



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
Internet: ct.gov/csc

Daniel F. Caruso
Chairman

March 22, 2011

TO: Parties and Intervenors

FROM: Linda Roberts, Executive Director *LR*

RE: **DOCKET NO. 396** – SBA Towers II, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and management of a telecommunications facility located at 49 Brainerd Road, Niantic (East Lyme), Connecticut.

By its Decision and Order dated March 3, 2011, the Connecticut Siting Council granted a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and management of a telecommunications facility located at the SBA Hybrid Site (i.e. approximately 310 feet to the south of the proposed location) ,49 Brainerd Road, Niantic (East Lyme), Connecticut.

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

LR/MP/laf

Enclosures (3)

c: State Documents Librarian

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.

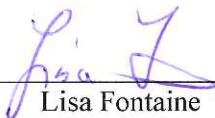
ATTEST:



Linda Roberts
Executive Director
Connecticut Siting Council

I certify that a copy of the Findings of Fact, Opinion, and Decision and Order in Docket No. 396 has been forwarded by Certified First Class Return Receipt Requested mail, on March 22, 2011, to all parties and intervenors of record as listed on the attached service list, dated February 16, 2010.

ATTEST:



Lisa Fontaine
Fiscal Administrative Officer
Connecticut Siting Council

**LIST OF PARTIES AND INTERVENORS
SERVICE LIST**

Status Granted	Document Service	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Applicant	<input checked="" type="checkbox"/> U.S. Mail	SBA Towers II LLC	Carrie L. Larson, Esq. Pullman & Comley, LLC 90 State House Square Hartford, CT 06103-3702 (860) 424-4312 (860) 424-4370 fax clarson@pullcom.com
Intervenor (granted 01/07/2010)	<input checked="" type="checkbox"/> E-mail	Cellco Partnership d/b/a Verizon Wireless	Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103-3597 (860) 275-8200 (860) 275-8299 fax kbaldwin@rc.com
Intervenor (granted 01/07/2010)	<input checked="" type="checkbox"/> E-mail	Russell L. Brown 41 Brainerd Road Niantic, CT 06357 (860) 739-5984 (860) 691-1145 fax rds@businessbookpress.com	
Party (granted 01/07/2010)	<input checked="" type="checkbox"/> U.S. Mail	Town of East Lyme	Edward B. O'Connell, Esq. Waller, Smith & Palmer, P.C. 52 Eugene O'Neill Drive P.O. Box 88 New London, CT 06320 (860) 442-0367 (860) 447-9915 fax eboconnell@wallersmithpalmer.com tmcollins@wallersmithpalmer.com
Intervenor (granted 02/11/2010)	<input checked="" type="checkbox"/> U.S. Mail	New Cingular Wireless PCS, LLC	Daniel M. Laub, Esq. Christopher B. Fisher, Esq. Cuddy & Feder LLP 445 Hamilton Avenue, 14 th floor White Plain, NY 10601 (914) 761-1300 (914) 761-5372 fax cfisher@cuddyfeder.com dlaub@cuddyfeder.com

LIST OF PARTIES AND INTERVENORS
SERVICE LIST

Status Granted	Document Service	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Party (granted 02/11/2010)	<input checked="" type="checkbox"/> E-mail	Friends of the Pattagansett Trust	Keith R. Ainsworth, Esq. Evans Feldman & Ainsworth, LLC 261 Bradley Street P.O. Box 1694 New Haven, CT 06507-1694 (203) 772-4900 (203) 782-1356 fax krainsworth@snet.net
Intervenor (granted 02/11/2010)	<input checked="" type="checkbox"/> U.S. Mail	Joseph Raia 97 West Main Street, Unit 9 Niantic, CT 06357 (860) 691-1005 (860) 739-0036 Raia.joseph@sbcglobal.net	



Daniel F. Caruso
Chairman

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March 22, 2011

Carrie L. Larson, Esq.
Pullman & Comley, LLC
90 State House Square
Hartford, CT 06103-3702

RE: **DOCKET NO. 396** – SBA Towers II, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and management of a telecommunications facility located at 49 Brainerd Road, Niantic (East Lyme), Connecticut.

Dear Attorney Larson:

By its Decision and Order dated March 3, 2011, the Connecticut Siting Council (Council) granted a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance and management of a telecommunications facility located at the SBA Hybrid Site (i.e. approximately 310 feet to the south of the proposed location), 49 Brainerd Road, Niantic (East Lyme), Connecticut.

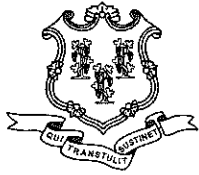
Enclosed are the Council's Certificate, Findings of Fact, Opinion, and Decision and Order.

Very truly yours,

Linda Roberts
Executive Director

LR/MP/laf

Enclosures (4)



Daniel F. Caruso
Chairman

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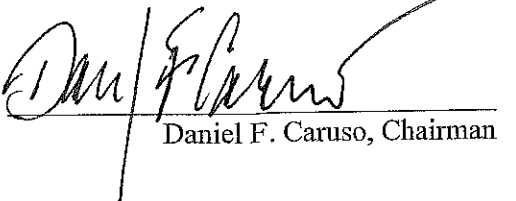
E-Mail: siting.council@ct.gov

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**CERTIFICATE
OF
ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED
DOCKET NO. 396**

Pursuant to General Statutes § 16-50k, as amended, the Connecticut Siting Council hereby issues a Certificate of Environmental Compatibility and Public Need to SBA Towers II, LLC for the construction, maintenance and management of a telecommunications facility located at the SBA Hybrid Site (i.e. approximately 310 feet to the south of the proposed location), 49 Brainerd Road, Niantic (East Lyme), 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 March 3, 2011.

By order of the Council,



Daniel F. Caruso, Chairman

March 3, 2011

<p>DOCKET NO. 396 – SBA Towers II, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and management of a telecommunications facility located at 49 Brainerd Road, Niantic (East Lyme), Connecticut.</p>	<p>} Connecticut } Siting } Council } March 3, 2011</p>
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Findings of Fact

Introduction

1. SBA Towers II LLC (SBA), in accordance with provisions of Connecticut General Statutes (C.G.S.) § 16-50g through 16-50aa, applied to the Connecticut Siting Council (Council) on December 7, 2009 for the construction, maintenance, and management of a 170-foot wireless telecommunications facility, which would include a 170-foot tall monopole tower, to be located at 49 Brainerd Road in the Town of East Lyme, Connecticut. (SBA 1, pp. 1-2)
2. SBA is a Delaware limited liability company and a subsidiary of SBA Communications Corporation, a publicly traded company that owns and operates wireless infrastructure facilities nationwide. Its offices are at One Research Drive, Suite 200C, Westborough, Massachusetts. (SBA 1, p. 3)
3. The parties in this proceeding are SBA, Town of East Lyme, and Friends of the Pattagansett Trust. The intervenors to this proceeding are Cellco Partnership d/b/a Verizon Wireless (Cellco), New Cingular Wireless PCS, LLC (AT&T), Russell Brown, and Joseph Raia. (Transcript, February 23, 2010, 3:10 p.m. [Tr. 1], pp. 6-7)
4. Intervenors Cellco and AT&T are licensed by the Federal Communications Commission to provide wireless telecommunications services in New London County, Connecticut. (AT&T 1; Cellco 1)
5. The purpose of the proposed facility would be to provide service along Route 156 and the Amtrak corridor in East Lyme, as well as adjacent areas. (AT&T 1, p. 1)
6. Pursuant to C.G.S. § 16-50m, the Council, after giving due notice thereof, held a public hearing on February 23, 2010, beginning at 3:10 p.m. and continuing at 7:03 p.m. at Camp Rell, Nett Hall, Smith Street, East Lyme. (Council's Hearing Notice dated January 14, 2010; Tr. 1, p. 3; Transcript 2 – 7:03 p.m. [Tr. 2], p. 3)
7. The Council held continued public hearings in New Britain on March 23, 2010 and April 22, 2010. (Transcript 3 – March 23, 2010 at 1:30 p.m. [Tr. 3], p. 3; Transcript 4 – April 22, 2010 at 2:05 p.m. [Tr. 4], p. 4)
8. The Council and its staff conducted an inspection of the proposed site on February 23, 2010, beginning at 2:00 p.m. During the field inspection, the applicant flew a balloon at the proposed site to simulate the height of the proposed tower. Weather conditions during the field review were not conducive to a balloon flight and included a 10 mile-per-hour wind with rain and sleet. The balloon was tethered at 170 feet above ground level to simulate the height of the tower. It could not be maintained at the proposed height for any significant amount of time due to the weather conditions. The balloon was aloft from 7:00 a.m. to 9:00 a.m. and from 1:00 p.m. to approximately 5:00 p.m. for the convenience of the public. (Council's Hearing Notice dated January 14, 2010; Tr. 1, p. 16)

9. Pursuant to C.G.S. § 16-50l (b), public notice of the application was published in The Day on November 18, 2009 and November 20, 2009. (SBA 1, p. 4)
10. Pursuant to C.G.S. § 16-50l(b), notice of the application was provided to all abutting property owners by certified mail. SBA received return receipts from all abutters. (SBA 1, p. 4; SBA 3, response 2)
11. Pursuant to C.G.S. § 16-50l (b), SBA provided notice to all federal, state and local officials and agencies listed therein. (SBA 1, p. 3)
12. On July 26, 2010, SBA filed a motion to reopen the evidentiary record limited to wetland issues. (SBA Motion to Reopen dated July 26, 2010)
13. On July 29, 2010, the Council granted the motion to reopen the evidentiary record limited to wetland issues. (Council Memo dated July 30, 2010)
14. On October 7, 2010, SBA filed a motion to reopen the evidentiary record with respect to T-Mobile's lease with SBA. (SBA Motion to Reopen dated October 7, 2010)
15. On October 7, 2010, the Council granted SBA's motion to reopen the evidentiary record. However, the Council ruled that the reopening would not be limited to the lease with T-Mobile. (Council Memo dated October 12, 2010)
16. On October 21, 2010, the Council closed the evidentiary record, denied the application without prejudice, and reopened the decision to deny the application without prejudice on its own motion under CGS §4-181a(b). (Council Memo dated October 25, 2010)
17. Pursuant to C.G.S. § 16-50m, the Council, after giving due notice thereof, held a public hearing on December 21, 2010, beginning at 2:05 p.m. in Hearing Room 1, 10 Franklin Square, New Britain, Connecticut. (Council's Hearing Notice dated November 10, 2010; Transcript 5 – 2:05 p.m. [Tr. 5], p. 3)

State Agency Comment

18. Pursuant to C.G.S. § 16-50j (h), on January 14, 2010 and May 20, 2010, 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); Department of Agriculture (DOAg); Department of Transportation (DOT); and Department of Emergency Management and Homeland Security (DEMHS). (Record)
19. The DOT's Bureau of Engineering and Highway Operations responded to the Council's solicitation for comments on February 10, 2010, but had no comments. (DOT Comments dated February 10, 2010)
20. The DPH's Drinking Water Section responded to the Council's solicitation for comments on February 10, 2010. The DPH indicated that it had reviewed the application for potential impacts to any sources of public drinking water supply. The project does not appear to be in a public water supply source water area. DPH had no further comments. (DPH Comments dated February 17, 2010)

21. The DEP's Office of Long Island Sound Programs responded to the Council's solicitation for comments on February 17, 2010 and May 12, 2010 with concerns regarding visual impact on coastal resources. (DEP Comments dated February 17, 2010 and May 12, 2010)
22. The CEQ responded to the Council's solicitation for comments on March 12, 2010. The CEQ is concerned about adverse impacts per the Connecticut Coastal Management Act (CCMA) and impacts to birds. (CEQ Comments dated March 12, 2010)
23. The CEQ also notes that the visual impact of the proposed tower cannot be fully assessed without a virtual simulation of its appearance when viewed from the waters of Long Island Sound, a major recreational resource. (CEQ Comments dated March 12, 2010)
24. The following agencies did not respond with comments on the application: DPUC, OPM, DECD, DOAg, and DEMHS. (Record)

Municipal Consultation

25. SBA notified the Town of East Lyme (Town) of the proposal on September 10, 2009 by sending a technical report to First Selectman Paul Formica. SBA met with First Selectman Formica, Chris Taylor – Deputy Fire Marshal, and Brooks Gianakos – Town Emergency Services Consultant on September 24, 2009 to discuss the proposed facility. (SBA 1, p. 16)
26. SBA representatives also attended a public informational meeting with the East Lyme Board of Selectman on November 18, 2009. (SBA 1, pp. 16-17)
27. The Board of Selectman (Board) voted unanimously to become a party in the Council proceeding to express their opposition to the proposed site. The Board's various concerns included the site's proximity to the Pattagansett River, which is considered a sensitive estuary, and Raven's Woods, a 26-acre nature preserve owned by East Lyme Land Trust. (Town 1)
28. At a public hearing held on February 23, 2010, First Selectman Formica provided a limited appearance statement. Mr. Formica noted that many East Lyme citizens and their legislative representatives are concerned that the tower would be located within a coastal boundary and is not consistent with the Town's Plan of Development and Conservation. Mr. Formica also expressed concerns about adverse effects to the coastal landscape. Mr. Formica encouraged the exploration of alternative sites to find one more suitable for all those involved. (Tr. 1, pp. 9-11)
29. The Town's Plan of Development and Conservation does not specifically refer to telecommunications facilities, but does adopt the CCMA. (Tr. 1, pp. 87-89)
30. SBA would provide space on the tower for the Town's emergency communication services for no compensation. The Town is interested in co-locating emergency services antennas on the proposed tower, but the details have been not finalized. (SBA 1, p. 5; Tr. 1, p. 48)

Federal Designation for Public Need

31. 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)

