **Location** | **Antenna Height agl**<br>**Structure Height agl**<br>**Structure Type** | **Approximate Distance from Sites** |
|---|---|---|
| 56 South Cliff Street, Ansonia | 68 feet – 75-foot building | 1.51 miles southwest |
| 2 Progress Avenue, Seymour | 250 feet – 280-foot self-supporting lattice | 2.69 miles north |
| 401 Wakelee Avenue, Ansonia | 148 feet – 196-foot self-supporting lattice tower | 2.22 miles west |
| 71 Pleasant View Drive, Derby | 117 feet – 120-foot monopole | 2.72 miles southwest |
| 1114 Johnson Road, Woodbridge | 95 feet – 81-foot power mount | 3.18 miles southeast |
| 800 Ogg Meadow Road, Orange | 125 feet – 160-foot monopole | 3.27 miles southeast |
| 86 Amity Road, New Haven | 52 feet – 57-foot billboard | 3.81 miles east |

(Applicant 3, response 5)

## Existing and Proposed Wireless Coverage – Verizon

79. Verizon Wireless operates in the 1970-1975 MHz cellular frequency bands and the 869-880 MHz PCS bands and at a signal level service design of -85 dBm. (Verizon Wireless 1, responses 1 and 2)

80. Verizon Wireless has an existing cellular coverage gap of 2.3 miles and a 5.2 mile gap in PCS coverage along Route 313. Verizon Wireless has an existing cellular coverage gap of 2.1 miles and a 3.2 mile gap in PCS coverage along Peck Hill Road. Verizon Wireless' existing signal level in the area of the proposed facility varies from -86 dBm to below -110 dBm. Coverage from surrounding sites is depicted on Figure 6. (Verizon Wireless 1, responses 4 and 11)

81. A full array of 12 Verizon Wireless antennas (at a centerline height of 157 feet agl) would cover approximately 3.5 miles of Route 313 at cellular frequencies and approximately 3.3 miles on Route 313 at PCS frequencies. A full array of 12 Verizon Wireless antennas (at a centerline height of 157 feet agl) would cover an approximately 2.3 mile portion of Peck Hill Road at cellular frequencies and an approximately 2.0 mile portion of Peck Hill Road at PCS frequencies. (Verizon Wireless 1, response 6 and 11; Tr. 1, p. 78)

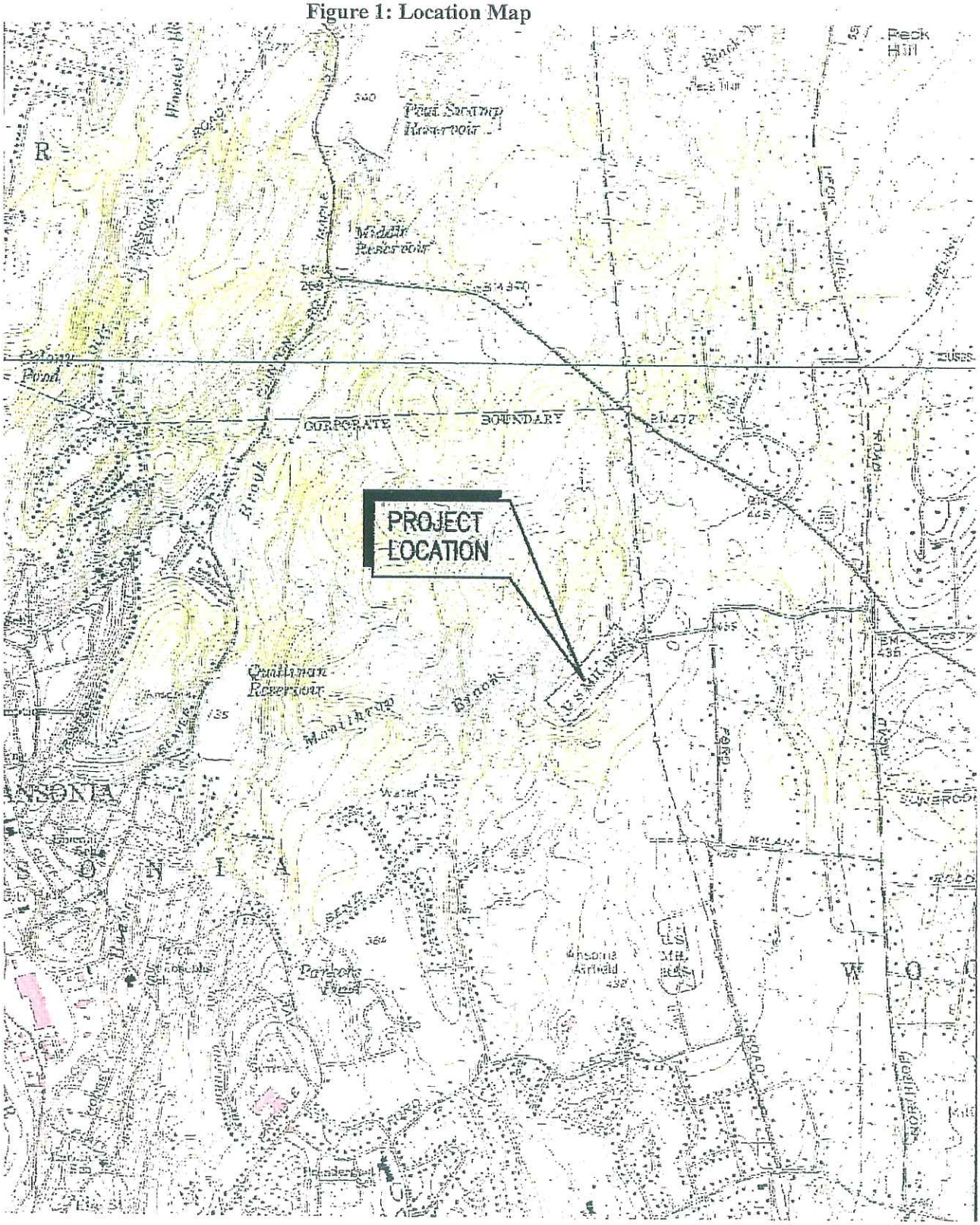
82. If Verizon Wireless were to use flush-mounted antennas, it would need a minimum antenna height of 167 feet agl. With T-Mobile's antennas at the 167-foot level, Verizon Wireless would need to mount flush-mounted antennas at the 177-foot level on the proposed tower to satisfy its coverage objectives. (Tr. 1, pp. 82-83)

83. Adjacent Verizon Wireless facilities that could interact with the proposed facility are as follows:

| **Location** | **Antenna Height agl**<br>**Structure Height agl**<br>**Structure Type** | **Approximate Distance from Sites** |
|---|---|---|
| 401 Wakelee Avenue | 178 feet – 196-foot self-supporting lattice tower | 2.4 miles west |
| 123 Mineva Street, Derby | 50 feet – church bell tower | 2.9 miles southwest |
| 664 Rimmon Hill Road, Beacon Falls | 150 feet – 160-foot monopole | 4.2 miles northwest |
| 1027 Race Brook Road, Woodbridge | 127 feet – 150-foot monopole | 2.7 miles southeast |
| 1055 Wintergreen Avenue, Hamden | 170 feet – 180-foot lattice tower | 3.7 miles east |
| 100 Pond Lily Avenue, Hamden | 67 feet and 77 feet – 80-foot flagpole | 4.2 miles east |
| 93 Old Amity Road, Bethany | 180 feet – 250-foot self-supporting lattice tower | 4.5 miles northeast |

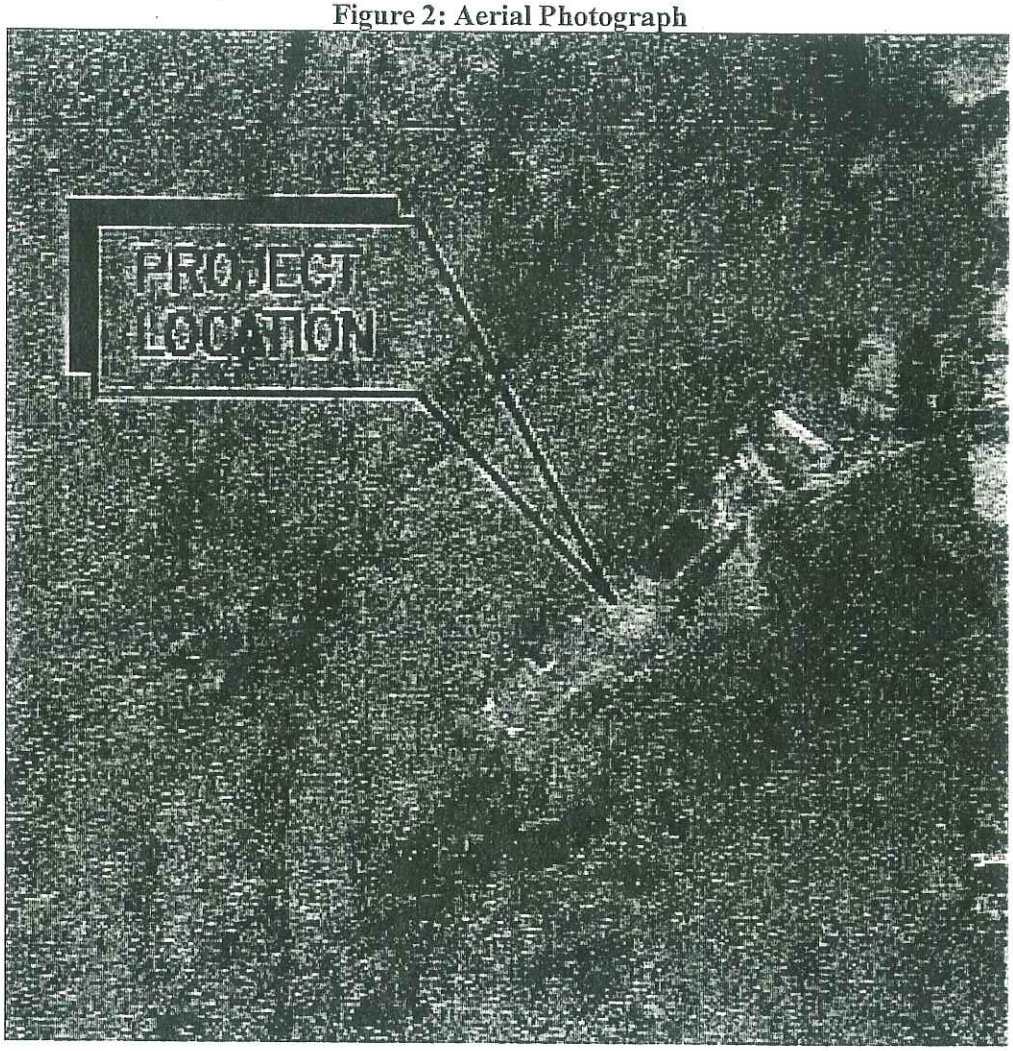
(Verizon Wireless 1, response 8)