32. 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. (Council Administrative Notice Item No. 7)
33. The Telecommunications Act of 1996 prohibits local and state entities from discriminating among providers of functionally equivalent services. (Council Administrative Notice Item No. 7)
34. 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, which include human health 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)
35. The Wireless Communications and Public Safety Act of 1999 (E911 Act) was enacted by Congress to promote and enhance public safety by making 9-1-1 the universal emergency assistance number, by furthering deployment of wireless 9-1-1 capabilities, and by encouraging construction and operation of seamless ubiquitous and reliable networks for wireless services. (SBA 1, pp. 5-6)
36. 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. SBA's facility would be in compliance with the requirements of the 911 Act. (SBA 1, p. 6)

Existing and Proposed Wireless Coverage – AT&T

37. AT&T seeks to provide coverage to Route 156 to the north, the Amtrak corridor and shoreline areas to the south, Black Point to the east, Giant's Neck to the west, as well as adjacent areas. (SBA 1, Tab F)
38. AT&T operates in the 850 MHz (cellular) band and the 1900 MHz (PCS) band at a signal level service design of -74 dBm for this area, sufficient for in-building coverage. The signal level threshold for in-vehicle coverage is -82 dBm. (AT&T 3, responses 3, 4, 8)
39. AT&T would initially provide cellular service and would expand to PCS service as needed in the future. AT&T also plans to deploy 700 MHz (LTE) service on its network beginning in 2011. (AT&T 3, responses 7, 8)
40. AT&T currently experiences a coverage gap on Route 156 of 0.5 miles. (AT&T 3, response 1)
41. The minimum height at which AT&T could achieve its coverage objective from the proposed site is 167 feet. (AT&T 3, response 5; AT&T 9; Tr. 5, p. 60)
42. AT&T's antennas at the proposed site at 167 feet would provide cellular coverage on Route 156 for 1.6 miles. AT&T's antennas would also provide about 2.2 miles of cellular coverage on the Amtrak corridor. AT&T's cellular coverage area at this antenna height would be 3.29 square miles. (SBA 1, Tab F; AT&T 3, responses 10, 12 and 13; Tr. 3, p. 137)

43. AT&T's antennas at the proposed site at 157 feet would provide cellular coverage on Route 156 for 1.6 miles. AT&T's antennas would also provide about 2.2 miles of cellular coverage on the Amtrak corridor. AT&T's cellular coverage area at this antenna height would be 2.40 square miles. (SBA 1, Tab F; AT&T 3, responses 10, 12 and 13; Tr. 3, p. 137)
44. AT&T antennas at the proposed site at 147 feet would provide cellular coverage on Route 156 for 1.6 miles. AT&T's antennas would also provide about 2.2 miles of cellular coverage on the Amtrak corridor. AT&T's cellular coverage area at this antenna height would be 2.16 square miles. (SBA 1, Tab F; AT&T 3, responses 10, 12 and 13; Tr. 3, p. 137)
45. Adjacent AT&T facilities that would interact with the proposed facility are as follows:

Location	Antenna Height agl	Approximate Distance from Proposed Site
15 Liberty Way, East Lyme	62 feet – rooftop facility	1.25 miles northwest
93 Roxbury Road, East Lyme	79 feet – water tank	1.88 miles north
51 Daniels Avenue, Waterford	168 feet – lattice tower	3.33 miles east-northeast

(AT&T 3, response 6; SBA 1, Tab H)

46. If AT&T's antennas were located at the 157-foot level of the tower, there would be a slight reduction in coverage in the eastern portion of Black Point and small changes elsewhere. (Tr. 5, p. 60)
47. Shifting the tower up to 500 feet south is not expected to materially affect coverage and would not change the antenna height required by AT&T. (Tr. 1, p. 66; Tr. 3, p. 139)

Existing and Proposed Wireless Coverage – Verizon Wireless

48. Cellco seeks to provide coverage to Route 156 to the north, the Amtrak corridor and shoreline areas to the south, Black Point to the east, Giant's Neck to the west, as well as adjacent areas. (Cellco 2, response 7)
49. Cellco operates in the 850 MHz (cellular) band, the 1900 MHz (PCS) band, and the 700 MHz (LTE) band at a signal level service design of -85 dBm for this area, sufficient for in-vehicle coverage. The signal level threshold for in-building coverage is -75 dBm. (Cellco 2, responses 2, 3, and 6)
50. Cellco currently experiences a coverage gap on Route 156 of 0.25 miles for cellular service and 2.4 miles for PCS service. (Cellco 2, response 8)
51. The minimum height at which Cellco could achieve its coverage objective from the proposed site is 147 feet. (Cellco 2, response 4)

52. Cellco’s antennas at the proposed site at 147 feet would provide cellular coverage on Route 156 for 1.84 miles and PCS coverage for 1.79 miles. The LTE coverage on Route 156 would be 2.09 miles. Cellco’s antennas at this height would provide cellular coverage to the Amtrak Acela corridor for 2.58 miles and PCS coverage for 2.45 miles. LTE service would be provided to the Amtrak corridor in the future. Cellco’s antennas at this height would provide 16.29 square miles of cellular coverage, 8.19 square miles of PCS coverage, and 18.42 square miles of LTE coverage. (Cellco 2, responses 9 and 10; Tr. 3, p. 91)
53. Cellco’s antennas at the proposed site at 137 feet would provide cellular coverage on Route 156 for 1.65 miles and PCS coverage for 1.60 miles. The LTE coverage on Route 156 would be 1.89 miles. Cellco’s antennas at this height would provide cellular coverage to the Amtrak Acela corridor for 2.36 miles and PCS coverage for 2.10 miles. Cellco’s antennas at this height would provide 15.79 square miles of cellular coverage, 7.75 square miles of PCS coverage, and 17.12 square miles of LTE coverage. (Cellco 2, responses 9 and 10)
54. Cellco’s antennas at the proposed site at 127 feet would provide cellular coverage on Route 156 for 1.59 miles and PCS coverage for 1.50 miles. The LTE coverage on Route 156 would be 1.77 miles. Cellco’s antennas at this height would provide cellular coverage to the Amtrak Acela corridor for 2.30 miles and PCS coverage for 1.91 miles. Cellco’s antennas at this height would provide 15.21 square miles of cellular coverage, 6.64 square miles of PCS coverage, and 16.34 square miles of LTE coverage. (Cellco 2, responses 9 and 10)
55. Adjacent Cellco facilities that would interact with the proposed facility are as follows:

Location	Antenna Height agl	Approximate Distance from Proposed Site
93 Roxbury Road, East Lyme	148 feet – lattice tower	1.88 miles north
36 Hatchetts Hill Road, Old Lyme	175 feet – monopole	2.52 miles west
51 Daniels Avenue, Waterford	140 feet – lattice tower	3.33 miles east

(Cellco 2, response 5; SBA 1, Tab H)

56. Raising Cellco’s antennas to the 157-foot level of the tower would generally increase the coverage area. (Tr. 5, p. 46)
57. Shifting the tower up to 500 feet south is not expected to materially affect coverage and would not change the antenna height required by Cellco. (Tr. 1, p. 66; Tr. 3, pp. 91-92)

Site Selection

58. SBA established a search ring for the target service area in April 2009. (SBA 3, response 1)
59. The search ring is located in the Black Point area and also covers areas to the south, southwest, and southeast of Black Point. (SBA 3, response 1)

60. There are eight communications towers within a four-mile radius of the proposed site. None of these existing towers were found to be adequate for coverage purposes. The towers are listed below.

Tower Location	Height of Tower	Tower Owner	Approx. Distance and Direction
51 Daniels Avenue, Waterford	180 feet	Town of Waterford	3.33 miles to NE
Millstone Road, Waterford	450 feet	Dominion Nuclear CT, Inc.	3.10 miles to E
93 Roxbury Road, East Lyme	150 feet	Crown	1.88 miles to N
King Arthur Drive, East Lyme	90 feet	CL&P	3.81 miles to N
Flanders Road, East Lyme	97 feet	CL&P	3.73 miles to N
125 Mile Creek Road, Old Lyme	170 feet	Cellco	3.81 miles to NW
38 Hacketts Hill Road, Old Lyme	190 feet	VoiceStream	2.52 miles to W
30 Short Hills Road, Old Lyme	180 feet	Sprint	2.81 miles to W

(SBA 1, Tab H)

61. After determining there were no suitable structures within the search area, SBA and AT&T searched for properties suitable for tower development. AT&T Wireless investigated 11 parcels/areas, and one, the 49 Brainerd Road site, was selected for site development. The 10 rejected parcels/areas and reasons for their rejection are as follows:

Address	Assessor's Parcel Number	Reason for Rejection
100 Old Black Point Road	8.3-138	Rejected due to access issues. An access easement and negotiations with multiple landowners would be required.
120 Old Black Point Road	5.1-26 and 5.1-29	Rejected due to required wetlands crossings.
Old Black Point Road	5.1-31	Rejected due to site being landlocked with no access.
Old Black Point Road	8.3-133	Rejected due to the landowner not being responsive regarding potential leasing.
Attawan Road	8.3-39	Rejected due to the landowner not being responsive regarding potential leasing.
2 Central Avenue	8.1-112	Rejected by AT&T radio frequency engineers.
Brainerd Road	7.4-23	Rejected because site is currently utilized for conservation land and hiking trails.
Brainerd Road	7.4-22	Rejected because property is conservation land and not available for commercial development.
Giant's Neck Road	10-3-14-1	Rejected due to site being too far outside search area and is located on DEP land.
Fairhaven Road	8.1-106	Rejected due to the landowner not being responsive regarding potential leasing.

(SBA 1, Tab G; SBA 3, response 8)

62. T-Mobile is interested in pursuing an unrelated tower site at Indian Woods Road. This site would provide adequate cellular and LTE coverage for Cellco, but would reduce PCS coverage. Notwithstanding, Cellco would be willing to utilize this site as an alternative to the proposed site. However, this site would not meet AT&T's coverage objectives, and it is too close to an existing AT&T site. AT&T would require additional sites to meet its objectives if its antennas were located on the tower at the Indian Woods site. (Tr. 2, p. 38; Cellco 3, response 6; AT&T 9; Tr. 3, p. 92; Tr. 5, p. 62)
63. The 14 Cross Lane, Old Lyme site would not meet AT&T's or Cellco's coverage objectives and is no longer being pursued by SBA because the location is no longer available. (AT&T 3, response 18; Cellco 2, response 12)
64. SBA investigated the possibility of locating the proposed facility at up to four locations on a property at Giant's Neck Road known as assessor's parcel 10.3, 14-1, and owned by the DEP. The site could work for both AT&T and Cellco from a coverage perspective. However, the DEP has indicated that the parcel is not available for leasing for a telecommunications facility. (SBA 7; Tr. 3, pp. 60-61; Tr. 4, pp. 50-52)
65. The Town sought to purchase the DEP parcel for a public safety building; alternatively, it sought a land swap to obtain the parcel, but was unable to secure any agreement with DEP. The Town is no longer pursuing such an option. (Tr. 4, pp. 26-52; Tr. 5, pp. 110-111)

66. The Town of East Lyme is not willing to lease property on Black Point to SBA. (Town 5, response 1)
67. SBA could not find any private property owners on Black Point willing to enter into a lease agreement for a tower site. (Tr. 5, pp. 20-21)
68. Intervenor Joseph Raia offered the Pondcliff Condominium property at 97 West Main Street, East Lyme as a possible tower site. However, this site would not meet Cellco's or AT&T's coverage objectives. (Joseph Raia 1 and 2; Cellco 2, response 13; AT&T 3, response 15)
69. The Nebelung Farms, LLC property at 138 North Bridebrook Road, East Lyme was also considered as a possible tower site. However, this site would not meet AT&T's or Cellco's coverage objectives. (AT&T 3, response 17; Cellco 2, response 14)
70. T-Mobile has proposed three new towers in the neighboring community of Old Lyme: Docket No. 391 – 232 Shore Road; Docket No. 392 – 387 Shore Road; and Docket No. 393 – 61-1 Buttonball Road. While Cellco and AT&T have intervened in the Docket No. 391 proceeding, none of these three sites would meet or assist in meeting Cellco's or AT&T's coverage objectives at the proposed 49 Brainerd Road, East Lyme site. (Cellco 2, response 15; AT&T 3, response 17)
71. Per Council suggestion, AT&T and Cellco investigated the possibility of a tower in the vicinity of Route 156 between the intersection of Black Point Road and west to near Park Place. Cellco's engineers modeled this hypothetical location with an antenna height up to 199 feet above ground level and determined that the site could not satisfy the coverage objectives. AT&T's engineers modeled this location and determined that it would provide redundant coverage because of a nearby existing site, and the coverage provided would not be equal to or better than that of the proposed site. (Cellco 5, response 1; AT&T 11, response 1)
72. Per Council suggestion, AT&T and Cellco investigated the possibility of a hypothetical two-tower solution, each approximately 75-feet tall. One tower would be located on Town property in the middle of Black Point. The other tower would be located to the northeast on church property on Central Avenue on Black Point. While this configuration could provide coverage for Cellco for most of Black Point, portions of Route 156, and east of Fairhaven Road, significant portions of Route 156, west of Fairhaven Road, and the entire Giant's Neck area would remain uncovered. An additional cell site to the north or northwest of the proposed site would be required to meet Cellco's coverage objectives. AT&T's engineers determined that this two-tower configuration would not provide adequate coverage because 0.6 square miles would have less than acceptable in-building coverage when compared to the proposed site. (Cellco 5, response 2)
73. Per Council suggestion, AT&T and Cellco also investigated the possibility of a hypothetical two-tower solution, with each tower at least 20 to 30 feet shorter than the proposed tower. One tower would be located in the vicinity of Giants Neck and one on Black Point. Upon investigation by Cellco's engineers, it was determined that both sites are located too far south to cover the gaps along portions of Route 156. AT&T's engineers determined that such a site would provide redundant coverage and would not meet its coverage objectives. (Cellco 5, response 5; AT&T 11, response 7)
74. Microcells and repeaters are not viable technological alternatives for providing coverage to the identified coverage gap. Microcells and repeaters are low-power sites that are limited in coverage and capacity. They are generally used for covering an area less than half a mile or for providing service in buildings. (SBA 1, p. 6)

75. While it might be possible to provide coverage to Black Point using a distributed antenna system (DAS), such a system could not meet Cellco's other coverage objectives, which include significant portions of Route 156, parts of the Amtrak rail line, and local roads as far west as the Giants Neck and Rocky Neck State Park areas. Similarly, DAS might work for Black Point for AT&T, but it could not meet AT&T's coverage needs for Route 156, around the Giants Neck area, and the Amtrak rail line. (Cellco 5, response 4; AT&T 11, response 4)

Facility Description

76. The proposed site is located on a 51-acre parcel at 49 Brainerd Road in East Lyme. The parcel, owned by Christopher Samuelsen, contains a residence. This site is depicted on Figure 1. (SBA 1, p. 2)
77. The property is classified in the R-40 residential district. The Town's zoning regulations permit telecommunication towers in R-40 districts, subject to issuance of a Special Permit. (SBA 1, p. 14; SBA 1a – Town of East Lyme Zoning Regulations, Section 31)
78. The proposed tower site is located in the northern portion of the property. The site is mostly undeveloped and wooded with deciduous hardwood species with an average tree canopy height of 50 feet. (SBA 1, Attachment I)
79. The proposed facility would consist of a 170-foot above ground level (agl) monopole within a 100-foot by 100-foot leased area. The tower would be constructed in accordance with the American National Standards Institute TIA/EIA-222-G "Structural Standards for Steel Antenna Towers and Antenna Support Structures". (SBA 1, p. 2; Tr. 1, p. 17)
80. The proposed tower would be located at approximately 41° 18' 30.30 north latitude and 72° 13' 26.10 west longitude at an elevation of 21 feet above mean sea level (amsl). This would result in a tower height of 191 feet amsl. (SBA 1, Tabs B and O)
81. The tower would be designed for a total of four carriers. (SBA 1, Tab B; Tr. 1, p. 36)
82. AT&T would initially install six panel antennas on T-arms at a centerline height of 167 feet agl. Cellco would install 12 panel antennas on a low-profile platform at a centerline height of 147 feet agl. (Cellco 2, response 4; AT&T 3, response 5; SBA 1, p. 8)
83. Cellco prefers to use a low-profile platform, but could use T-arms if required. (Cellco 2, response 4)
84. T-Mobile expressed an interest in co-locating at the 157-foot level of the tower, but did not intervene in the proceeding. T-Mobile has a lease with SBA. (SBA 1, p. 2; Tr. 1, pp. 20, 68; Tr. 5, p. 18)
85. SBA has reserved the 157-foot level of the tower for T-Mobile. (Tr. 4, p. 94)
86. If a flush-mounted configuration is required, Cellco would need three levels of three antennas each, due to its cellular, PCS, and LTE services. The required heights would be 147 feet, 157 feet, and 167 feet in order to provide comparable coverage to a low-profile platform mount or T-arm mount configuration at 147 feet. (Cellco 2, response 6; Tr. 3, p. 114)
87. If a flush-mounted configuration is required, AT&T would also need three levels of three antennas each, due to its cellular, and future PCS and LTE services. These levels would be 177 feet, 187 feet, and 197 feet. (Tr. 3, pp. 139-140)

88. A 75-foot by 75-foot equipment compound enclosed by a eight-foot high chain link fence would be established at the base of the tower. AT&T would install a 12-foot by 20-foot equipment shelter within the compound. Cellco would install a 12-foot by 30-foot equipment shelter within the fenced compound. (AT&T 1, Tab B)
89. For emergency backup power, Cellco would rely on a propane-fueled generator to be located inside its equipment shelter. A 1,000 gallon propane tank would be located within the fenced compound, adjacent to the equipment shelter. This would provide approximately 70 to 75 hours of run time. (Cellco 2, response 9; Tr. 3, p. 92)
90. AT&T would utilize a diesel backup generator that would be located on a 4-foot by 11-foot concrete pad within the fenced compound. The diesel fuel tank would hold about 200 gallons and would provide three to four and one-half days of run time. A battery backup system would be used to prevent a reboot condition during the generator start-up delay period. (AT&T 3, response 19; Tr. 3, pp. 145-146)
91. Development of the site would require approximately 140 cubic yards of cutting. No fill would be required. (SBA 3, response 12)
92. Access to the proposed site would extend about 45 feet to the southwest from the end of Brainerd Road and then turn southeast and continue approximately 155 feet to the compound. The gravel drive would be approximately 10 to 12 feet wide with a parking/turnaround area on the northwest side of the compound. (SBA 1, Tab B; Tr. 1, p. 73)
93. SBA could put an entrance gate in front of the parking/turnaround area if requested. (Tr. 1, p. 75)
94. Utilities would be installed underground from pole number 2072 on Brainerd Road to the compound, generally following the path of the access drive. (SBA 1, Tab B)
95. The presence of ledge would be determined upon completion of the geotechnical investigation. If ledge is present, the preferred method of removal would be chipping instead of blasting. (SBA 3, response 5)
96. The tower setback radius would remain entirely within the subject property for all location options. (SBA 1, Tab B)
97. The nearest property boundary from the proposed tower is approximately 220 feet to the northwest (Raven property). The tower would be seasonally visible from this location. (SBA 1, Tabs B and I)
98. There are five residences within 1,000 feet of the proposed tower site. The nearest residence is the Abarca property, located approximately 376 feet to the north of the proposed tower site at 46 Brainerd Road, East Lyme. (SBA 1, Tab B and p. 15)
99. The proposed tower is approximately 500 feet to the south of Intervenor Russell Brown's property at 41 Brainerd Road. (SBA Late File Aerial Photograph; SBA 1, Tab B)
100. The area surrounding the proposed Brainerd Road site is residential in nature, with large wooded lots. The site area is at the very end of Brainerd Road on a large parcel that abuts the Amtrak rail line located approximately 1,100 feet to the east and also about 1,760 feet to the south. A 99-acre parcel owned by DEP and a 22-acre land trust parcel, both undeveloped, are to the west of the proposed site. (SBA 3, response 11; SBA 1, Tab B)

101. In addition, the Millstone power plant is located approximately 2.9 miles to the east of the proposed facility. (SBA 3, response 11; SBA 1, Tab B)

102. The estimated construction cost of the proposed facility, not including the carrier's co-locations, is:

Tower and foundation costs (inc. installation)	\$97,000
Site development costs	\$73,000.
Utility installation costs	\$25,000.

Total	<u>\$ 195,000.</u>
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(SBA 1, p. 18)

103. The estimated construction cost of Cellco's co-location at the proposed facility is:

Cell site radio equipment	\$450,000.
Platform, antennas and coax	\$70,000.
Power systems (inc. generator and fuel tank)	\$50,000.
Equipment shelter	\$50,000.
<u>Misc. site costs (i.e. site prep. and restoration)</u>	<u>\$7,500.</u>

Total	<u>\$627,500.</u>
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(Cellco 2, response 18)

104. The estimated construction costs of AT&T's co-location at the proposed facility is:

Antennas	\$7,400.
<u>Radio Equipment</u>	<u>\$140,000.</u>

Total	<u>\$147,400.</u>
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(Tr. 3, p. 143)

105. A two-tower solution would roughly double the cost to SBA. It would also double the cost to AT&T and Cellco because each carrier would have two co-locations instead of one. (Tr. 5, p. 23; Cellco 5, response 3)

Alternate Sites on the Subject Property

106. Three alternative locations on the 49 Brainerd Road property were identified during the proceeding. Two of these locations were suggested by Intervenor Russell Brown and one by SBA. These alternative locations are listed as follows:

Alternative Site	Approx. Distance and Direction from Proposed Site	Ground Elevation (amsl)	Tower Height (amsl)
Russell Brown Option No. 1	500 feet to South	11 feet	181 feet
Russell Brown Option No. 2	150 feet to South	20 feet	191 feet
SBA Hybrid Site	310 feet to South	15 feet	185 feet

(SBA Late File Aerial Photograph; Russell Brown 1 and 2; Tr. 4, pp. 127-128)

- 107. The property owner prefers Russell Brown Option No. 2 because the Russell Brown Option No. 1 may impact a well on his property. (Tr. 3, p. 45)
- 108. The SBA Hybrid Site's access drive would not be located near the well, so any impact on the well would be minimal. (Tr. 5, p. 18)
- 109. Regardless of which site option is chosen, the property owner prefers to have access for the site leave his driveway in the vicinity of the Russell Brown Option No. 2 location. This would prevent vehicular traffic from tripping an alarm that detects vehicles entering his driveway. (Tr. 1, pp. 54-56)
- 110. If the tower is approved at the subject property, Mr. Brown's first preference for its location is at the SBA Hybrid Site. His second preference is his Option No. 1 location with minor southwesterly footprint adjustments made to avoid impinging on the identified wetlands, and his third preference would be his Option No. 2. (Tr. 4, pp. 18-20; Revision of Testimony dated November 22, 2010)
- 111. If the tower is approved at the subject property, the First Selectman of East Lyme generally supports Russell Brown Option No. 2. (Tr. 4, p. 28)

Environmental Considerations

- 112. The proposed facilities 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. (SBA 1, Tab K)
- 113. No Federally threatened or endangered species or State endangered, threatened or special concern species are present at the proposed site, even if the tower were shifted 500 feet to the south. (SBA 1, Tab K; Tr. 3, p. 28)
- 114. The entire East Coast, including the subject property, is located in a migratory bird flyway. (Tr. 4, p. 92)

115. The proposed project would be consistent with the U.S. Fish and Wildlife Service Guidelines for Communications Towers. (Tr. 4, p. 92)
116. Approximately 17 trees with diameters of six inches or more at breast height (dbh) would be removed to develop the proposed site or the Russell Brown Option No. 2. (SBA 1, p. 9; Tr. 4, p. 91)
117. The Russell Brown Option No. 1 location would require the removal of 23 trees with diameters of six inches or more dbh. (Tr. 4, p. 91)
118. There is one wetland system approximately 50 feet east of the northeast corner of the proposed equipment compound. Thus, some construction would occur within the Town's 100-foot Upland Review Area. (SBA 1, p. 16; Tr. 1, p. 39)
119. The facility has a relatively small footprint (a compound area of 5,625 square feet); it is buffered from the wetland by 50 feet or more; and its stormwater runoff would not drain towards the wetland. Thus, no adverse impact to the wetland is expected. (SBA 1, Tab J; Tr. 1, p. 39)
120. The Russell Brown Option No. 2 location has a wetland buffer of approximately 50 feet, similar to the proposed location. (Tr. 3, p. 34)
121. The Russell Brown Option No. 1 location would not have a wetland buffer. The wetland boundary would extend approximately 8 to 10 feet into the eastern side of the equipment compound. (SBA Post-Hearing Interrogatories, Exhibit A)
122. Developing a facility at the Russell Brown Option No. 1 location would require approximately 500 to 1,000 square feet of wetlands to be filled. (SBA Post-Hearing Interrogatories, Exhibit A)
123. If the Russell Brown Option No. 1 site were shifted to the west to avoid wetland impacts, the tower setback radius would move closer to the existing home on the subject property and the access would impact an existing well on that property. (Tr. 5, p. 18)
124. The SBA Hybrid Site would have a wetland buffer of approximately 36 feet. Development at this site would result in no likely adverse impacts to wetlands. (SBA Post-Hearing Interrogatories, Exhibit A)
125. Even with a shift of 500 feet to the south, the project is expected to comply with the CCMA. (Tr. 3, pp. 28-29)
126. Obstruction marking and lighting of the tower would not be required. (SBA 1, p. 17)
127. Cellco's backup generator is expected to meet state noise standards at the property boundary. Under normal conditions, the generator would only run about 20 to 30 minutes per week during daylight hours for testing purposes. (Cellco 2, response 17)
128. AT&T's backup generator is also expected to meet state noise standards at the property boundary. Typically, the generator would run about 20 minutes per week for testing purposes. (AT&T 3, response 20)
129. The noise levels from both generators are not additive. (Tr. 3, p. 107)

130. The cumulative worst-case maximum power density from the radio frequency emissions from the operation of AT&T's and Cellco's proposed antennas is 23.3 percent of the standard for Maximum Permissible Exposure, as adopted by the FCC, at the base of the proposed tower. This calculation 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, which creates the highest possible power density levels. Under normal operation, the antennas would be oriented outward, directing radio frequency emissions away from the tower, thus resulting in significantly lower power density levels in areas around the tower. (Council Administrative Notice 1 and 2; AT&T 3, response 14; Cellco 2, response 11)
131. A two-tower configuration involving two 75-foot towers on Black Point would not have an adverse impact on coastal resources (Tr. 5, p. 19)
132. A two-tower configuration would not have a significant risk of bird strikes and would also be consistent with the U.S. Fish and Wildlife Guidelines for the siting and construction of towers to minimize bird strikes. (Tr. 5, p. 20)

Visibility

133. The tower would be visible year-round on land from approximately 63 acres within a two-mile radius of the site. The tower would be seasonally visible from approximately 45 acres on land within a two-mile radius of the site. (SBA 1, Tab I)
134. The majority of the year-round visibility of the tower is over open water. Approximately 2,219 acres, or 97 percent of the 2,282 acres of year-round visibility, is over Long Island Sound and the Pattagansett River. (SBA 1, Tab I)
135. Areas of year-round visibility of the tower extend to the immediate shoreline and include select portions of Old Black Point Road, Barone Road, Indian Rock Road, Fairhaven Road, Marshfield Road, and Gada Street. A total of 31 residences on these roads would have a year-round view of the tower. (SBA 1, Tab I)
136. The majority of the year-round views of the tower also feature existing overhead electrical infrastructure associated with the Amtrak rail corridor and overhead utilities on distribution poles. (SBA 1, Tab I)
137. A total of approximately 20 additional homes located on select portions of Old Black Point Road, Barone Road, Sunnyside Drive, Gada Street, Marshfield Road, and Birch Street would have seasonal views of the tower. (SBA 1, Tab I)