**Figure 1: Location Map**



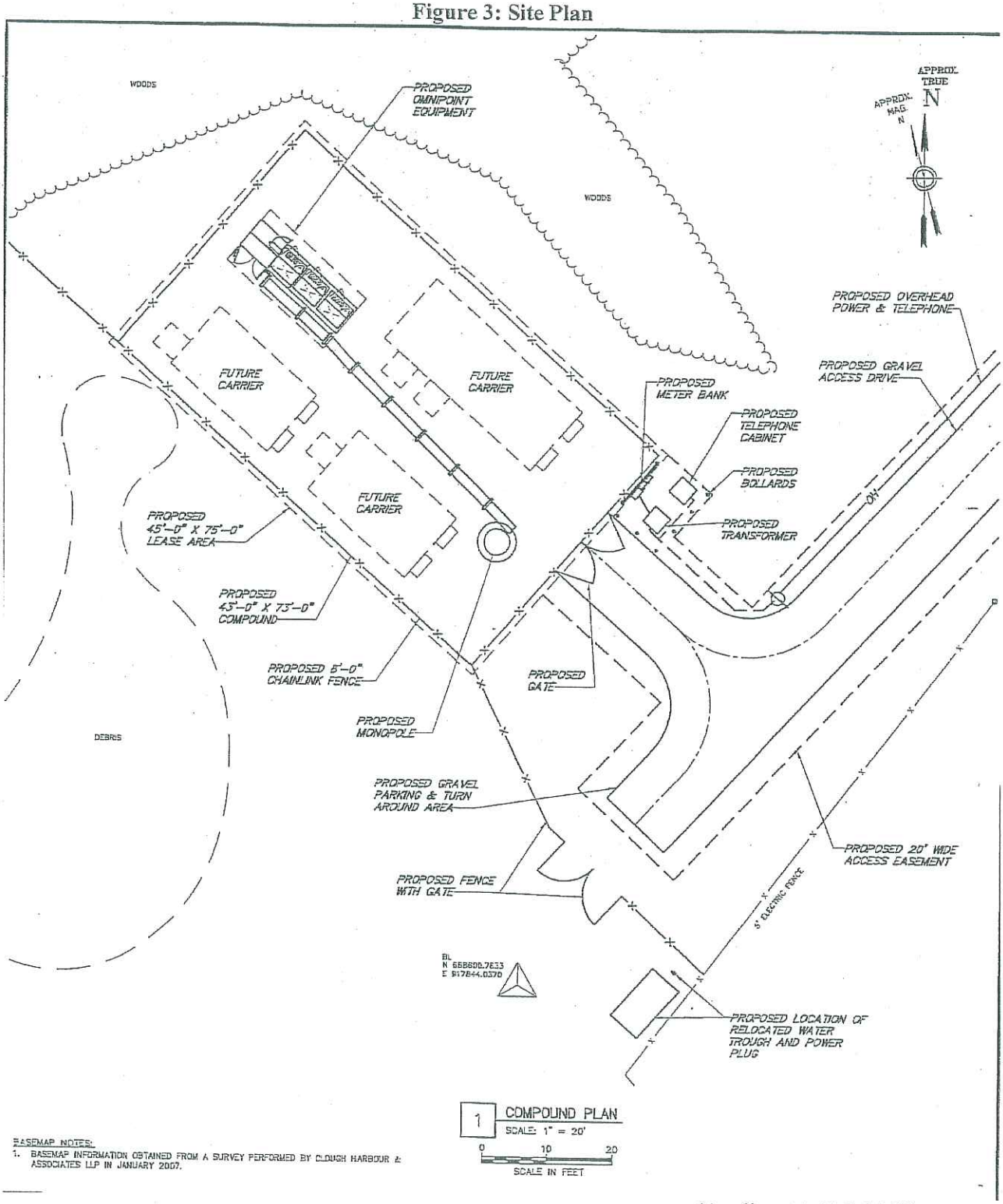

(Applicant 1, Exhibit B)

**Figure 2: Aerial Photograph**



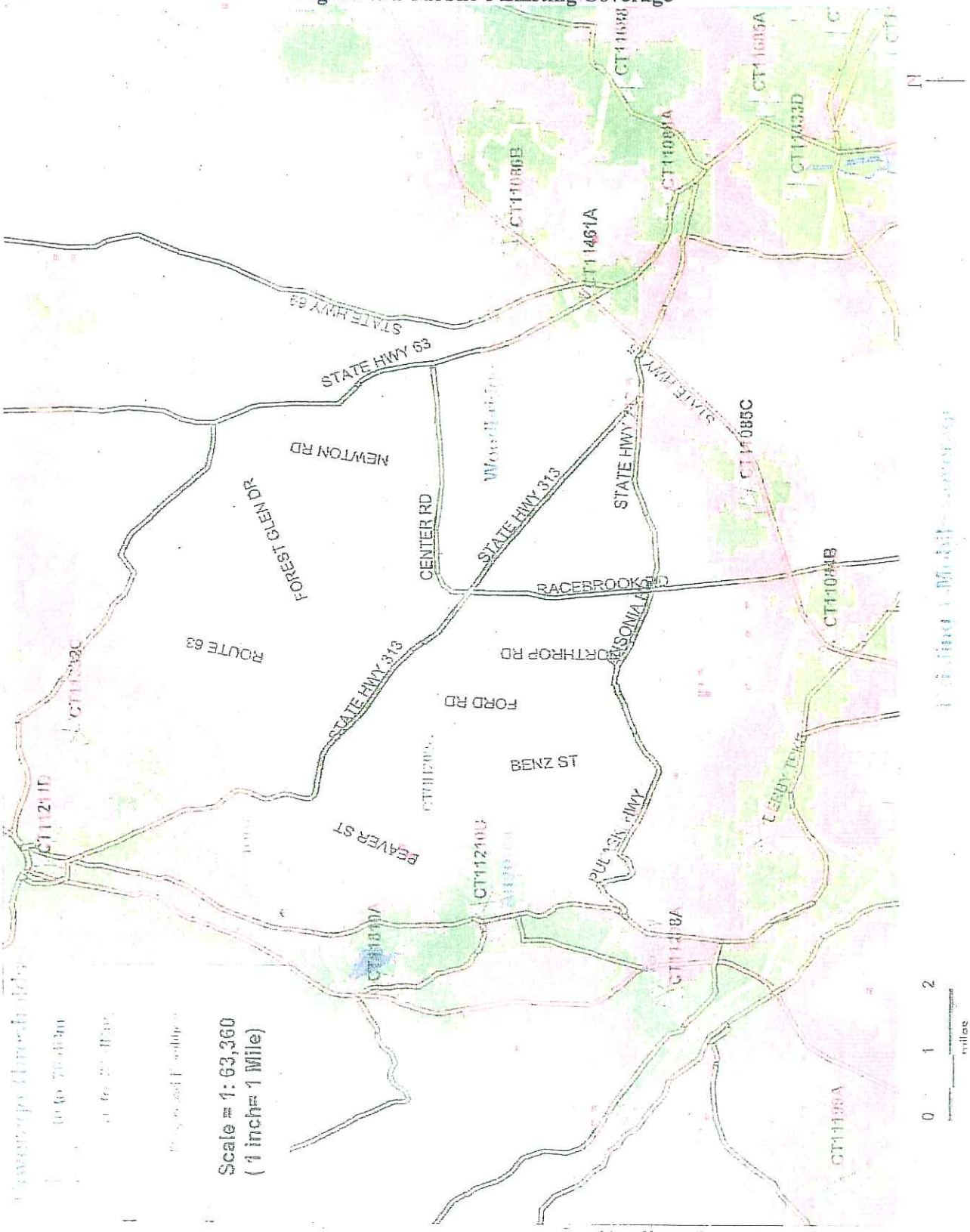

(Applicant 1, Exhibit B)