138. 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
1. Old Black Point Road adjacent to house #188.	Yes	80 feet – above trees	1.09 miles northwest
2. Old Black Point Road adjacent to house #158.	Yes	80 feet - above trees	0.82 miles northwest
3. Old Black Point Road adjacent to house #140.	Yes	85 feet – above trees	0.67 miles northwest
4. Old Black Point Road adjacent to house #108.	Yes	85 feet – above trees	0.49 miles northwest
5. Old Black Point Road adjacent to house #74	Yes	55 feet - above trees	0.32 miles northwest
6. Old Black Point Road adjacent to house #44.	Yes	70 feet – above trees	0.37 miles southwest
7. Intersection of Barone Road and Indian Rock Road.	Yes	60 feet – above trees	0.39 miles west
8. Sunnyside Drive adjacent to house #18.	Yes	10 feet – above trees	0.84 miles southwest
9. Fairhaven Road at Gada Street	Yes	20 feet – above trees	0.51 miles southwest
10. East Lyme Land Conservancy hiking trail	Yes	10 feet – above trees	0.15 miles northeast
11. Brainerd Road adjacent to house #23.	No	None	0.25 miles southeast
12. Old Black Point Road.	No	None	1.18 miles northwest
13. Sunrise Avenue at Indianola Road.	No	None	1.04 miles northwest
14. Crescent Avenue at Prospect Street Avenue.	No	None	1.08 miles southwest
15. Fairhaven Road at Black Point Road.	No	None	0.98 miles southwest
16. Old Black Point Road at Pleasant Drive.	No	None	0.49 miles southwest
17. Fairhaven Road over Pattagansett River.	No	None	0.48 miles southwest
18. Giant's Neck Road.	No	None	0.75 miles northeast
19. Route 156 west of Park Place	No	None	0.84 miles southwest

(SBA 1, Tab I)

139. The proposed facility would be located approximately 2,560 feet north of Long Island Sound. Visibility of the proposed tower from specific locations on Long Island Sound is presented in the table below:

Location	Visible	Approx. Portion of Tower Visible	Approx. Distance to Tower
1. Long Island Sound West of North Brother Island	Yes	10 feet – above trees	1.63 miles northeast
2. Long Island Sound Overlooking South Brother Island	Yes	56 feet - above trees	1.59 miles northeast
3. Long Island Sound	Yes	62 feet – above trees	1.59 miles northeast
4. Long Island Sound	Yes	51 feet – above trees	0.79 miles northeast
5. Long Island Sound	Yes	47 feet - above trees	0.99 miles northeast
6. Long Island Sound Overlooking Long Rock	Yes	63 feet – above trees	1.32 miles northeast
7. Long Island Sound Overlooking Griswold Island	No	None	1.26 miles north
8. Long Island Sound Overlooking Griswold Island	Yes	60 feet – above trees	1.36 miles north
9. Long Island Sound	Yes	69 feet – above trees	1.32 miles northwest
10. Long Island Sound	Yes	20 feet – above trees	1.80 miles north
11. Long Island Sound	No	None	1.80 miles northwest
12. Long Island Sound	Yes	10 feet – above trees	1.76 miles southwest
13. Long Island Sound	Yes	20 feet – above trees	1.98 miles northwest

(SBA 8)

140. No views of the tower are expected from Rocky Neck State Park. (Tr. 1, p. 77)
141. The proposed tower is expected to be visible from Intervenor Russell Brown’s residence. (Tr. 4, p. 16)
142. The tower would be visible year-round from select portions of the hiking trail located on the East Lyme Land Conservancy property to the southwest of the proposed facility. The views would not be continuous, but up to several hundred feet of the trail would have seasonal views of the tower through the trees. (SBA 1, Tab I, p. 5; Tr. 1, p. 18)
143. There are no state or locally-designated scenic roads within a two-mile radius of the proposed tower. (SBA 1, Tab I)
144. The tower is within the Coastal Management Zone. (Tr. 1, p. 24)
145. The panoramic view shows the coastline from Rocky Neck to Giant’s Neck is relatively unsettled and unobstructed. (SBA 8)
146. Areas within 0.5 miles of the proposed tower with year-round views of the tower include Town open space on Old Black Point Road and southeast of Brainerd Road, The Nature Conservancy Pattagansett Marshes, and the outflow of the Pattagansett River. (SBA 1, Tab I)
147. No landscaping is proposed in the application. However, to reduce the visual impact of the compound, SBA is willing to consider native plantings around the compound as part of the Development and Management Plan. (SBA 1, Tab B; Tr. 1, pp. 75-77; Tr. 2, p. 77)

148. SBA considered alternative or stealth tower designs such as a tree tower (monopine), but is concerned that a monopine would extend too far above the tree line to blend in effectively. (Tr. 1, pp. 27-28)
149. A steel monopole, as proposed, tends to dull in a short period of time and blend in better against the sky as a background. (Tr. 1, p. 28)
150. SBA also considered a configuration with two shorter towers, roughly 100 to 110 feet tall, but determined the two visual footprints might extend farther into residential areas. (Tr. 1, p. 29)
151. Shifting the tower 500 to the south (i.e. utilizing the Russell Brown Option No. 1) would reduce the visual impact of the tower from the hiking trail at the East Lyme Land Conservancy. However, it would move the views of the tower closer to the shoreline and homes to the south. Approximately one or two additional homes would have views of the tower. Visibility from open water on Long Island Sound would increase by 200 acres. (Tr. 1, pp. 19, 37; Tr. 3, p. 1)
152. Russell Brown Option No. 1 tower location would have less visual impact on the Brainerd Road residents than the Russell Brown Option No. 2 location. (Tr. 4, p. 10)
153. Visibility of the tower at the SBA Hybrid Site from specific locations on Long Island Sound is presented in the table below:

Location	Visible	Approx. Portion of Tower Visible	Approx. Distance to Tower
1. Long Island Sound West of North Brother Island	Yes	37 feet – above trees	1.63 miles northeast
2. Long Island Sound Overlooking South Brother Island	Yes	79 feet - above trees	1.59 miles northeast
3. Long Island Sound	Yes	80 feet – above trees	1.59 miles northeast
4. Long Island Sound	Yes	63 feet – above trees	0.79 miles northeast
5. Long Island Sound	Yes	65 feet - above trees	0.99 miles northeast
6. Long Island Sound Overlooking Long Rock	Yes	75 feet – above trees	1.32 miles northeast
7. Long Island Sound Overlooking Griswold Island	No	None	1.26 miles north
8. Long Island Sound Overlooking Griswold Island	Yes	85 feet – above trees	1.36 miles north
9. Long Island Sound	Yes	85 feet – above trees	1.32 miles northwest
10. Long Island Sound	Yes	40 feet – above trees	1.80 miles north
11. Long Island Sound	No	None	1.80 miles northwest
12. Long Island Sound	Yes	10 feet – above trees	1.76 miles southwest
13. Long Island Sound	Yes	20 feet – above trees	1.98 miles northwest

(SBA 8)

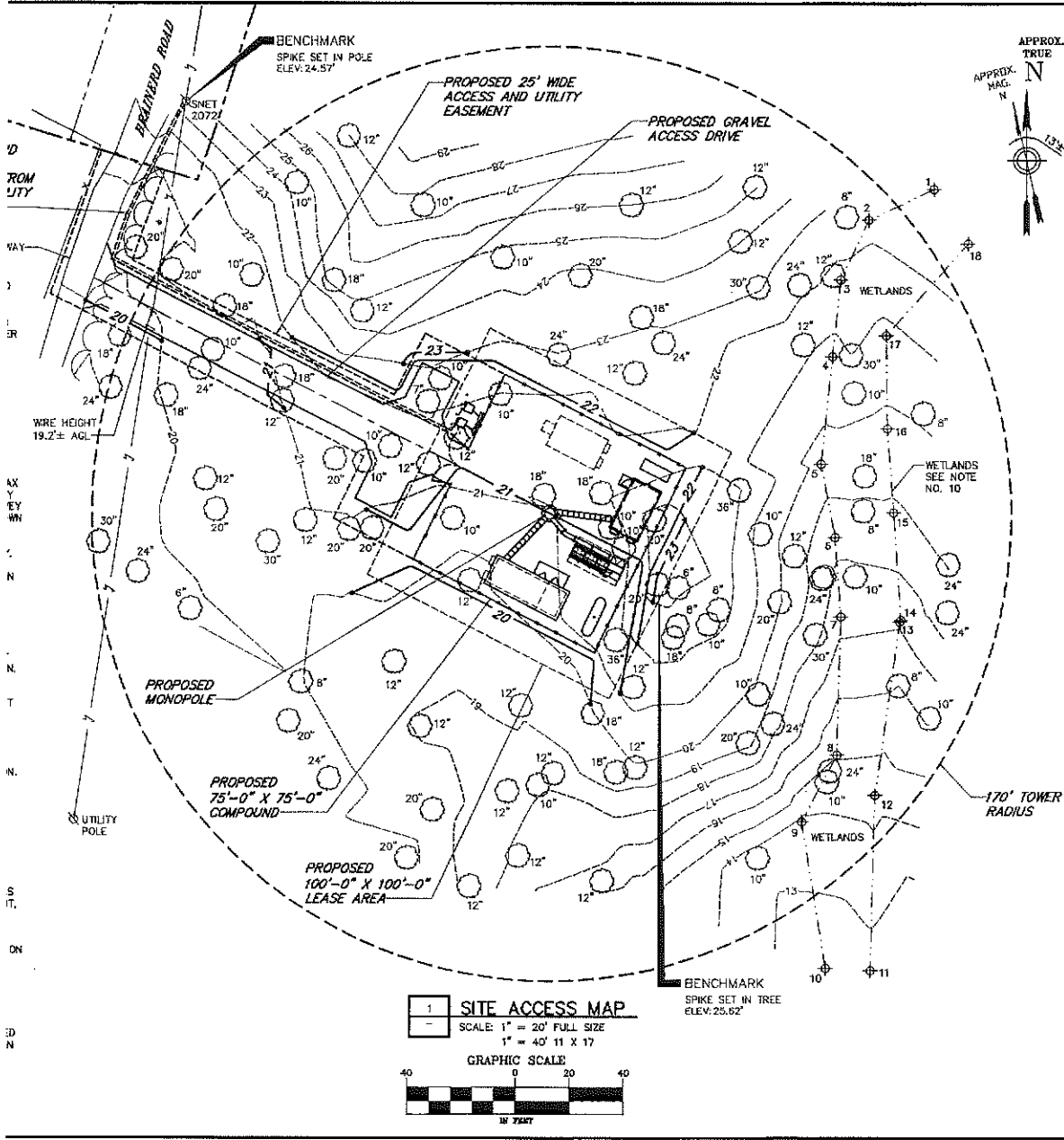


Figure 1: Location of Proposed Site at 49 Brainerd Road, East Lyme (SBA 1, Tab B)



Figure 2: Location of Proposed Site at 49 Brainerd Road, East Lyme (SBA 1, Tab B)

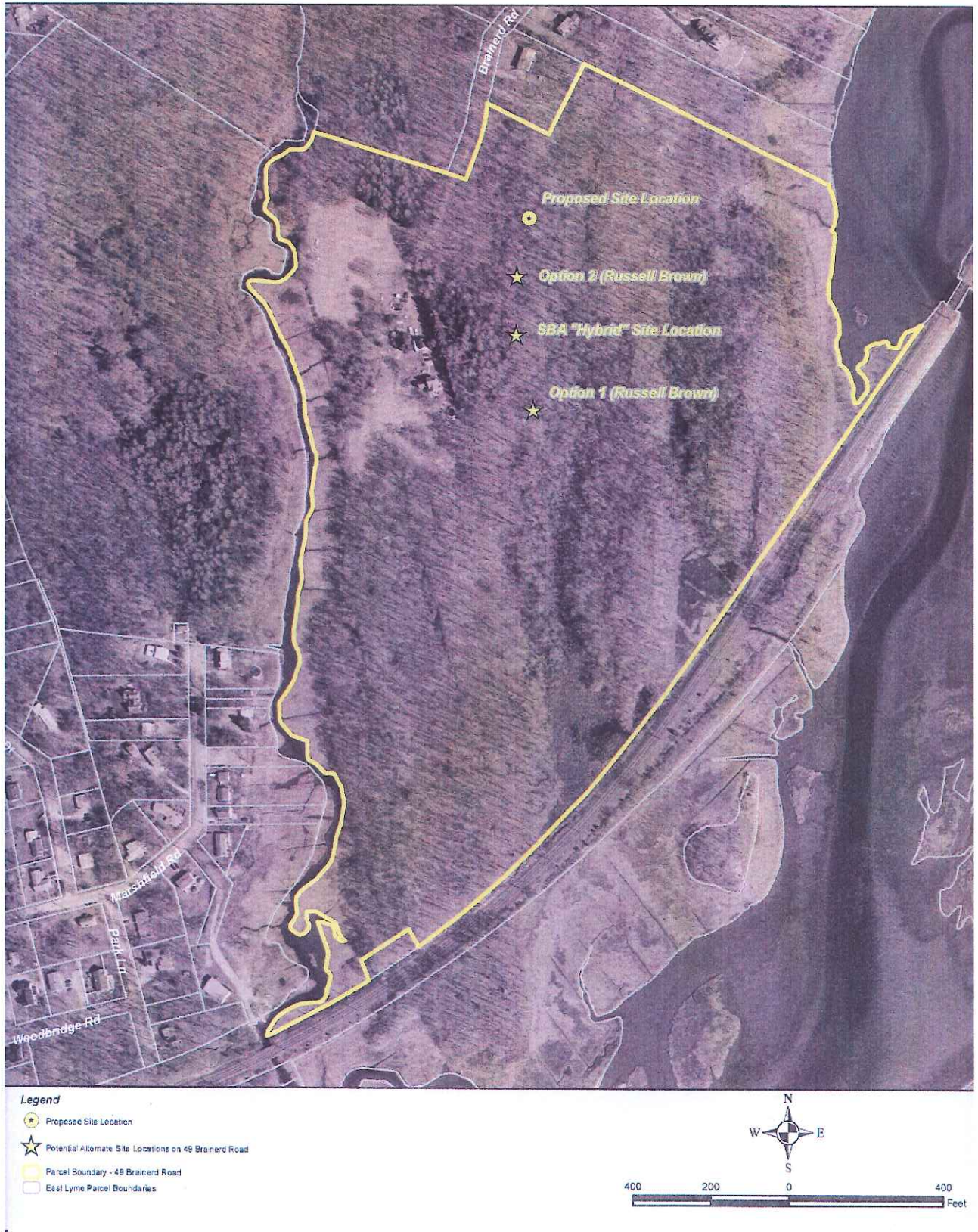


Figure 3: Location of Proposed and Alternate Sites on Subject Property. (SBA Late File Aerial Photograph)

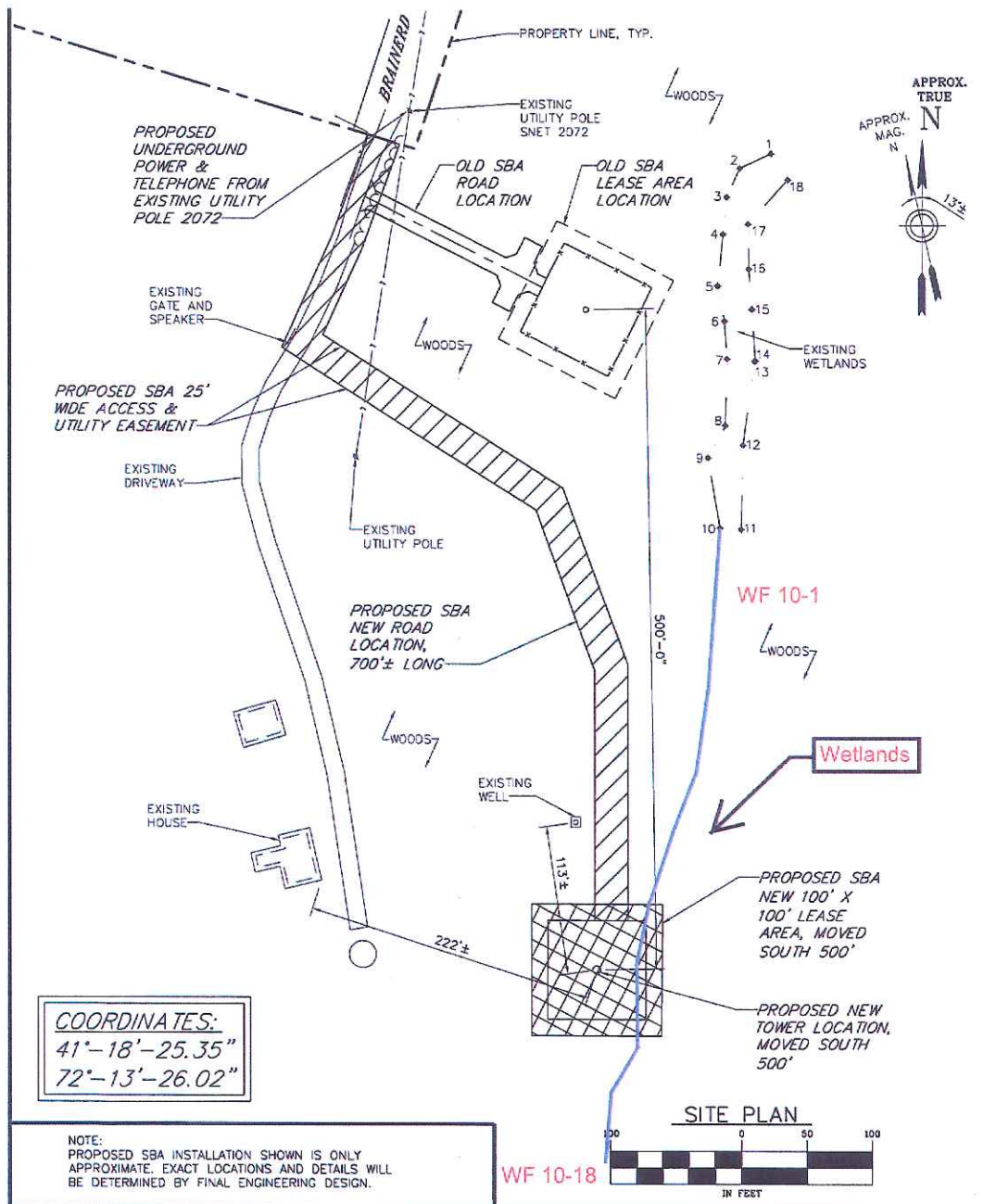


Figure 4: Location of proposed site and Russell Brown Option No. 1 site with wetlands (SBA Post-Hearing Interrogatories)

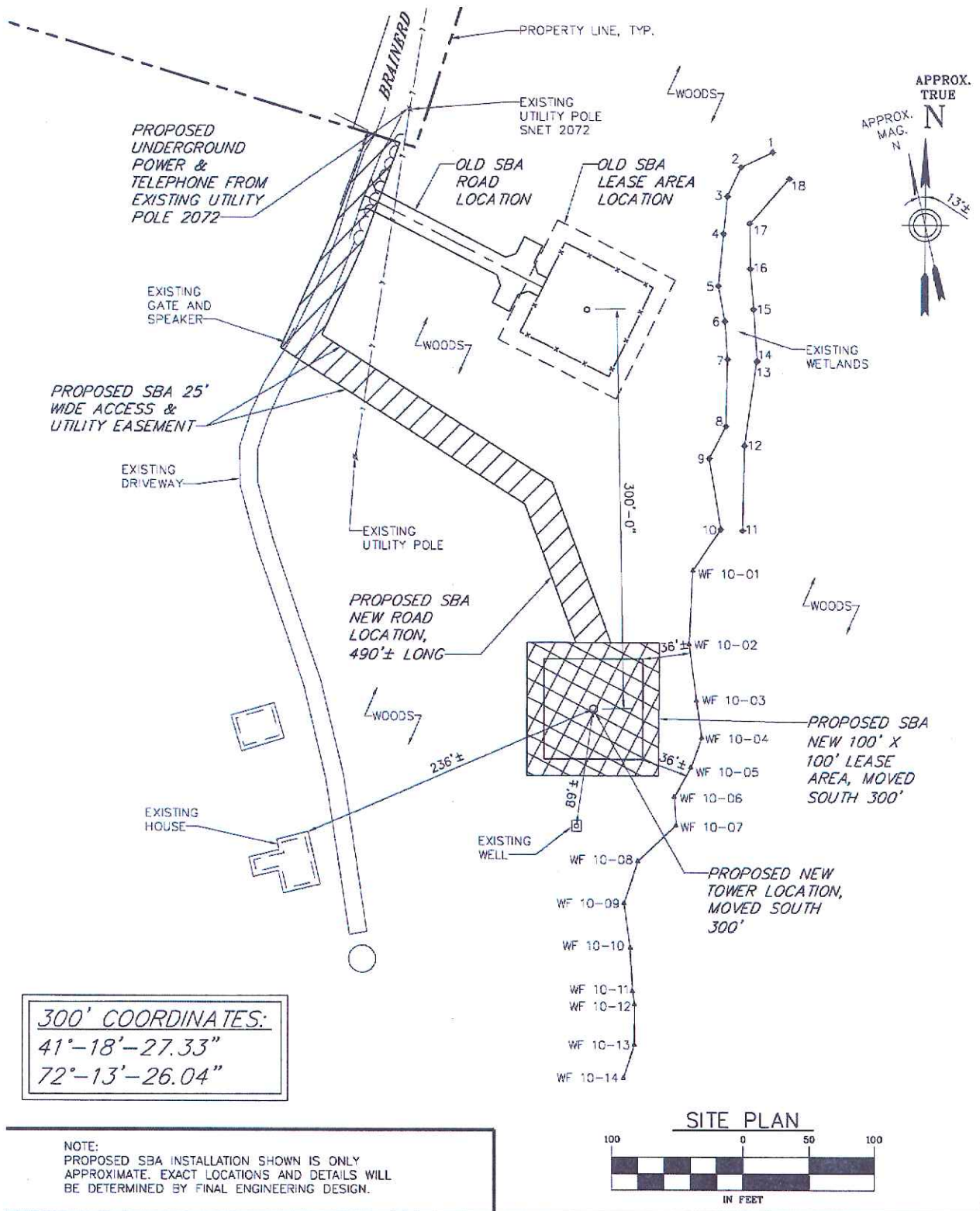


Figure 5: Location of Proposed Site and SBA Hybrid Site with wetlands (SBA Post-Hearing Interrogatories)

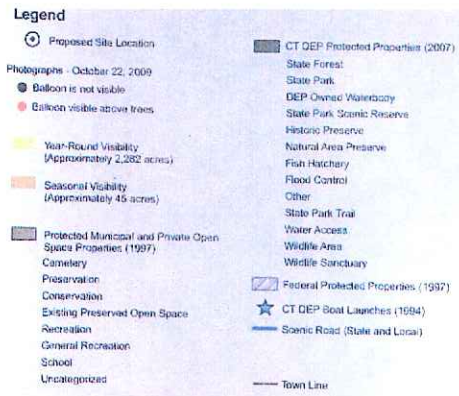
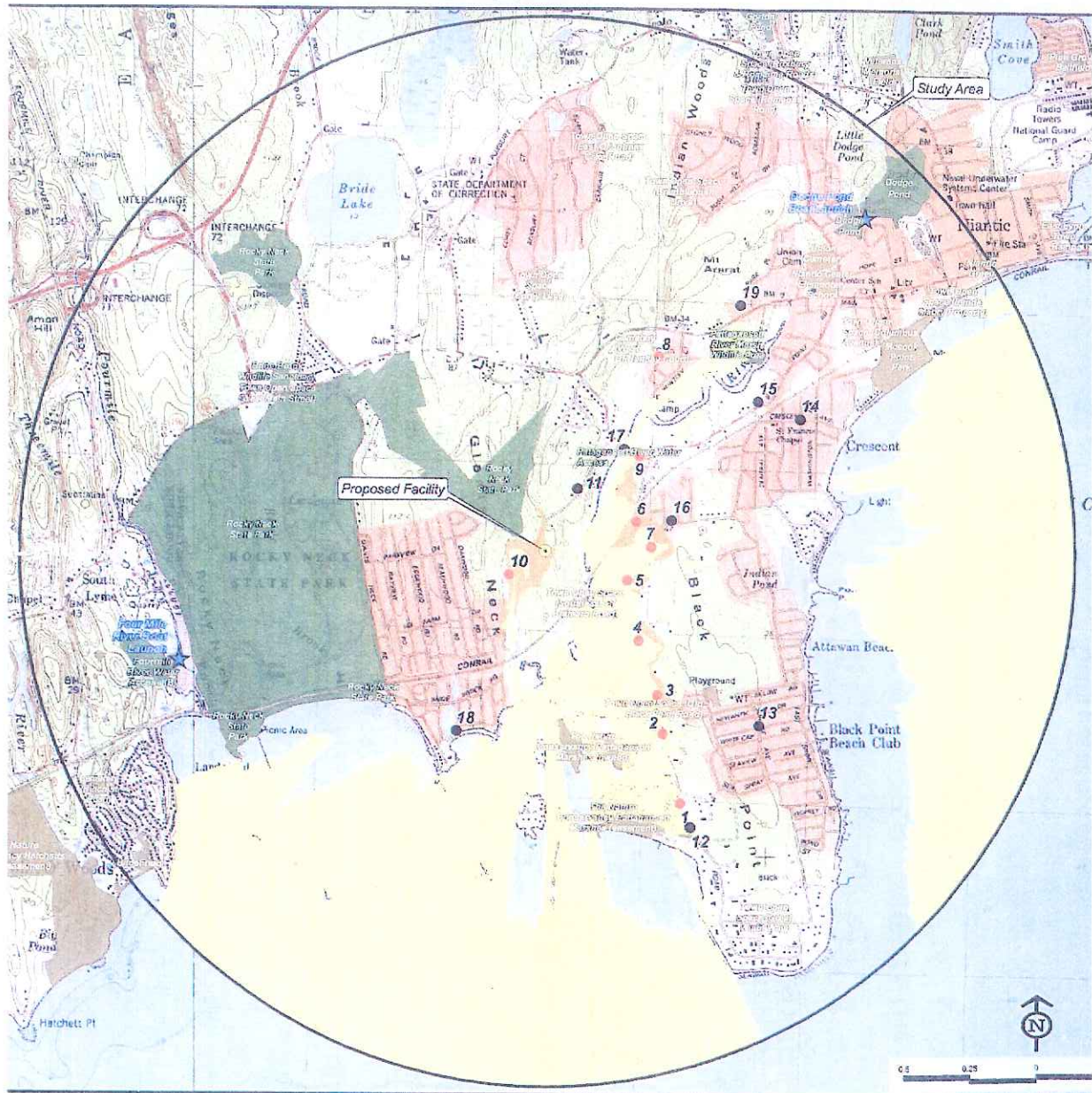


Figure 6: Projected visibility of proposed site. (AT&T 1, Tab 4)