## Figure 3: Site Plan



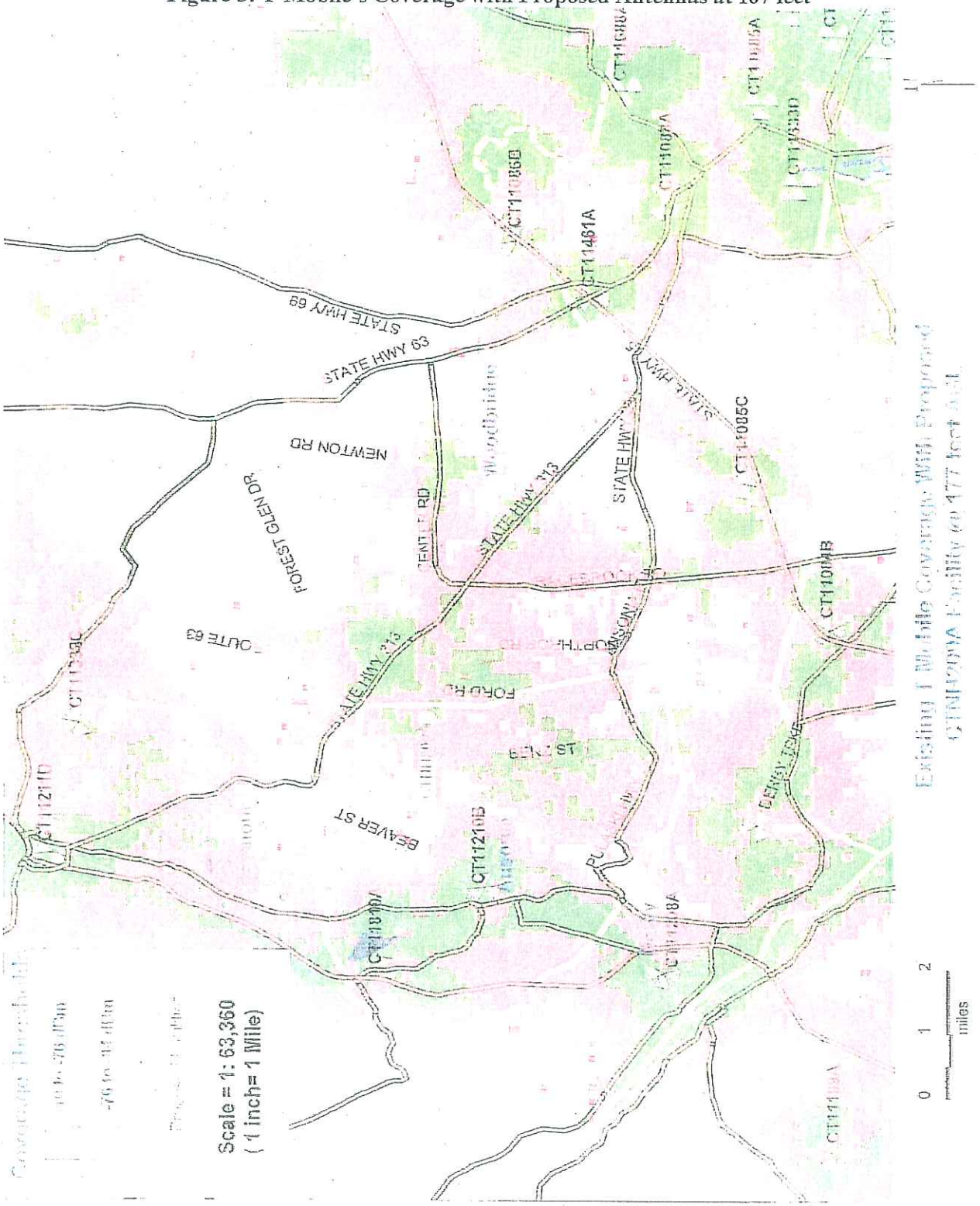

(Applicant 1, Exhibit B)

**Figure 4: T-Mobile's Existing Coverage**



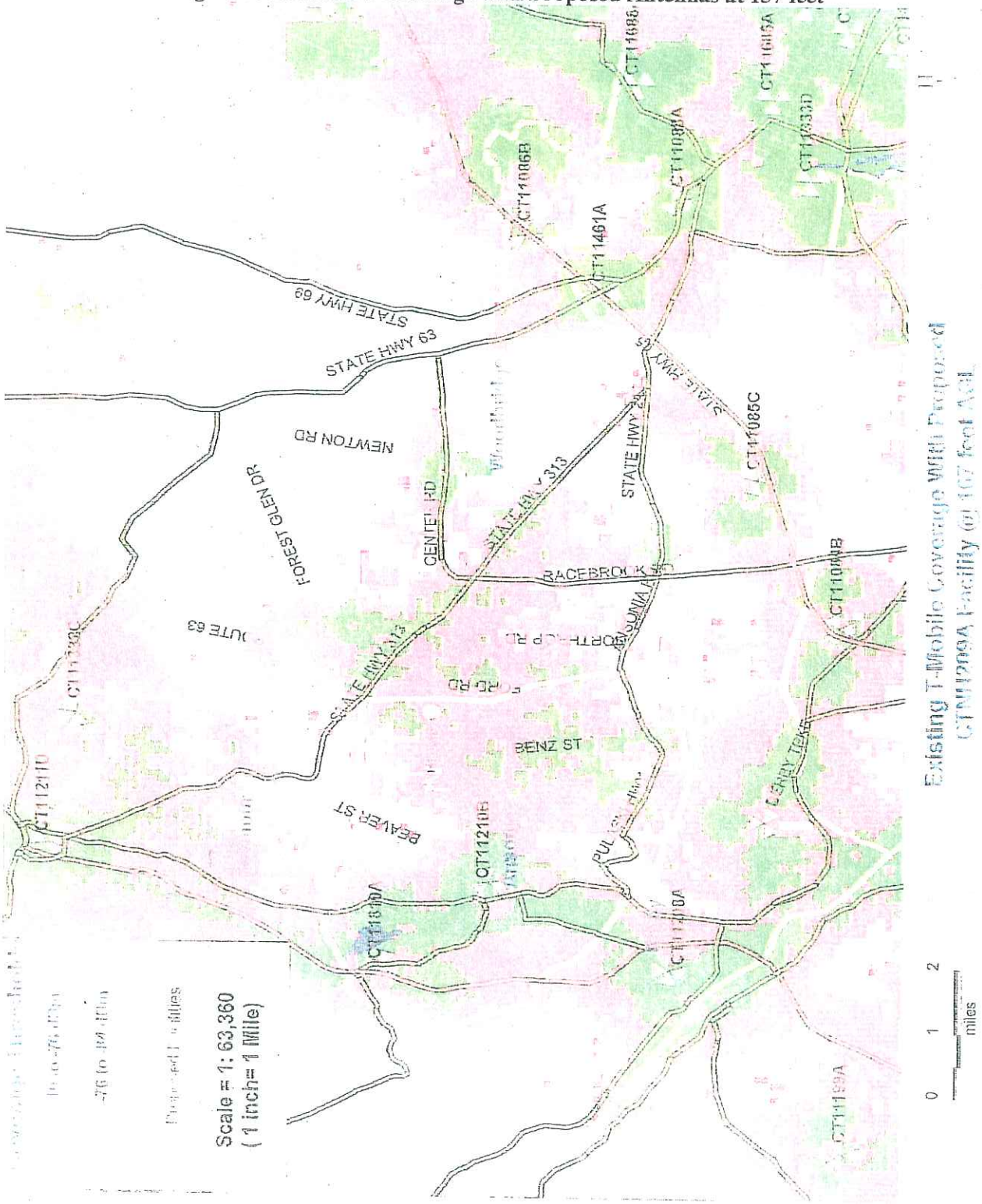

(Applicant 3, response 1)