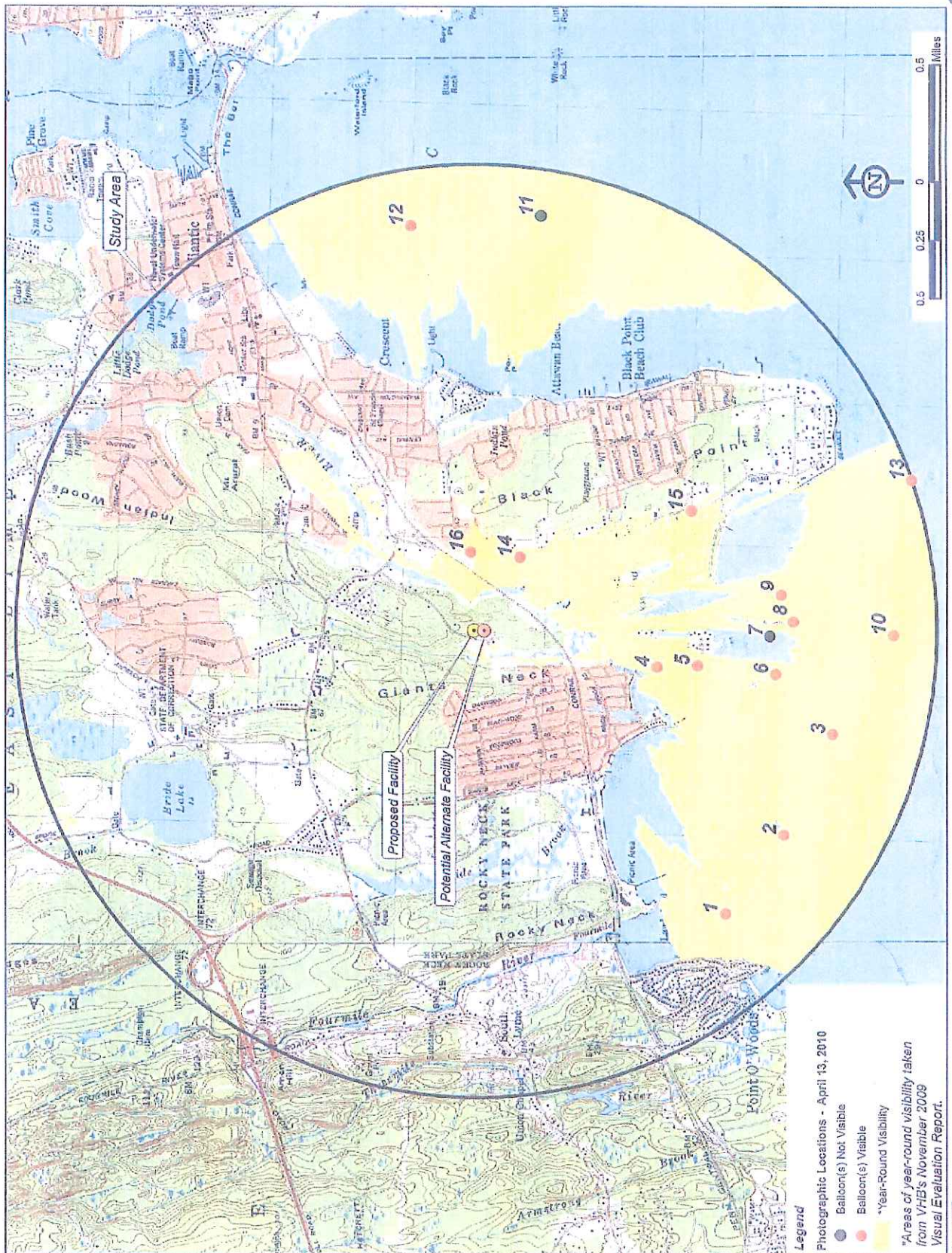


Figure 7: Projected visibility from Long Island Sound. (SBA 8)

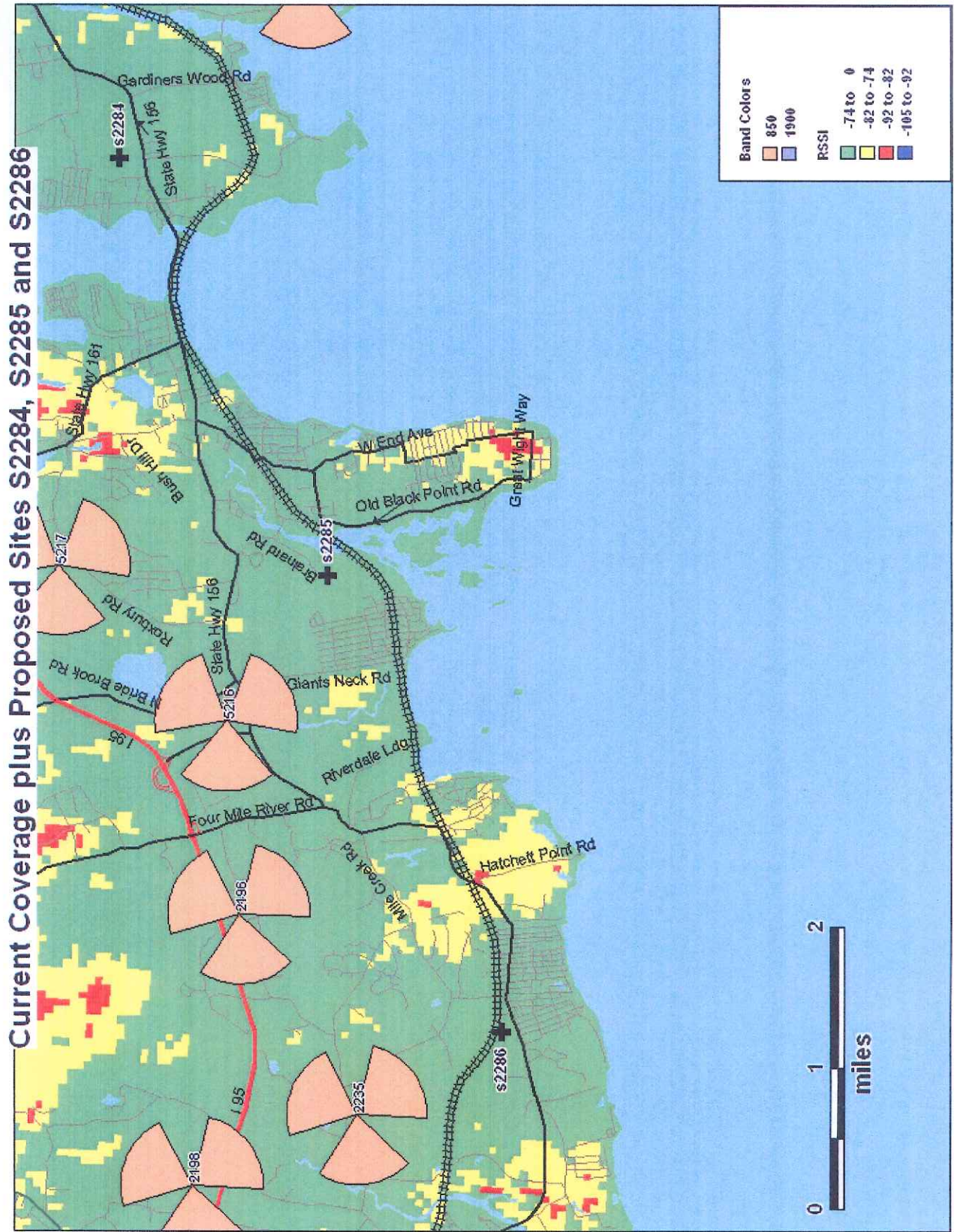


Figure 9: AT&T existing and proposed cellular coverage. (SBA 1, Tab F)

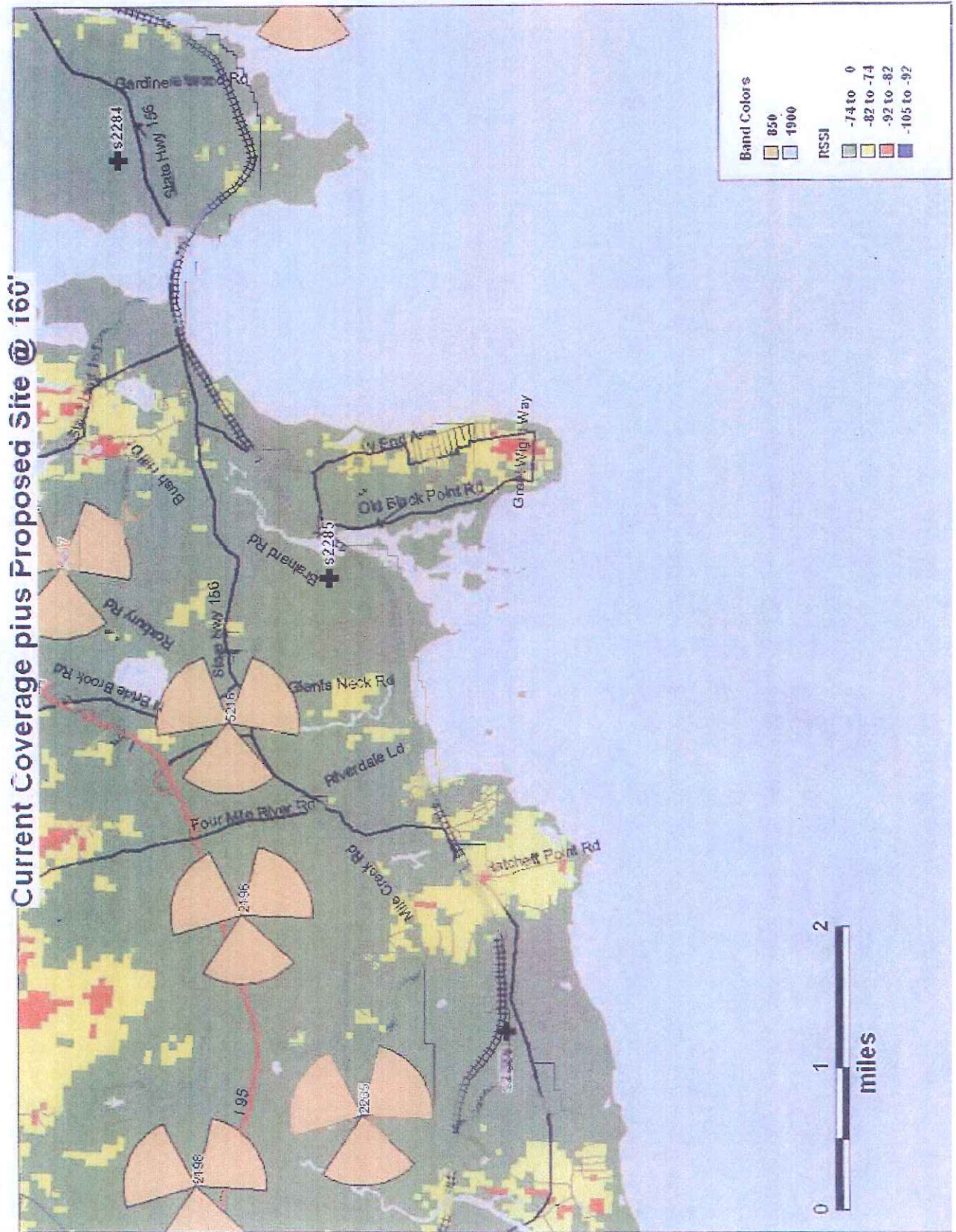


Figure 10: AT&T proposed cellular coverage with antennas mounted at 160 feet agl. (AT&T 3, response 10)

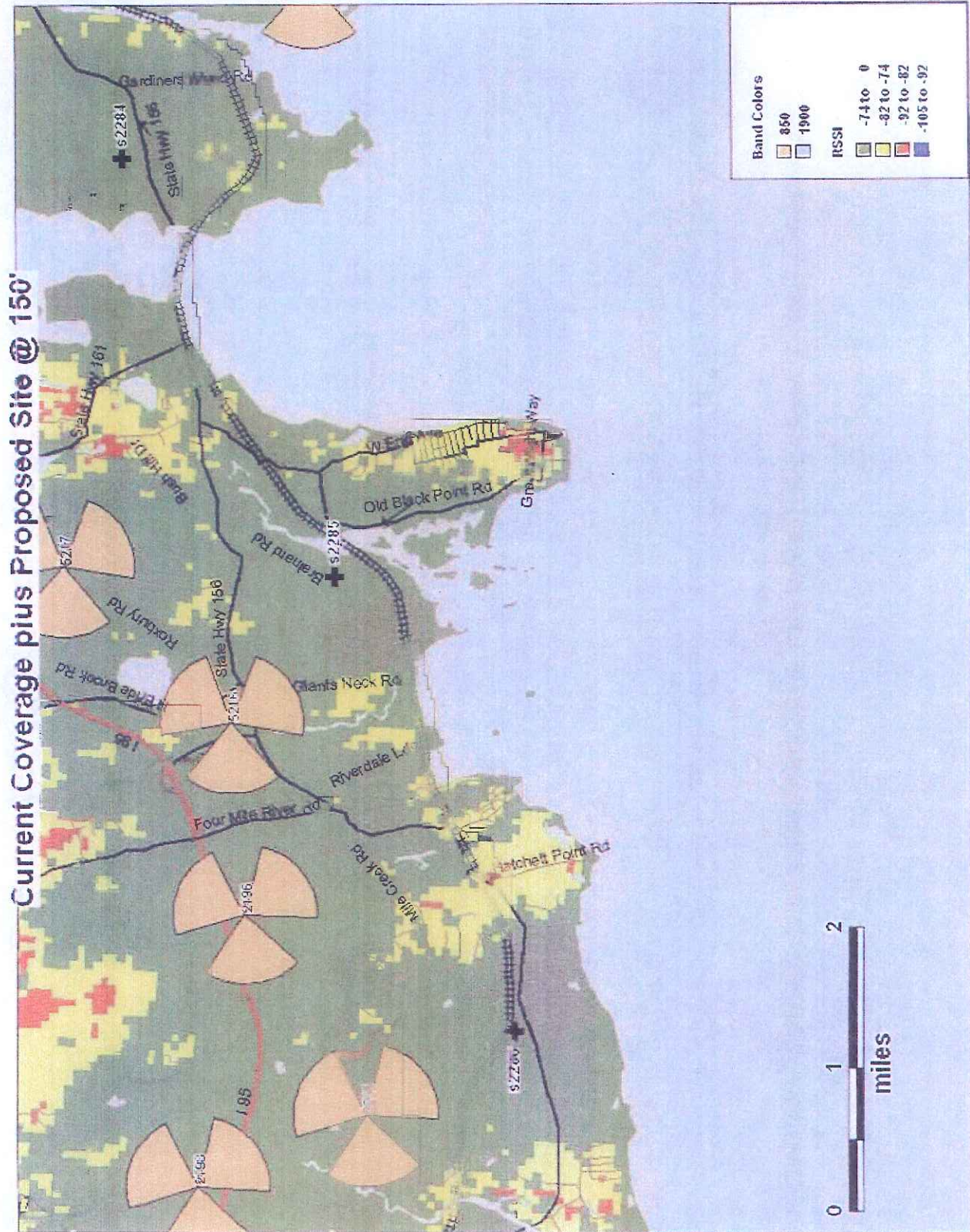


Figure 11: AT&T proposed cellular coverage with antennas mounted at 150 feet agl. (AT&T 3, response 10)