**Figure 5: T-Mobile's Coverage with Proposed Antennas at 167 feet**



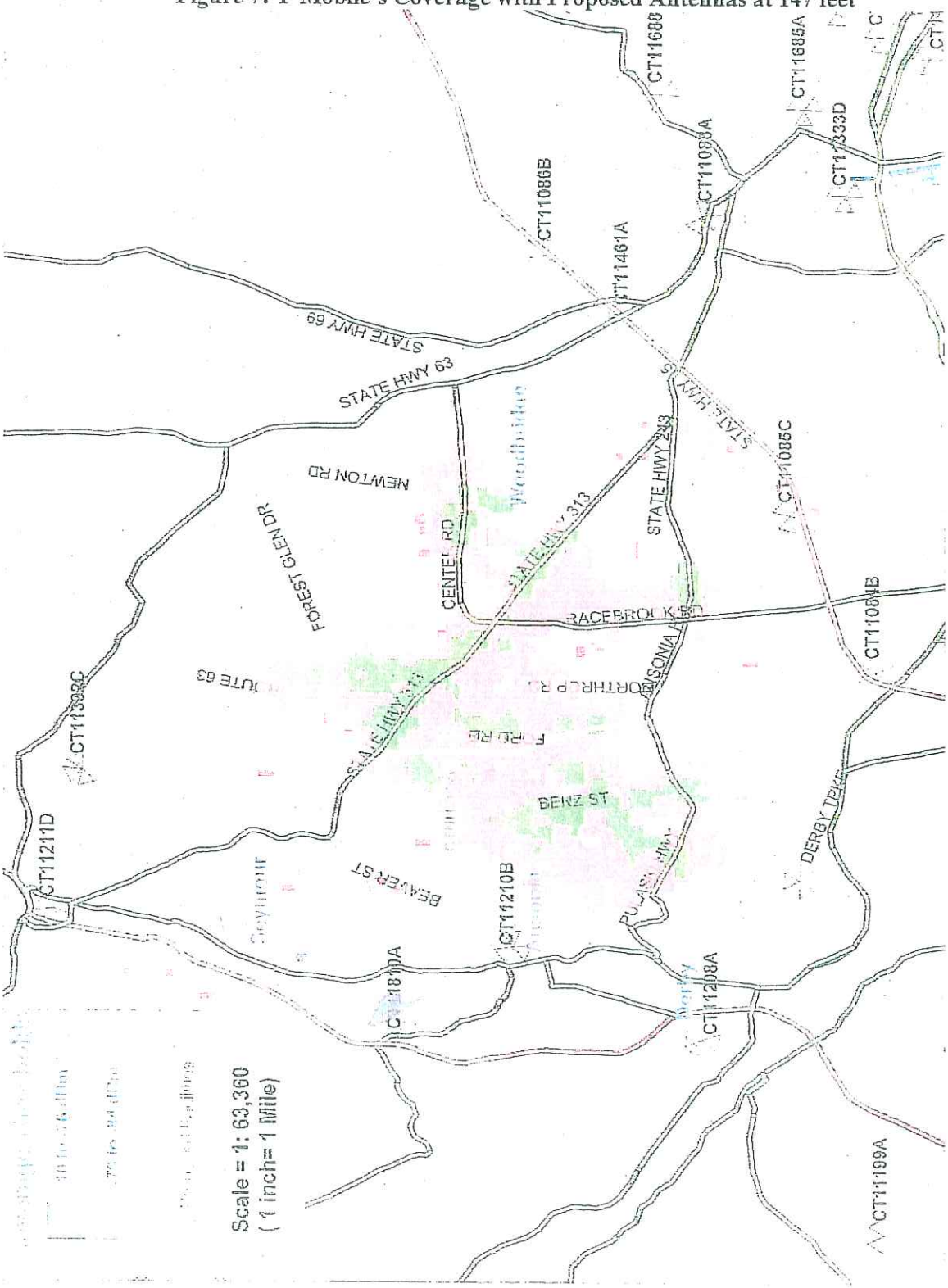

(Applicant 3, response 1; Tr. 1, p. 22)

**Figure 6: T-Mobile's Coverage with Proposed Antennas at 157 feet**



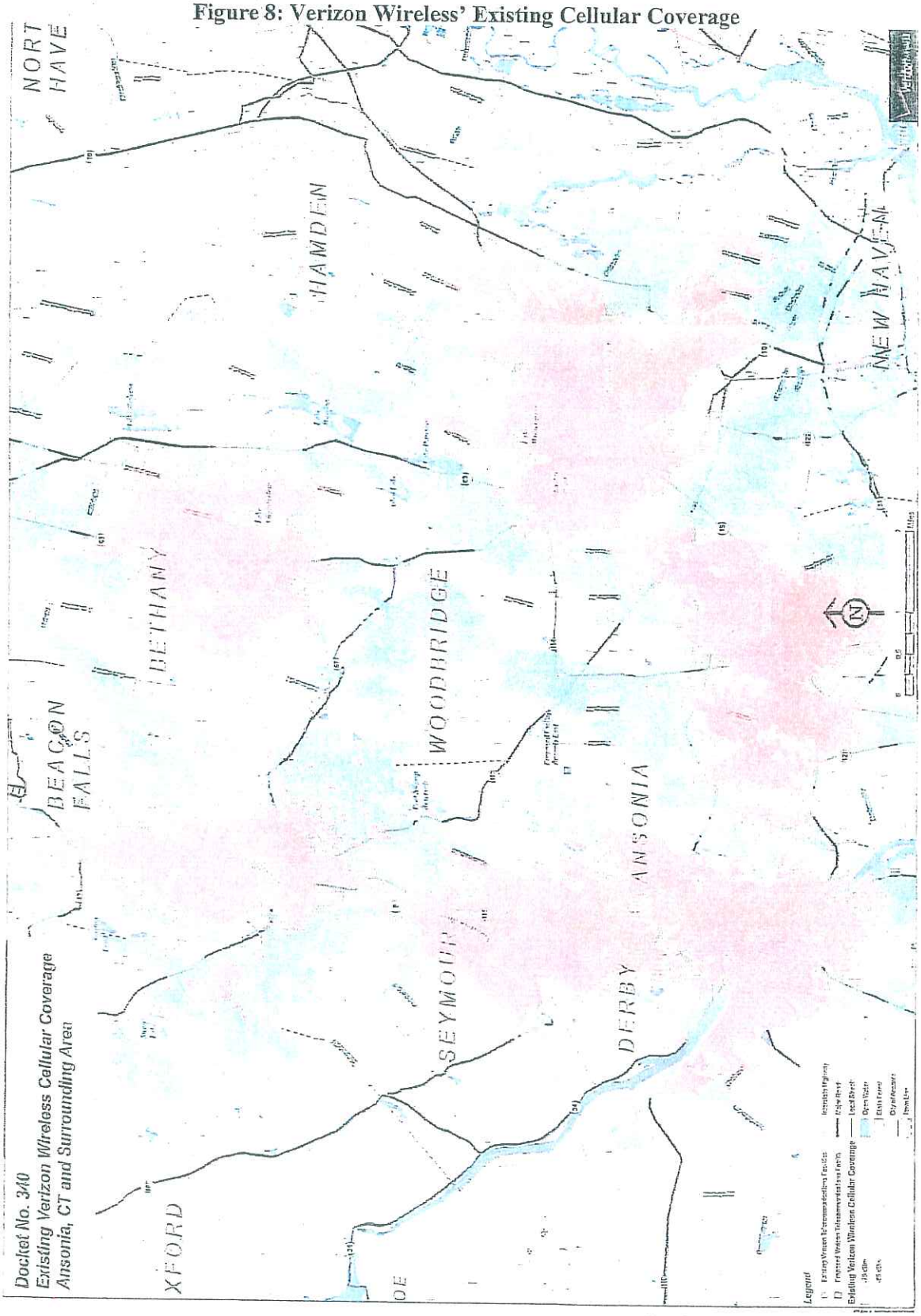

(Applicant 3, response 1; Tr. 1, p. 22)

**Figure 7: T-Mobile's Coverage with Proposed Antennas at 147 feet**



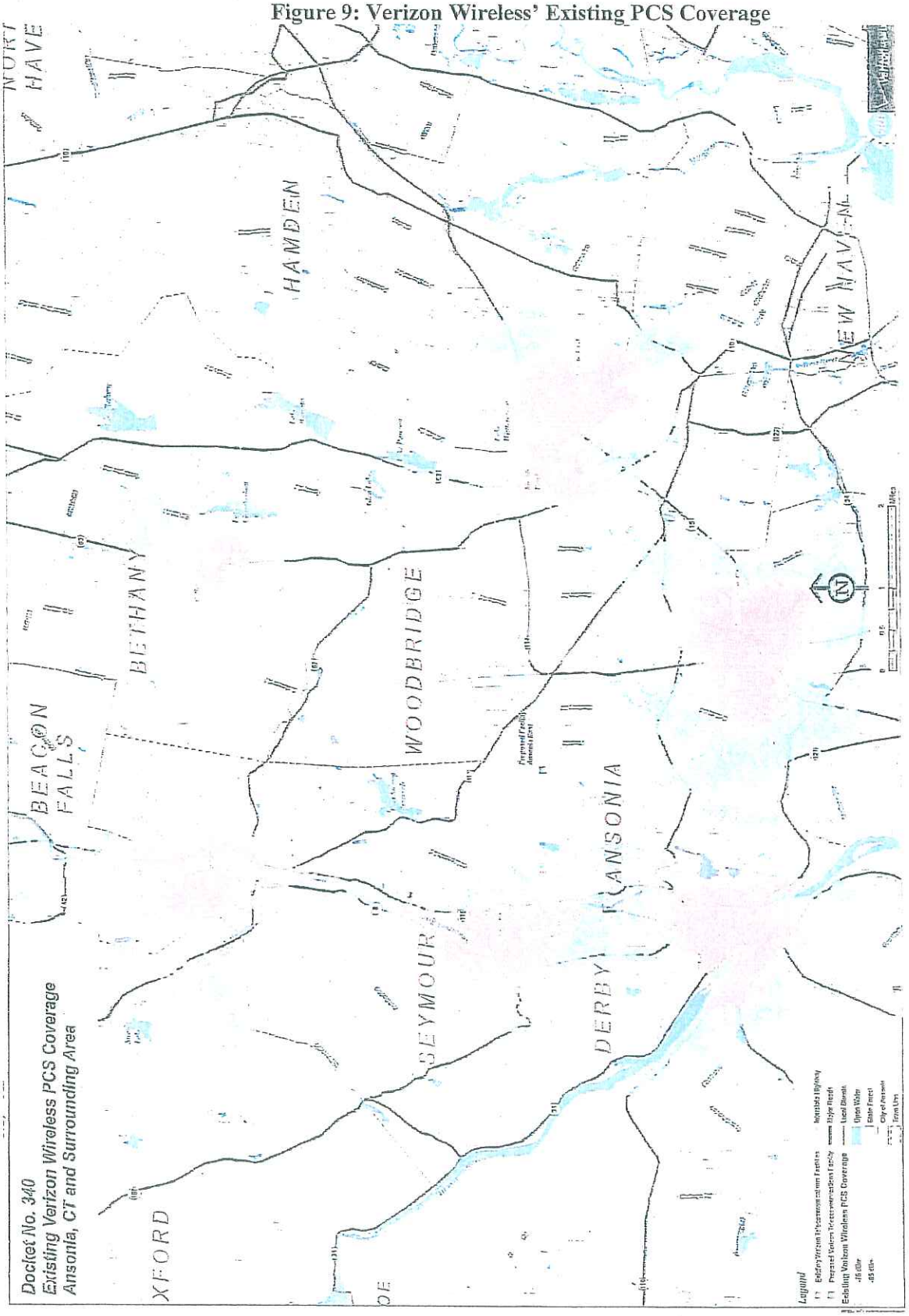

(Applicant 3, response 1; Tr. 1, p. 22)

**Figure 8: Verizon Wireless' Existing Cellular Coverage**



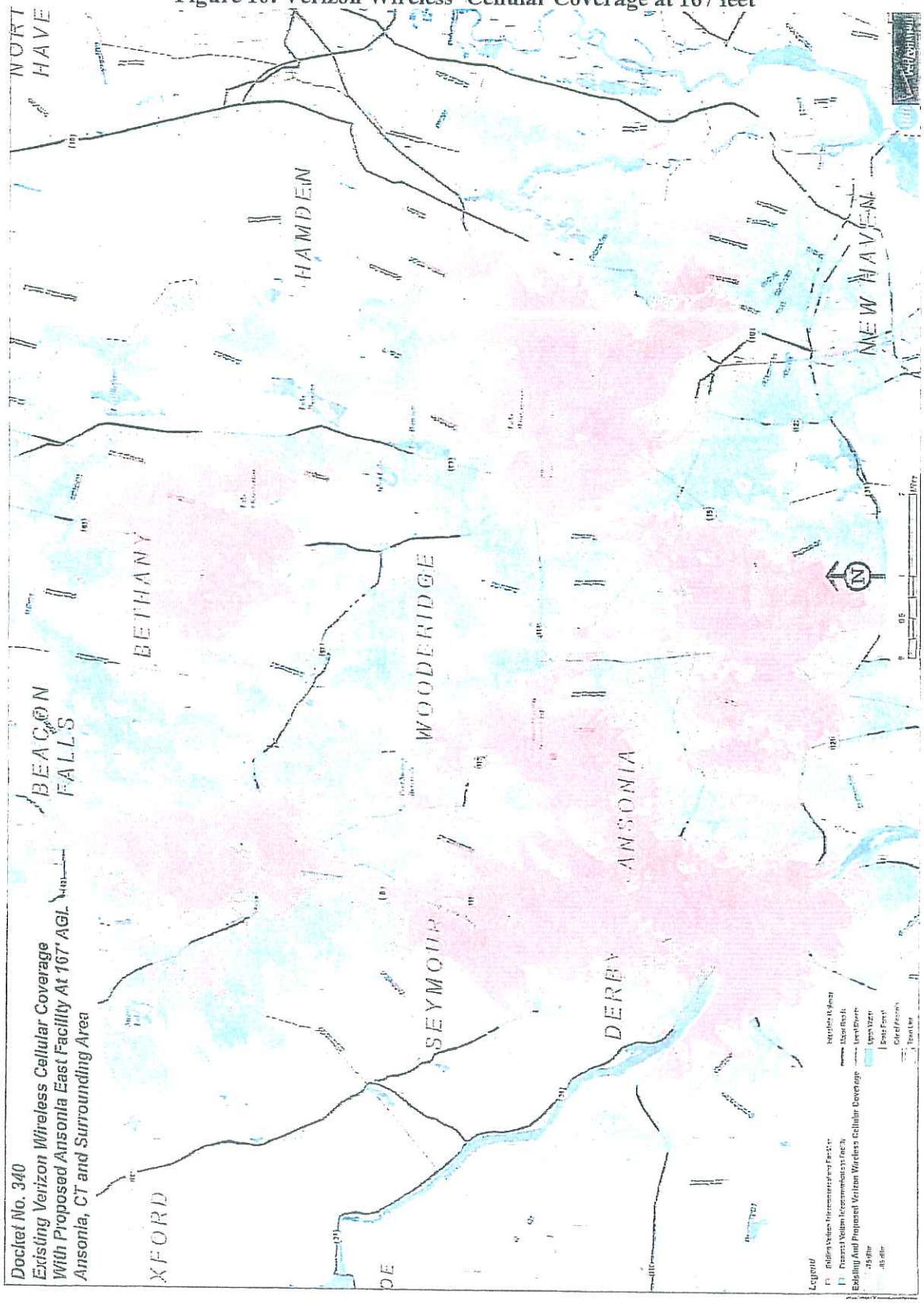

(Verizon 1, response 11)

**Figure 9: Verizon Wireless' Existing PCS Coverage**



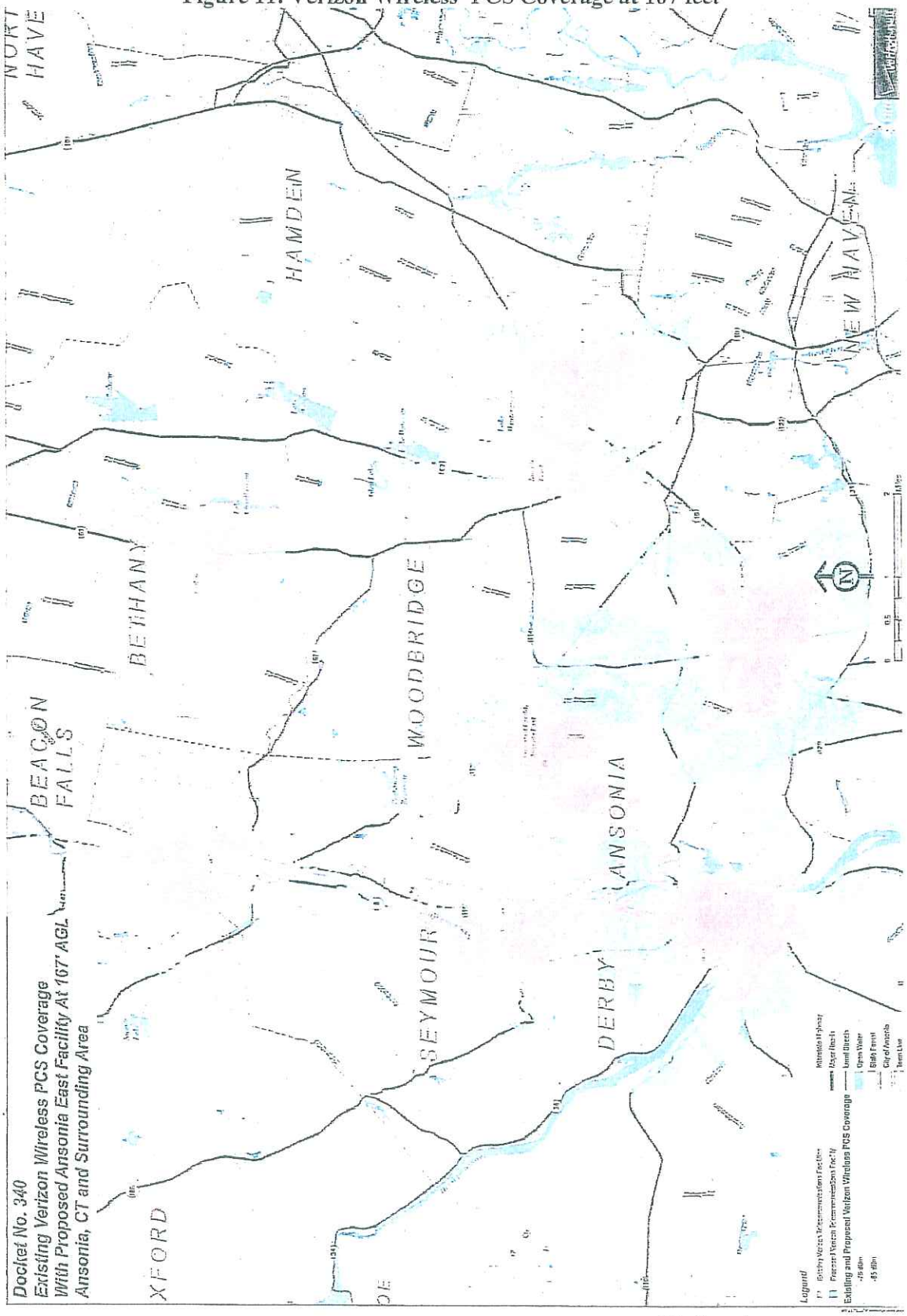

(Verizon 1, response 11)