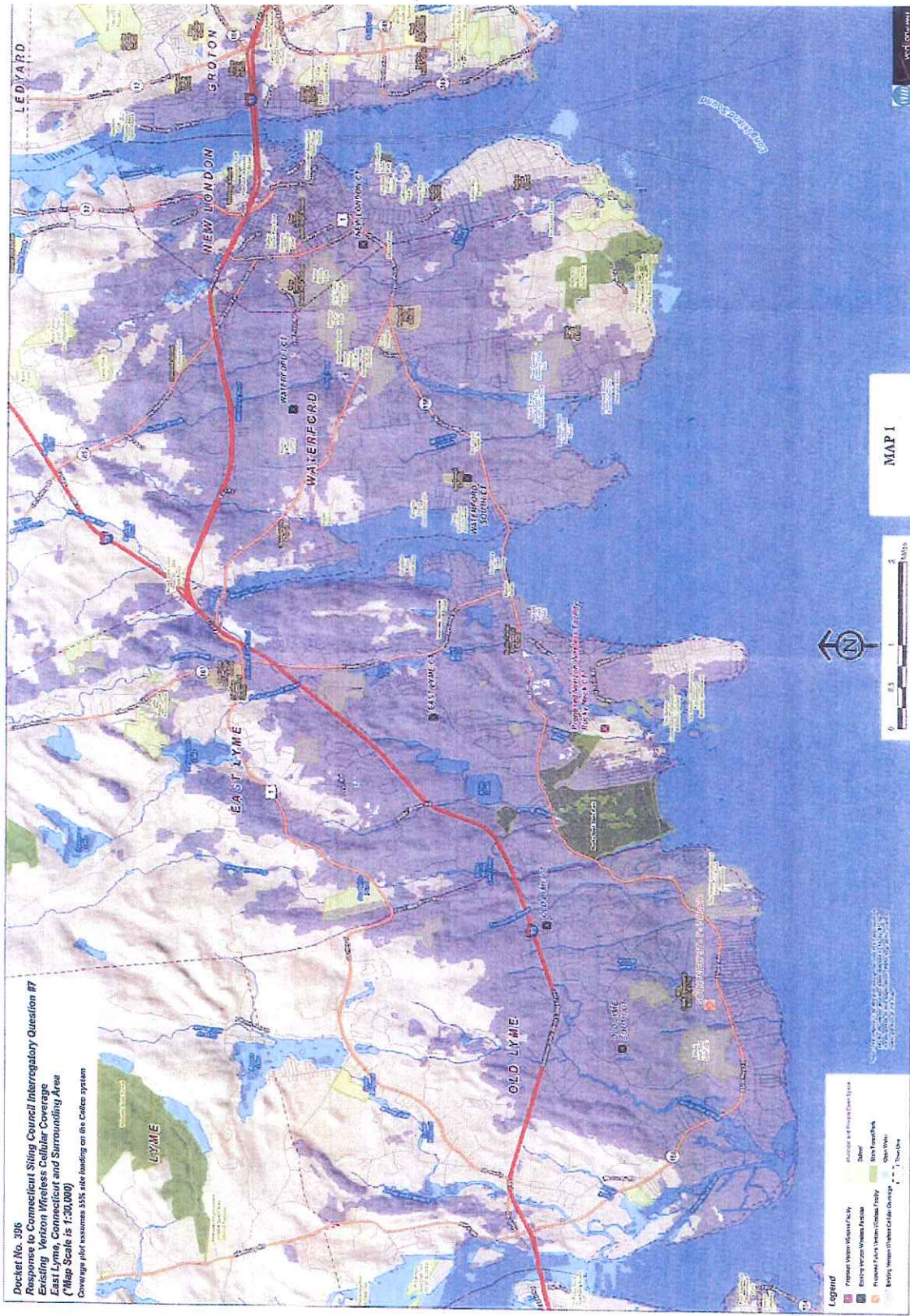


Figure 12: Cellco's Existing Cellular Coverage. (Cellco 2, response 7)

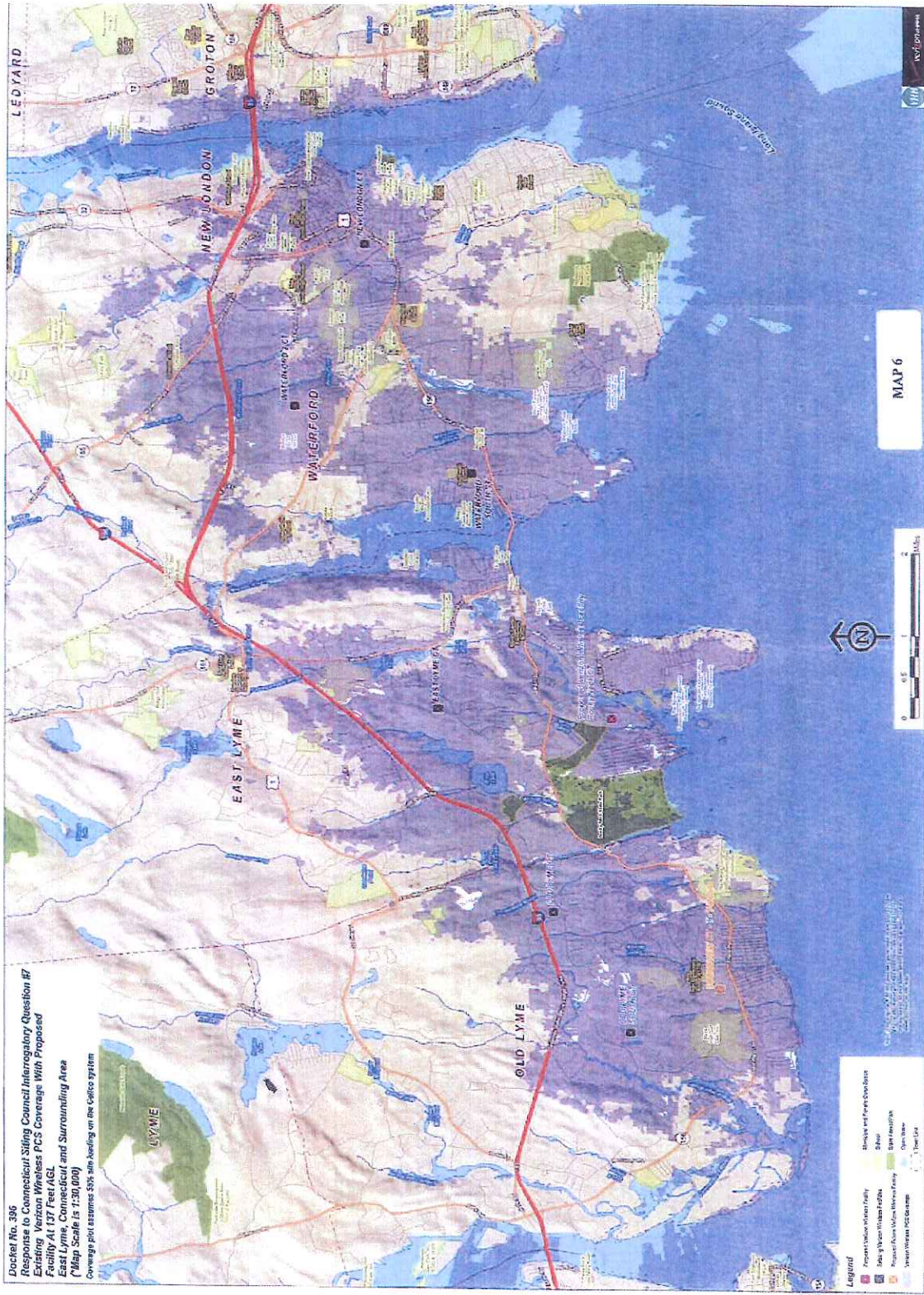


Figure 17: Cellco's Existing and PCS Coverage at 137 feet. (Cellco 2, response 7)

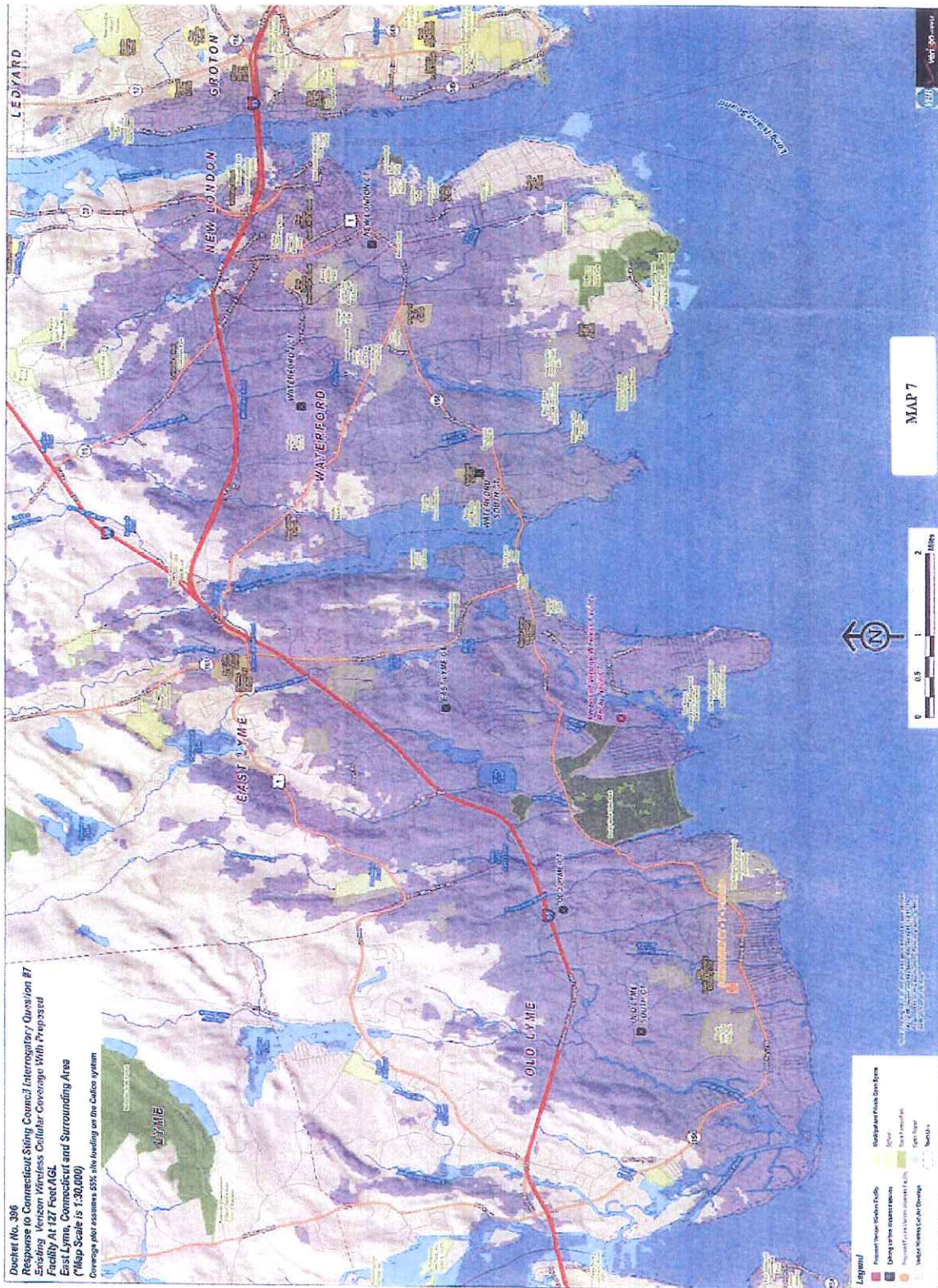


Figure 18: Cellco's Existing and Cellular Coverage at 127 feet. (Cellco 2, response 7)

DOCKET NO. 396 – SBA Towers II, LLC application for a } Connecticut
Certificate of Environmental Compatibility and Public Need for }
the construction, maintenance and management of a } Siting
telecommunications facility located at 49 Brainerd Road, Niantic }
(East Lyme), Connecticut. } Council

March 3, 2011

Opinion

On December 7, 2009, SBA Towers II, LLC (SBA) applied to the Connecticut Siting Council (Council) for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance and management of a wireless telecommunications facility to be located in the Town of East Lyme, Connecticut. SBA is seeking to develop a facility on property owned by Christopher Samuelsen. This property contains one residence.

The objective is to provide coverage along Route 156, the Amtrak corridor in East Lyme, as well as adjacent areas which are experiencing significant gaps in service. New Cingular Wireless PCS, LLC (AT&T) and Cellco Partnership d/b/a Verizon Wireless (Cellco) participated as intervenors in this proceeding to demonstrate their need for this facility. The Town of East Lyme (Town) and Friends of the Pattagansett participated in the proceeding as Parties. Russell Brown and Joseph Raia participated in this proceeding as intervenors.

SBA established a search ring for the proposed service area on April 2009. SBA, in consultation with AT&T, then searched for existing towers that could provide the required coverage. While eight existing towers were identified within a four-mile radius, none of those towers were found to meet AT&T's coverage objectives. AT&T then investigated 11 raw land sites, but such sites were rejected due to various issues such as the property owners not being interested, the sites not meeting AT&T's coverage objectives, or difficulty obtaining access.