**Figure 10: Verizon Wireless' Cellular Coverage at 167 feet**



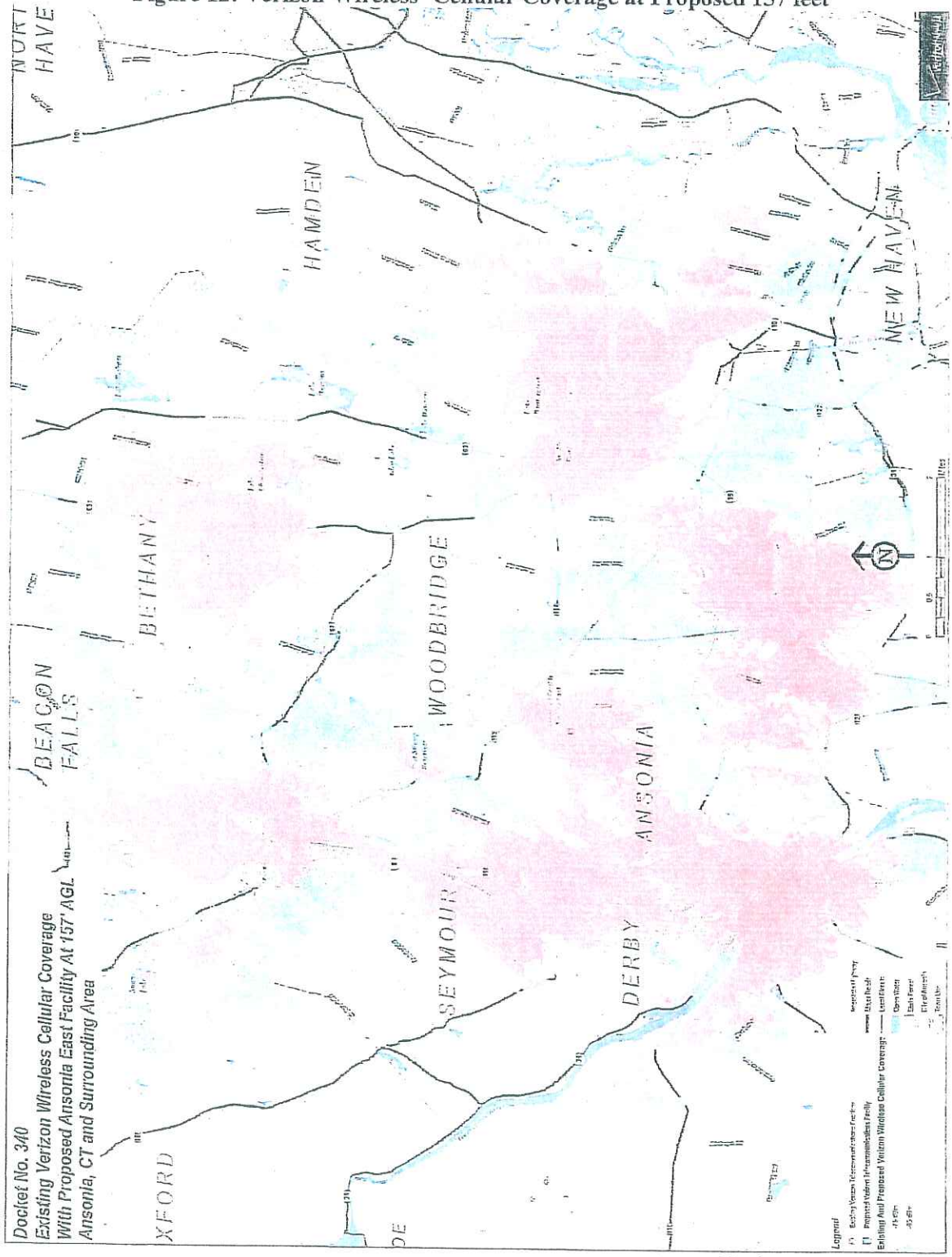

(Verizon 2, response 9)

**Figure 11: Verizon Wireless' PCS Coverage at 167 feet**



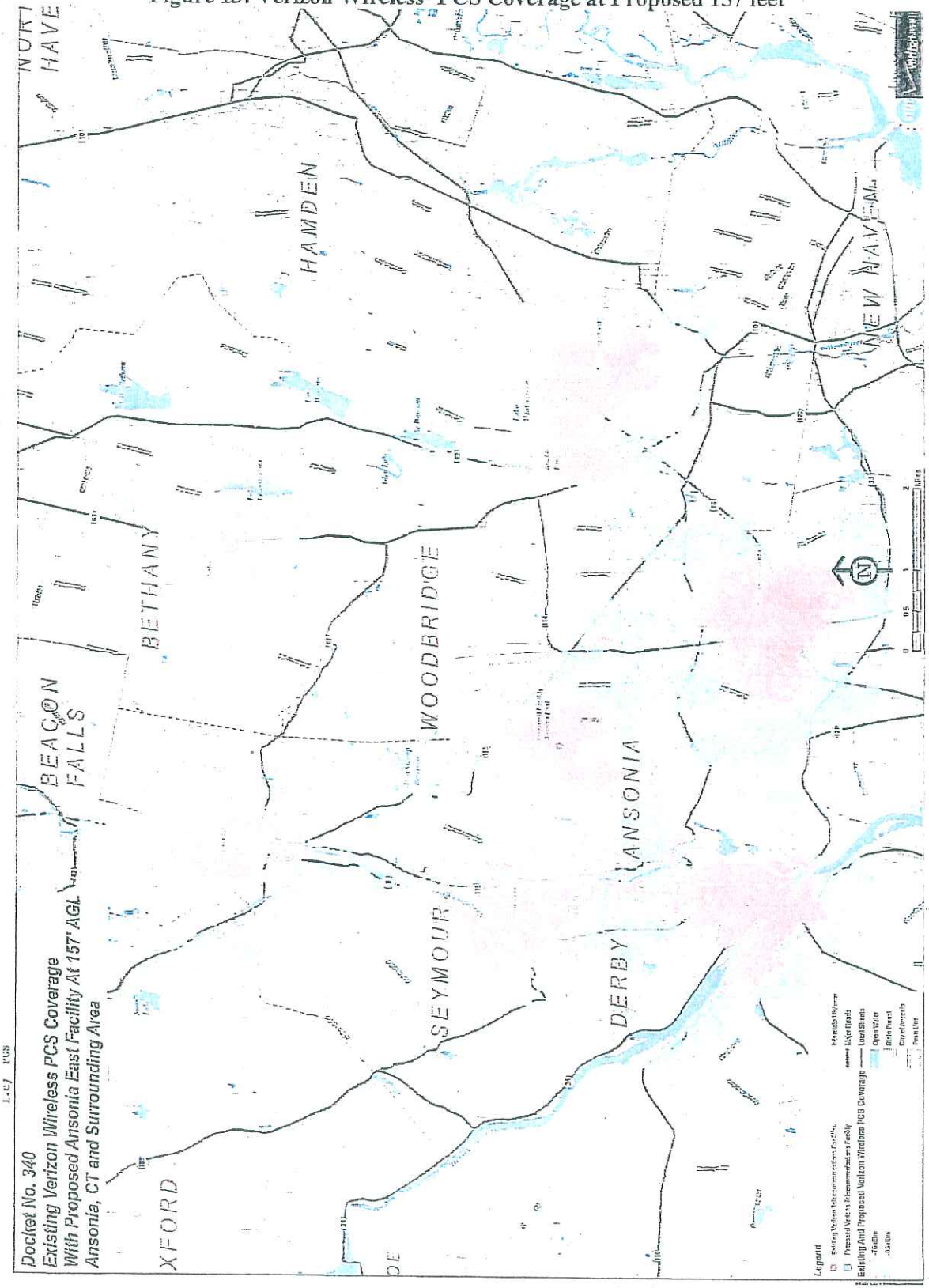

(Verizon 1, response 11)

**Figure 12: Verizon Wireless' Cellular Coverage at Proposed 157 feet**



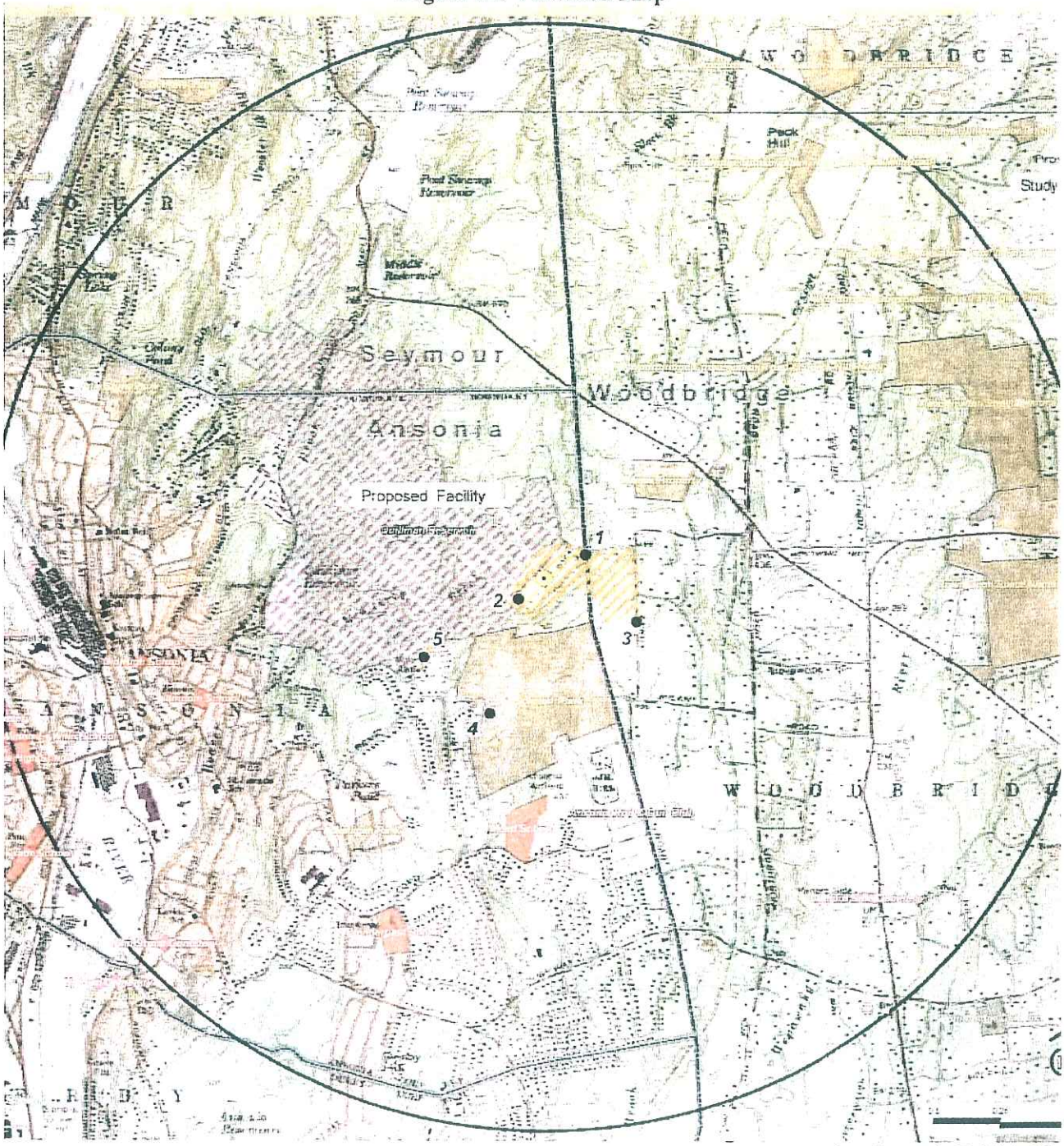

(Verizon 1, response 11)

**Figure 13: Verizon Wireless' PCS Coverage at Proposed 157 feet**




(Verizon Wireless 1, response 11)

**Figure 14: Viewshed Map**




(Applicant 1, Exhibit K)

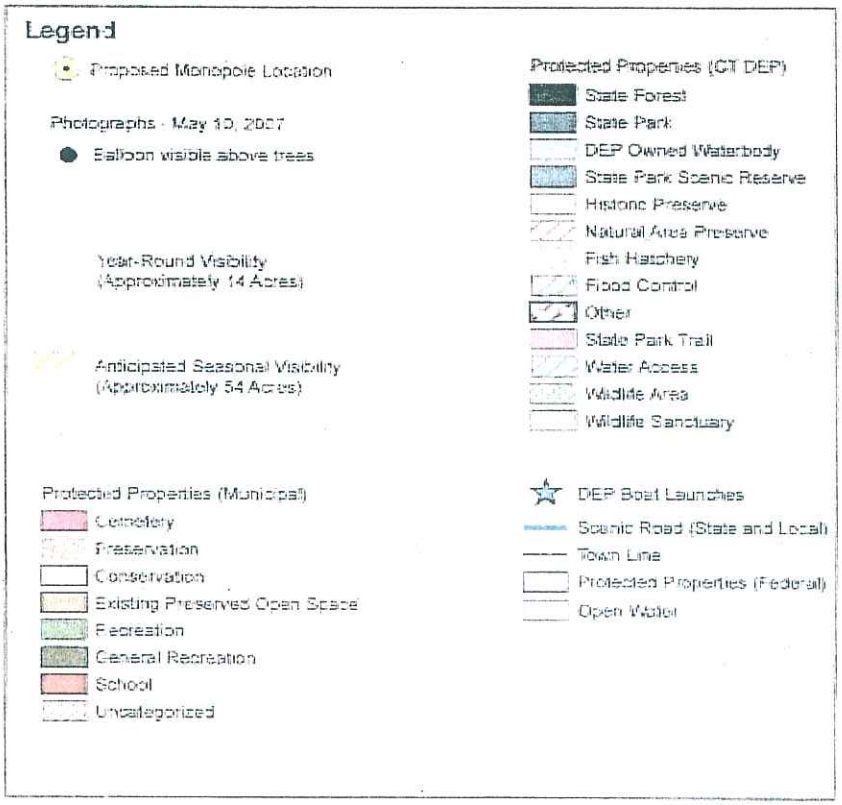
Figure 15: Viewshed Map Legend

# Proposed Optasite Facility
# CT-999-0099
# 1 Deerfield Lane
# Ansonia, Connecticut

NOTE:
- Viewshed analysis conducted using ESRI's Spatial Analyst.
- Proposed Facility height is 180 feet.
- Existing tree canopy height estimated at 65 feet.

DATA SOURCES:
- 7.5 minute digital elevation model (DEM) with 30 meter resolution produced by the USGS, 1982
- Forest areas derived from 2005 color digital orthophotos with 2-meter pixel resolution; digitized by VHB, 2007
- Base map comprised of Ansonia and Naugatuck USGS Quadrangle Maps
- Protected properties data layer provided CTDEP, 2003
- Scenic Roads layer derived from available State and Local listings.

Map Compiled May, 2007




(Applicant 1, Exhibit K)

| | | |
|---|---|---|
| **DOCKET NO. 340** - Optasite Towers LLC and Omnipoint Communications, Inc. application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at 1 Deerfield Lane, Ansonia, Connecticut. | } | Connecticut |
| | } | Siting |
| | } | Council |

November 29, 2007

## Opinion

On June 7, 2007, Optasite Towers LLC (Optasite) and Omnipoint Communications, Inc. (T-Mobile) (collectively, the Applicant) applied to the Connectict Siting Council (Council) for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance and operation of a wireless telecommunications facility to be located in the City of Ansonia, Connecticut. The Applicant is seeking to develop a facility on property owned by Macabee Properties, LLC which is currently used as a horse farm. T-Mobile's objective in locating a facility at this location is to provide service along Route 313, Peck Hill Road, and the surrounding areas of Ansonia and Woodbridge. Cellco Partnership d/b/a Verizon Wireless (Verizon Wireless) participated as an intervenor in this proceeding to demonstrate their need for this facility. Osborne Lane Associates, LLC (Osborne), Gennaro Savino, and Brian Freeman also participated as intervenors in this proceeding.

The applicant proposes to construct a 180-foot monopole and associated 43-foot by 73-foot compound on a 16-acre parcel that contains a horse farm. The tower and compound area will be located in an open area in the western half of the parcel. No landscaping is proposed. Utilities are proposed to be installed overhead from existing service on Osbourne Lane to the compound. Approximately ten, thirty-foot utility poles would be installed along the proposed access roadway, with one about every 100 feet. The tower will be designed to support four levels of antennas with a 10-foot center-to-center vertical separation. Access to the site would extend from Osbourne Lane over an existing 700-foot long paved driveway and would continue over an existing 370-foot long dirt driveway to be improved with gravel to a width of 20 feet.

The Applicant initially proposed a 180-foot monopole, however the Applicant testified that due to an error in the ground elevation measurement, the required tower height for its coverage objectives is actually 170 feet. T-Mobile and Verizon Wireless currently lack coverage along Route 313 in the vicinity of the Ansonia/Woodbridge/Seymour town line, including Peck Hill Road in Woodbridge. Thus, the Council does not deny the need for a tower for expanded coverage and seamless network design. T-Mobile and Verizon Wireless could achieve its coverage objectives with antennas installed at centerline heights of 167 feet and 157 feet, respectively. Moreover, Verizon Wireless would accomplish complete coverage of Route 313 and Peck Hill Road at cellular frequencies and approximately 63 percent coverage along the same roadways at PCS frequencies. T-Mobile would accomplish approximately 69 percent coverage on Route 313, 62 percent coverage on Peck Hill Road, and 76 percent coverage on Northrop Road.

The proposed tower would be visible year-round from approximately 14 acres within a two-mile radius of the site. The tower would be seasonally visible from approximately 54 acres within a two-mile radius of the site. Seven residences would have partial year-round views of the facility and eight additional residences would have partial, seasonal views of the facility. However, approximately half of the total visibility of the proposed facility is located on the host property.

The Council finds that a ten-foot reduction in the height of the tower (from 180 feet to 170 feet) would have a minor reduction in the visibility of the tower. Based on this factor and the lack of demonstrated need for a tower height of 180-feet, the Council will limit the tower height to 170-feet. To further lessen the tower's visual impacts while still meeting the coverage objectives of T-Mobile and Verizon Wireless, the Council will also order that the antennas be installed on T-arms, rather than on full platform mounts. Also, the Council will order that the utilities be run underground in the general direction of the access drive to avoid the need for poles.

The tower setback radius extends onto the abutting City of Ansonia (City) property west of the site by approximately 31 feet. Optasite could have the tower designed with a yield point to prevent the tower from encroaching upon the City property in the unlikely event of a tower failure. Accordingly, the Council will order the inclusion of such yield point in the Development and Management Plan.

There are no known existing populations of federal or state endangered, threatened or special concern species occurring at the proposed site. Development of the site would not require the clearing of any trees six inches diameter or greater or affect any wetlands or watercourses. The proposed facility would have no effect on archaeological or historic resources.

The Council notes that since the site was formerly utilized as a Nike missile site from the late 1950s to 1971, hazardous materials may have been utilized at the site and released into the environment. Accordingly, the Council will order that during construction activities, no soils should be removed from the site without proper waste characterization to determine disposal requirements.