At its selected site, the 51-acre Samuelsen parcel, SBA would construct a 170-foot monopole and associated compound. The proposed tower location is in the northern portion of the subject property near the end of Brainerd Road. Underground utilities would be established from a utility pole on Brainerd Road. The tower would be designed to support the antennas of two additional carriers. Due to the size of the Samuelsen property, the tower setback radius would remain within the property boundaries. Accordingly, a design yield-point for the tower is not necessary. There is one wetland system approximately 50 feet east of the northeast corner of the proposed equipment compound. Thus, some construction would occur within the Town's 100-foot Upland Review Area. Development of the proposed site would require clearing of approximately 17 trees of six inches or greater in diameter at breast height (dbh).

The 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.

The proposed tower, which stands about 20 feet above mean sea level, would be visible year-round from approximately 63 acres within a two-mile radius of the tower. About 97 percent of this visibility is over open water. Areas of year-round visibility of the tower extend to the immediate shoreline of the Sound (about a half-mile away), and, somewhat closer, the mouth of the Pattagansett River, including a public access point to the water, marshes protected by the Nature Conservancy, and near-shore areas popular for recreation. On land, visibility includes

portions of Old Black Point Road, Barone Road, Indian Rock Road, Fairhaven Road, Marshfield Road, and Gada Street. A total of 31 residences on these roads would have a year-round view of the tower. The tower would also be visible year-round from select portions of the hiking trail located on the East Lyme Land Conservancy property to the southwest of the proposed facility. The tower would not be visible from Rocky Neck State Park.

The Council recognizes a need for coverage in this area by all the major carriers. Because we were concerned about the visual impacts of the proposed tower location and height, we investigated not only an original alternative in SBA's application on the subject property, but also further suggested alternatives during the proceeding on the subject property and others.

At the subject property, three alternative tower locations were considered, known as "Russell Brown Option No. 1", "Russell Brown Option No. 2", and the "SBA Hybrid." These are located 500 feet, 150 feet, and 310 feet south of the proposed site, respectively. All would offer mitigation possibilities for close-in visual impacts to the north of the proposed tower.

Russell Brown Option No. 1 would have no wetland buffer. The eastern side of the equipment compound would extend approximately 8 to 10 feet into wetlands. The Russell Brown Option No. 2 location has a wetland buffer of approximately 50 feet. The SBA Hybrid Site would have a wetland buffer of approximately 36 feet. No Federally threatened or endangered species or State endangered, threatened or special concern species are present at any of the three alternative sites on the subject property.

The Council also explored alternatives much farther afield. Three new unrelated towers had been proposed by T-Mobile in the neighboring town of Old Lyme. None of those towers was close enough to meet AT&T's or Cellco's coverage objectives. Another site in Old Lyme at 14 Cross Lane was considered, but it was also too far away to provide the necessary coverage in East Lyme and is no longer available for a tower. Intervenor Raia offered a site at the Pondcliff Condominium property at 97 West Main Street, but it proved unsatisfactory from an RF perspective. Likewise, Nebelung Farms, LLC property at 138 North Bridebrook Road was offered as a possible site but rejected on RF grounds.

T-Mobile was pursuing an unrelated tower site in East Lyme at Indian Woods Road that seemed a likely alternative. However, it did not meet AT&T's coverage objectives and was too close to an existing AT&T site.

Finally, the Council reviewed a possibility earlier rejected by SBA, which was to put the tower at one of four locations on a property at Giant's Neck Road known as assessor's parcel 10.3, 14-1, and owned by the Department of Environmental Protection (DEP). The site could work for both AT&T and Cellco from a coverage perspective. However, the DEP has indicated that the parcel is not available to lease for a telecommunications facility. The Town of East Lyme (Town) has sought to purchase this parcel or perform a land swap to obtain it, but has not been successful. The Town is no longer pursuing this option.

Ultimately, no available alternative site provided adequate coverage, minimized visibility, and afforded opportunities for co-location. In sum, the Council finds no feasible alternatives to the proposed site.

Nonetheless, the Council has made certain decisions to mitigate adverse visual impacts: first, to the north at the tower's immediate location; and second, to the east and south along the shores of the Pattagansett River and Long Island Sound.

Adjacent to the proposed tower is the East Lyme Land Conservancy hiking trail; several residences at the end of Brainerd Road are close nearby. The Council feels the tower would be a year-round visual intrusion to those areas. To mitigate such immediate adverse impacts, the Council will order that the tower be shifted significantly to the south.

Russell Brown Option No. 2, while south of the proposed site, is still too close to the hiking trail and nearby residents. Russell Brown Option No. 1 is a sufficient distance away, but would directly impact wetlands. Thus, the Council will order that the tower be constructed at the SBA Hybrid Site. This shift approximately 310 feet to the south will mitigate near views reasonably, while also maintaining a 36-foot buffer from wetlands. Adherence to the Connecticut Guidelines for Erosion and Sedimentation control will minimize wetland impacts during construction.

The Council's decision to shift the tower south, however, slightly increases the proposed tower's wider visual impacts—that is, impacts to coastal resources. The Council has the duty to protect these, too. Commenting on the application, the DEP's Office of Long Island Sound Programs referenced the Connecticut Coastal Management Act (CCMA), which contains a general statement that the coast is rich in aesthetic resources, and defines an adverse impact on coastal resources as one that degrades visual quality through significant alternation of the natural features of vistas and view points. Also, DEP believes that the visibility of the tower from numerous public areas represents a significant adverse impact in comparison to the existing uninterrupted natural vistas and terrain, inconsistent with the CCMA policy. DEP notes that the new photographic documentation effectively demonstrates adverse visual impacts. DEP concluded it would be prudent for the Council to consider a less visible location or take steps to minimize visual impacts. The Council on Environmental Quality (CEQ) had similar comments and suggested that the visual impact to Long Island Sound be analyzed. Such analysis was subsequently performed. The CEQ is further concerned about the proposed tower's impacts on birds.

With regard to bird impacts, the Council notes that, while the entire East Coast is a migratory bird flyway, SBA has met the U.S. Fish and Wildlife Service Guidelines for Communications Towers in order to mitigate potential impacts on birds.

Regarding visual impacts to coastal resources, the Council has considered alternative stealth tower designs such as a flagpole. However, such a design contains internal antennas and would necessitate greater tower height to achieve the same coverage. Such additional tower height could worsen the visual impact. Therefore, the Council will require that the tower be designed as a monopole, but with T-arm antenna mounts. This antenna mount design will be less visually intrusive than a platform while providing adequate coverage and not requiring additional tower height.

According to a methodology prescribed by the Federal Communications Commission (FCC) Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997), the combined radio frequency power density levels of the AT&T and Celco antennas proposed to be installed on the tower have been calculated by Council staff to amount to 23.3% 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, management, and maintenance of the telecommunications facility at the SBA Hybrid 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, management, and maintenance of a 170-foot monopole telecommunications facility at the SBA Hybrid Site located at 49 Brainerd Road, East Lyme.

<p>DOCKET NO. 396 – SBA Towers II, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and management of a telecommunications facility located at 49 Brainerd Road, Niantic (East Lyme), Connecticut.</p>	<p>} } }</p>	<p>Connecticut Siting Council</p>
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March 3, 2011

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, maintenance, and management 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 SBA Towers II, LLC, hereinafter referred to as the Certificate Holder, for a telecommunications facility at the SBA Hybrid Site (i.e. approximately 310 feet to the south of the proposed location) at 49 Brainerd Road, East Lyme, Connecticut.

Unless otherwise approved by the Council, the facility shall be constructed, managed, 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 New Cingular Wireless PCS, LLC (AT&T), Cellco Partnership d/b/a Verizon Wireless (Cellco), and other entities, both public and private, but such tower shall not exceed a height of 170 feet above ground level. All commercial wireless telecommunications antennas shall be attached to the tower via T-arms.

2. 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 Town of East Lyme 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, landscaping, water drainage, and erosion and sedimentation controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.

3. Prior to the commencement of operation, the Certificate Holder shall 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.

4. 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.
5. 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.
6. The Certificate Holder shall provide reasonable space on the tower for no compensation for any Town of East Lyme public safety services (police, fire and medical services), provided such use can be accommodated and is compatible with the structural integrity of the tower.
7. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed with at least one fully operational wireless telecommunications carrier providing wireless service 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. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The Certificate Holder shall provide written notice to the Executive Director of any schedule changes as soon as is practicable.
8. Any request for extension of the time period referred to in Condition 7 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 Town of East Lyme. Any proposed modifications to this Decision and Order shall likewise be so served.
9. 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.
10. Any nonfunctioning antenna, and associated antenna mounting equipment, on this facility shall be removed within 60 days of the date the antenna ceased to function.
11. 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.
12. The Certificate Holder shall remit timely payments associated with annual assessments and invoices submitted by the Council for expenses attributable to the facility under Conn. Gen. Stat. §16-50v.
13. This Certificate may be transferred in accordance with Conn. Gen. Stat. §16-50k(b), provided both the Certificate Holder/transferor and the transferee are current with payments to the Council for their respective annual assessments and invoices under Conn. Gen. Stat. §16-50v. In addition, both the Certificate Holder/transferor and the transferee shall provide the Council a written agreement as to the entity responsible for any quarterly assessment charges under Conn. Gen. Stat. §16-50v(b)(2) that may be associated with this facility.

14. The Certificate Holder shall maintain the facility and associated equipment, including but not limited to, the tower, tower foundation, antennas, equipment compound, radio equipment, access road, utility line and landscaping in a reasonable physical and operational condition that is consistent with this Decision and Order and a Development and Management Plan to be approved by the Council.
15. If the Certificate Holder is a wholly-owned subsidiary of a corporation or other entity and is sold/transferred to another corporation or other entity, the Council shall be notified of such sale and/or transfer and of any change in contact information for the individual or representative responsible for management and operations of the Certificate Holder within 30 days of the sale and/or transfer.

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 Day.

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

SBA Towers II LLC

Its Representative

Carrie L. Larson, Esq.
Pullman & Comley, LLC
90 State House Square
Hartford, CT 06103-3702

Intervenor

Cellco Partnership d/b/a Verizon Wireless

Its Representative

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597

Intervenor

Russell L. Brown

Its Representative

Russell L. Brown
41 Brainerd Road
Niantic, CT 06357

Party

Town of East Lyme

Its Representative

Edward B. O'Connell, Esq.
Waller, Smith & Palmer, P.C.
52 Eugene O'Neill Drive
P.O. Box 88
New London, CT 06320

Intervenor

New Cingular Wireless PCS, LLC

Party

Friends of the Pattagansett Trust

Intervenor

Joseph Raia

Its Representative

Daniel M. Laub, Esq.
Christopher B. Fisher, Esq.
Cuddy & Feder LLP
445 Hamilton Avenue, 14th floor
White Plain, NY 10601

Its Representative

Keith R. Ainsworth, Esq.
Evans Feldman & Ainsworth, LLC
261 Bradley Street
P.O. Box 1694
New Haven, CT 06507-1694

Its Representative

Joseph Raia
97 West Main Street, Unit 9
Niantic, CT 06357

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. 396 – SBA Towers II, LLC** application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and management of a telecommunications facility located at 49 Brainerd Road, Niantic (East Lyme), Connecticut, and voted as follows to approve the SBA Hybrid Site (i.e. approximately 310 feet to the south of the proposed location) at 49 Brainerd Road, East Lyme, Connecticut:

Council Members

Vote Cast




Daniel F. Caruso, Chairman

Yes




Colin C. Tait, Vice Chairman

No



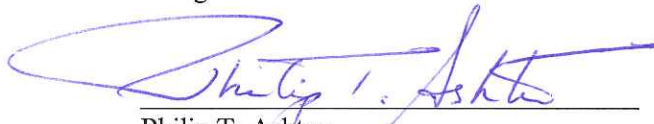
Commissioner Kevin M. DelGobbo
Designee: Larry P. Levesque

Abstain



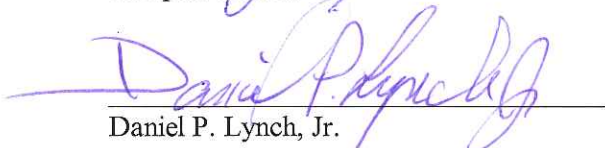
Acting Commissioner Susan Frechette
Designee: Brian Golembiewski

No



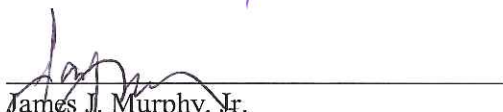
Philip T. Ashton

Yes



Daniel P. Lynch, Jr.

Yes



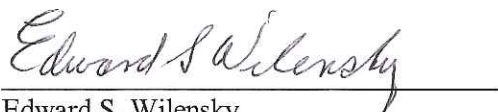
James J. Murphy, Jr.

Yes



Dr. Barbara Currier Bell

No



Edward S. Wilensky

Yes

Dated at New Britain, Connecticut, March 3, 2011



Daniel F. Caruso
Chairman

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

Internet: ct.gov/csc

March 22, 2011

TO: Classified/Legal Supervisor
396100223
Day, The (Daily)
47 Eugene O'Neill Drive, P. O, Box 1231
New London, CT 06320-1231

FROM: Lisa A. Fontaine, Fiscal Administrative Assistant

RE: **DOCKET NO. 396** – SBA Towers II, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and management of a telecommunications facility located at 49 Brainerd Road, Niantic (East Lyme), Connecticut.

Please publish the attached notice as soon as possible, but not on Saturday, Sunday, or a holiday.

Please send an affidavit of publication and invoice to my attention.

Thank you.

LAF



Daniel F. Caruso
Chairman

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

Internet: ct.gov/csc

NOTICE

Pursuant to General Statutes § 16-50p (e), the Connecticut Siting Council (Council) announces that, on March 3, 2011, the Council issued Findings of Fact, an Opinion, and a Decision and Order approving an application from SBA Towers II, LLC for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and management of a telecommunications facility located at 49 Brainerd Road, Niantic (East Lyme), Connecticut. This application record is available for public inspection in the Council's office, Ten Franklin Square, New Britain, Connecticut.