According to a methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997), the combined radio frequency power density levels of the antennas proposed to be installed on the tower have been calculated by Council staff to amount to 7.75% of the FCC's Maximum Permissible Exposure, as measured at the base of the tower. This percentage is well below federal and state standards established for the frequencies used by wireless companies. If federal or state standards change, the Council will require that the tower be brought into compliance with such standards. The Council will require that the power densities be recalculated in the event other carriers add antennas to the tower. The Telecommunications Act of 1996 prohibits any state or local agency from regulating telecommunications towers on the basis of the environmental effects of radio frequency emissions to the extent that such towers and equipment comply with FCC's regulations concerning such emissions.

Based on the record in this proceeding, the Council finds that the effects associated with the construction, operation, and maintenance of the telecommunications facility at proposed site, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with policies of the State concerning such effects, and are not sufficient reason to deny this application. Therefore, the Council will issue a Certificate for the construction, operation, and maintenance of a 170-foot monopole telecommunications facility at the proposed site located at 1 Deerfield Lane, Ansonia, Connecticut.

| | | |
|---|---|---|
| **DOCKET NO. 340** - Optasite Towers LLC and Omnipoint Communications, Inc. application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at 1 Deerfield Lane, Ansonia, Connecticut. | } | Connecticut<br>Siting<br>Council<br>November 29, 2007 |

**Decision and Order**

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, operation, and maintenance of a telecommunications facility, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate, either alone or cumulatively with other effects, when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application, and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to Optasite Towers LLC (Optasite) and Ominipoint Communications, Inc. (T-Mobile), hereinafter collectively referred to as the Certificate Holder, for a telecommunications facility at 1 Deerfield Lane, Ansonia, Connecticut.

The facility shall be constructed, operated, and maintained substantially as specified in the Council's record in this matter, and subject to the following conditions:

1. The tower shall be constructed as a monopole, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of T-Mobile and other entities, both public and private, but such tower shall not exceed a height of 170 feet above ground level. The height at the top of Certificate Holder's antennas shall not exceed 170 feet above ground level.

2. Such tower shall incorporate a yield point to eliminate the potential fall radius onto the adjacent property.

3. All cellular and PCS antennas shall be attached to the tower with T-arms.

4. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be served on the City of Ansonia for comment, and all parties and intervenors as listed in the service list, and submitted to and approved by the Council prior to the commencement of facility construction and shall include:
   a) a final site plan(s) of site development to include specifications for the tower, tower foundation, antennas, equipment compound, radio equipment, access road, utility line, and landscaping; and
   b) construction plans for site clearing, grading, water drainage, and erosion and sedimentation control consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.

5. Utilities shall be underground and follow the general alignment of the access drive.

6. During construction activities, no soils should be removed from the site without proper waste characterization to determine disposal requirements.

7. The Certificate Holder shall, prior to the commencement of operation, provide the Council worst-case modeling of the electromagnetic radio frequency power density of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall ensure a recalculated report of the electromagnetic radio frequency power density be submitted to the Council if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.

8. Upon the establishment of any new State or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.

9. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.

10. The Certificate Holder shall provide reasonable space on the tower for no compensation for any City of Ansonia and Town of Woodbridge public safety services (police, fire and medical services), provided such use can be accommodated and is compatible with the structural integrity of the tower.

11. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed and providing wireless services within eighteen months from the date of the mailing of the Council's Findings of Fact, Opinion, and Decision and Order (collectively called "Final Decision"), this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's Final Decision shall not be counted in calculating this deadline.

12. Any request for extension of the time period referred to in Condition 11 shall be filed with the Council not later than 60 days prior to the expiration date of this Certificate and shall be served on all parties and intervenors, as listed in the service list, and the City of Ansonia. Any proposed modifications to this Decision and Order shall likewise be so served.

13. If the facility ceases to provide wireless services for a period of one year, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made.

14. The Certificate Holder shall remove any nonfunctioning antenna, and associated antenna mounting equipment, within 60 days of the date the antenna ceased to function.

15. In accordance with Section 16-50j-77 of the Regulations of Connecticut State Agencies, the Certificate Holder shall provide the Council with written notice two weeks prior to the commencement of site construction activities. In addition, the Certificate Holder shall provide the Council with written notice of the completion of site construction and the commencement of site operation.

Pursuant to General Statutes § 16-50p, the Council hereby directs that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in The New Haven Register and in the Amity Observer.

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with Section 16-50j-17 of the Regulations of Connecticut State Agencies.

The parties and intervenors to this proceeding are:

| **Applicant** | **Its Representative** |
|---|---|
| Optasite Towers LLC and<br>Omnipoint Communications, Inc. | Julie Kohler, Esq.<br>Carrie L. Larson, Esq.<br>Cohen and Wolf, P.C.<br>1115 Broad Street<br>Bridgeport, CT 06604<br>(203) 368-1821<br>(203) 394-9901<br>jkohler@cohenandwolf.com<br>clarson@cohenandwolf.com |
| **Intervenor** | **Its Representative** |
| Cellco Partnership d/b/a Verizon Wireless | Kenneth C. Baldwin, Esq.<br>Robinson & Cole LLP<br>280 Trumbull Street<br>Hartford, CT 06103-3597<br>(860) 275-8200<br>(860) 275-8299 fax<br>kbaldwin@rc.com |
| **Intervenor** | **Its Representative** |
| Osborne Lane Associates, LLC | William Fieber<br>Keith A. Russo<br>c/o The Fieber Group<br>47 Elm Street<br>New Canaan, CT 06840<br>(203) 972-4975<br>(203) 972-4977 fax<br>krusso@fiebergroup.com |
| **Intervenor** | **Its Representative** |
| Gennaro Savino | Gennaro Savino<br>128 Ford Road<br>Woodbridge, CT 06525<br>(203) 387-1573<br>savinovineyards@sbcglobal.net |

**Intervenor**

Brian Freeman

**Its Representative**

Brian Freeman
5 Hampton Trail
Wallingford, CT 06492
(203) 793-7505
Brian@sparc.us

## CERTIFICATION

The undersigned members of the Connecticut Siting Council (Council) hereby certify that they have heard this case, or read the record thereof, in **DOCKET NO. 340** - Optasite Towers LLC and Omnipoint Communications, Inc. application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at 1 Deerfield Lane, Ansonia, Connecticut, and voted as follows to approve the proposed telecommunications facility located at 1 Deerfield Lane, Ansonia, Connecticut.

| Council Members | Vote Cast |
|---|---|
| Daniel F. Caruso, Chairman | Yes |
| Colin C. Tait, Vice Chairman | Absent |
| Commissioner Donald W. Downes<br>Designee: Gerald J. Heffernan | Yes |
| Commissioner Gina McCarthy<br>Designee: Brian J. Emerick | Yes |
| Philip T. Ashton | Yes |
| Daniel P. Lynch, Jr. | Yes |
| James J. Murphy, Jr. | Yes |
| Dr. Barbara Currier Bell | Yes |
| Edward S. Wilensky | Yes |

Dated at New Britain, Connecticut, November 29, 2007

**STATE OF CONNECTICUT** )

**ss. New Britain, Connecticut** :

**COUNTY OF HARTFORD** )

I hereby certify that the foregoing is a true and correct copy of the Findings of Fact, Opinion, and Decision and Order issued by the Connecticut Siting Council, State of Connecticut.

**ATTEST**:

S. Derek Phelps
Executive Director
Connecticut Siting Council

I certify that a copy of the Findings of Fact, Opinion, and Decision and Order in Docket No. 340 has been forwarded by Certified First Class Return Receipt Requested mail on December 13, 2007, to all parties and intervenors of record as listed on the attached service list, dated September 19, 2007.

**ATTEST**:

Lisa A. Fontaine
Fiscal Administrative Officer
Connecticut Siting Council

Date: September 19, 2007



**LIST OF PARTIES AND INTERVENORS**
**SERVICE LIST**

| Status Granted | Status Holder (name, address & phone number) | Representative (name, address & phone number) |
|---|---|---|
| **Applicant** | Optasite Towers LLC and Omnipoint Communications, Inc. | Julie Kohler, Esq.<br>Carrie L. Larson, Esq.<br>Cohen and Wolf, P.C.<br>1115 Broad Street<br>Bridgeport, CT 06604<br>(203) 368-1821<br>(203) 394-9901<br>jkohler@cohenandwolf.com<br>clarson@cohenandwolf.com |
| **Intervenor (approved 08/29/07)** | Cellco Partnership d/b/a Verizon Wireless | Kenneth C. Baldwin, Esq.<br>Robinson & Cole LLP<br>280 Trumbull Street<br>Hartford, CT 06103-3597<br>(860) 275-8200<br>(860) 275-8299 fax<br>kbaldwin@rc.com |
| **Intervenor (approved 08/29/07)** | Osborne Lane Associates, LLC | William Fieber<br>Keith A. Russo<br>c/o The Fieber Group<br>47 Elm Street<br>New Canaan, CT 06840<br>(203) 972-4975<br>(203) 972-4977 fax<br>krusso@fiebergroup.com |
| **Intervenor (approved 09/18/07)** | Gennaro Savino | Gennaro Savino<br>128 Ford Road<br>Woodbridge, CT 06525<br>(203) 387-1573<br>savinovineyards@sbcglobal.net |
| **Intervenor (approved 09/18/07)** | Brian Freeman | Brian Freeman<br>5 Hampton Trail<br>Wallingford, CT 06492<br>(203) 793-7505<br>Brian@sparc.us |